Children and Young People Committee

Meeting Venue:
Committee Room 1 - Senedd

Meeting date:
11 July 2012

Meeting time:
09:15

Cynulliad Cenedlaethol Cymru
National Assembly for Wales

For further information please contact:

Policy: Claire Morris
Committee Clerk
029 2089 8148 / 029 2089 8032
CYPCommittee@wales.gov.uk

Agenda

1. **Motion to elect temporary Chair for today's business (9.15)**

2. **Introductions, apologies and substitutions**

3. **School Standards and Organisation (Wales) Bill: Stage 1 - Evidence session 5 (9:15 - 10:15)** (Pages 1 - 13)
The Children's Commissioner for Wales
Keith Towler, Children's Commissioner

4. **Motion under Standing Order 17.42 to resolve to exclude the public from the meeting for the remainder of business (10.15)**

(Break - 10.15 - 10.30)

5. **Inquiry into Neonatal Care : Discussion of Draft Report (10.30 - 10.45)**

6. **Inquiry into adoption - Discussion of headline themes (10.45 - 11.15)**

7. **Scoping paper on the impact of Universal Credit on the provision of free school meals in Wales (11.15 - 11.30)**

8. **Papers to note**

Inquiry into Neonatal Care – additional information received from Health Boards (Pages 14 – 101)

Inquiry into Neonatal Care – additional information received from the Minister for Health and Social Services (Page 102)

Inquiry into Neonatal Care – additional information received from Royal College of Nursing Wales (Pages 103 – 184)

School Standards and Organisation (Wales) Bill: Letter from Chair of Constitutional and Legislative Affairs Committee (Page 185)

School Standards and Organisation (Wales) Bill: Letter from the Minister for Education and Skills to the Chair of the Constitutional and Legislative Affairs Committee (Pages 186 – 199)

Comisiynydd Plant Cymru
Children's Commissioner for Wales

Keith Towler

Consultation response

National Assembly for Wales' Children and Young People's Committee

Scrutiny of School Standards and Organisation (Wales) Bill: Stage 1

June 2012

The Children's Commissioner for Wales is an independent children's rights institution established in 2001. The Commissioner's principal aim is to safeguard and promote the rights and welfare of children.[1] In exercising his functions, the Commissioner must have regard to the United Nations Convention on the Rights of the Child (UNCRC).[2] The Commissioner's remit covers all areas of the devolved powers of the National Assembly for Wales insofar as they affect children's rights and welfare. They may also make representations to the National Assembly for Wales about any matter affecting the rights and welfare of children in Wales.[3]

The UNCRC is an international human rights treaty that applies to all children and young people aged 18 and under. It is the most widely ratified international human rights instrument and it gives children and young people a wide range of civil, political, economic, social and cultural rights which State Parties to the Convention are expected to implement. In 2004, the Welsh Assembly Government adopted the UNCRC as the basis of all its policy making for children, and in 2011 Welsh Government passed the Rights of Children and Young Persons (Wales) Measure[4].

Contact details

Organisation:	Children's Commissioner for Wales
Name:	Keith Towler
Title:	Children's Commissioner for Wales
Address:	Oystermouth House, Charter Court, Phoenix Way, Llansamlet, Swansea
Post code:	SA7 9FS
Tel:	01792 765600
e-mail:	commissioner@childcomwales.org.uk

[1] Section 72A Care Standards Act 2000
[2] Regulation 22 Children's Commissioner for Wales Regulations 2001
[3] Section 75A (1) Care Standards Act 2000
[4] http://www.assemblywales.org/bus-home/bus-legislation/bus-leg-measures/business-legislation-measures-rightsofchildren.htm

1. **Is there a need for a Bill to make provision about school standards and school organisation?**

I agree with the Welsh Government's intention to clarify and consolidate the legislative framework regarding school standards and organisation.

The Schools Standards and Organisation (Wales) Bill (which will be referred to as 'the Bill' in my response) provides Ministers with wide ranging powers to publish statutory guidance and regulation. Whilst on the whole the policy intent is comprehensively outlined, much of the assessments of how these powers could affect children and young people will be evaluated as the guidance and regulations are drafted and consulted upon. I would hope that as these discussions proceed, the process will uphold in particular articles 12 and 13 of the UNCRC regarding participation of children and young people in decisions which affect them and the provision of appropriate information to assist them in that process respectively.

My submission will highlight the need for clarification on a number of policy areas, especially in relation to safeguarding the provision of key services for children and young people.

2. **General comment on the application of the Rights of Children and Young Persons (Wales) Measure 2012.**

Whilst it is possible to deliberate on the technicalities of whether or not this Bill falls within the purview of the Rights of Children and Young Persons (Wales) Measure 2011, due to the Bill being introduced prior to May 2012 it is logical that Welsh Government apply the obligations in this instance. May saw the commencement of section 1 of the Rights of Children and Young Persons (Wales) Measure 2011 through which Welsh Ministers are obliged to consider the UNCRC and its optional protocols when making decisions about the following:

- Provision proposed to be included in an enactment;
- Formulation of a new policy;
- Review of or change to an existing policy.

I am disappointed that recommendations to this end, made during the white paper consultation on the Bill, were not reflected in the published Bill.

Any guidance and any decisions made by Welsh Ministers, emanating from the Bill will have to be undertaken having paid due regard to the UNCRC. I would suggest that the explanatory memorandum or the regulatory impact assessment should include an assessment of how the due regard duty under section 1 of the Rights of Children and Young Persons (Wales) Measure has been discharged as part of the policy gateway processes of Welsh Government.

The UNCRC is not mentioned anywhere in the documentation. Failure to refer to the UNCRC or its relevant articles is not decisive on the question of whether the due regard duty has been applied as the issue in every case is whether Welsh Ministers have in substance paid due regard. It is therefore not necessarily a determinative of whether the due duty has been performed. It is, however good

practice for decision makers to refer to the UNCRC and any other UNCRC relevant materials that have been considered. This makes it more likely that the relevant factors were taken into account.

Reference should be made on the face of the Measure and in accompanying documents. This would ensure effective documentation and evidence in line with the due regard duty.

The narrative associated with the Bill appears to be too narrow, suggesting that educational attainment is not seen within the wider context of upholding the rights of children and young people.

It is surprising that nowhere in the Bill, or associated documentation, is there an explicit reference to Section 175 of the Education Act 2002 which requires Local Education Authorities and governing bodies of maintained schools to have arrangements to ensure that they exercise their functions with a view to safeguarding and promoting the welfare of children.

This duty to safeguard and protect is highlighted in Article 19 of the UNCRC.

Accordingly local authorities and schools have a responsibility to:

- Provide a safe environment for children and young people for learning;
- Identify children and young people who are suffering or likely to suffer significant harm and take appropriate action with the aim of making sure they are kept safe both at home and at school; and
- Develop, through the curriculum and other means, children and young people's understanding, awareness, and resilience.

In providing limited focus on these issues, the Welsh Government is in danger of reinforcing any misguided perception that teachers are there to teach and that their responsibilities extend no further. There is a danger that this does a disservice to committed, competent and caring teachers and governors, as well as the most important party in our deliberations in relation to education, learners.

I am not suggesting that the provisions within the Bill are contrary to the application of the UNCRC, however it is concerning that the Bill does not appear to be seen within this context.

Section 2 of the Bill, relating to setting out the eight grounds for intervention by Welsh Ministers and local authorities, provides an obvious opportunity to address this issue. It should be clear that the basis for any such action is the best interest of the learners above any other considerations; this would be consistent with the UNCRC.

There are also precedents in 'due regard' cases which could help contextualise particular elements of the Bill. For example, it offers a framework which could be applied to the risks of transferring funds into the Revenue Support Grant (RSG). Key questions for consideration should be whether or not consideration has been afforded to:

- The requirement of progressive realisation, i.e. that goals may be achieved over time;
- The satisfaction of minimum core levels of provision;
- The avoidance of retrogression, i.e. that actions should not have a negative impact on rights already established;

- The need for non-discrimination and equality; and, participation, transparency and accountability.

Key questions for me in a number of areas, such as school based counselling and free school meals, are whether or not there are sufficient safeguards against retrogression and variances in access to services, whether or not the minimum levels of provision are adequate and also, does it assist in progressing the realisation of children's rights?

From a public policy perspective, Ministers simply cannot afford to divorce the agenda of rising standards from the UNCRC. It is not my contention that they are, however this must be reflected both on the face of the Bill as well as the accompanying explanatory memorandum. We should then see that the resulting guidance, regulations and decision making will also be consistent with the Ministerial duties.

3. **What are your views on each of the main parts of the Bill?**

Part 2 – Standards (sections 2-37)

Intervention in schools causing concern:
School governing bodies and local authorities are central to the provision of education and have considerable powers to make decisions that affect children and young people in schools. We trust that most schools are well governed and supported by local authorities, but there are some that raise serious concerns from a rights perspective.

My office has been made aware of decisions made about children's education that infringe their rights. Importantly, there are occasions where decisions are taken that contradict Welsh Government guidance. Some examples of issues referred to my office include schools with a lack of adherence to complaints guidance, unofficial exclusions and non referral to SERVOCA, the independent investigations service in relation to safeguarding cases. This is not something Welsh Ministers would wish to see, but in order for them to assess the impact of such non-compliance and to deliberate whether or not to intervene, they will be obliged – as the provisions of the Rights of Children and Young Persons (Wales) Measure 2011 are commenced – to pay due regard to the UNCRC. It would therefore be necessary to evidence how due regard has been applied.

Providing clarity and consolidation regarding the following scenarios of intervention is welcomed as a way to improve understanding of the available mechanisms to address failing within our schools:

- Intervention by local authorities in the conduct of maintained schools that are identified as a cause for concern;
- Intervention by Welsh Minister in the conduct of maintained schools, that are identified as a cause or concern;
- Intervention by Welsh Ministers in local authorities in the exercise of their education functions.

Whilst non-compliance with education Acts is referenced, I believe that it would be a missed opportunity given Welsh Minister's new duties under the Children and Young Persons (Wales) Measure 2011, not to refer to the need to uphold the rights of children and young people as learners.

In amending the grounds for intervention I would urge the Government to include non-compliance with the UNCRC in the criteria for intervening. This approach of 'overarching reference' would negate the necessity to refer to all relevant Education Acts with implications for children's rights.

A further discussion may be required to identify how this may be worded. There is also the question whether or not children and young people would be better served via a stand alone 'ground' for intervention or whether the UNCRC should be referenced in the other 'grounds', or both.

This would facilitate a widening of issues to be considered and offer an enhanced focus on key aspects of children and young people's wellbeing. It would raise awareness of the importance that Welsh Government places on the UNCRC and would demonstrate that, in Wales, we expect all professionals to operate with a child rights based approach. All educationalists and duty bearers within the system need to understand the role of education in relation to the wider agenda of upholding children's rights.

It would also be consistent with the current suggested content of the grounds for intervention within the Bill. Reference is made, for instance to Estyn reports as potential triggers. The School Effectiveness Framework states that "children and young people's participation in wider aspects of learning needs to build on the work of school councils to secure real engagement in the learning process[5]." Estyn have reviewed these processes of pupil participation and continue to do so. The inspectorate's activities also reflect wider thematic concerns, such as compliance with equality law. These are all issues related to raising standards and are part of the expansive rights based dialogue relating to attainment which should be reflected.

The dangers of not affording the governance and accountability structures a wider focus can become most apparent in extreme cases when safeguarding obligations are neglected, thus having a detrimental impact, for instance, on educational attainment as well as the health and wellbeing of children and young people. These cases often arise from not upholding the right of pupil voice within the system. An example of taking a narrow approach could be the non-implementation of school bullying policies. The emotional and physical wellbeing of learners is central to their ability to achieve and learn in relation to literacy and numeracy. If a school is ineffective in addressing bullying within the school, levels of attainment will suffer and standards will fall.

The areas of non-compliance could be in relation to non-application of the public sector equality duty in Wales, non-implementation of school bullying policies, non-implementation of school councils, flawed safeguarding procedures, poor hygiene and a lack of consideration for poverty issues etc.

On a practical note, when an intervention, either by local authority or Welsh Ministers, is made it is essential that the situation is explained to the learners and their parents/carers. There should be an obligation on Welsh Ministers and local government to fully explain the rationale, process and expected outcomes of any intervention.

There is also a need for sensitivity in the way that interventions are handled and the potential impact on learners as they become aware of the situation. Anecdotally I have been made aware by young people that the recent issues regarding school banding have had a negative impact on them, both in

[5] http://wales.gov.uk/docs/dcells/publications/091020frameworken.pdf

terms of how their school is perceived and how it compares with neighbouring schools if, for example their school is banded in a lower group.

School Improvement Guidance:
Whilst welcoming the development of the guidance on School Development Plans, I would be interested in the content of the guidance. I hope that it will reflect a wide ranging policy context, looking at a range of learners' needs. The guidance would need to link attainment and wellbeing and also consider ways of improving outcomes for the more vulnerable learners such as young carers, looked after children and children with additional needs. A clear UNCRC focus would also assist in addressing wider rights issues, such as safeguarding.

Part 3 - School Organisation (sections 38-84)

I certainly agree with the policy intent associated with the Bill and that there will be a single, comprehensive legislative framework. I have seen for myself the impact that delays in decision making can have on children's education. We also need to secure a position where school reorganisation does not become too politicised. I am concerned that children are being caught in the middle of hostilities within communities. This is unacceptable and we all have a responsibility to act in the best interest of the child.

My position on the process of school organisation is consistent with my response to the Government's consultation *School Organisation – Potential to Change the Process.*

In the development of the statutory code, I would call for children's rights to be clearly identified, that there is a consistent approach to consulting with children and young people and that the obligations in circular 021/2009 in this regard are consolidated and built upon.

The participation landscape for children and young people in Wales is continuing to evolve with the Rights of Children and Young Persons (Wales) Measure 2011 as well as the provisions relating to local authorities within the Children and Families (Wales) Measure 2010 and this must be reflected across all Government departments when engaging in community engagement deliberations. Key to success with the above agenda will be the clarity and guidance provided within the statutory code.

The early anecdotal indications in terms of the 09/2001 guidance is that consultation with children and young people has been inconsistent in terms of implementation and variable in terms of practice. There is an opportunity through this process to improve the situation.

Considerations will be needed in relation to the consultation's accessibility of information and process for the learners involved. I would, for instance, suggest that the code should include a requirement for there to be a meeting proposed with the school council and for age appropriate information to be made available for all children with age appropriate explanations of how to voice any concerns they may have.

Children and young people can be unduly influenced by adult views so they need balanced information about any proposal so they can be assisted to form their own views.

Within any guidance, I would expect to see a feedback loop for children and young people, so that they can see what decisions have been made and how their views have been considered. I welcome the fact that school councils have been included in the specific categories of statutory objector but have concerns with the proposal that: "Children and young people attending, or who might reasonably wish to attend, schools named in statutory notices," will need to ascertain a total of 10 names before a proposal will be referred to a local decision making panel.

For those who may not be involved with the schools council but have strong opinions and are affected by the proposals, mobilising a group of 10 peers may be difficult. If the current position is maintained then, at the very least, the Government must ensure that within the statutory code the local authorities will clarify how individual children will be supported in this process. Options may include providing children and young people with an independent advocate.

Any code of practice should define what is expected in a report regarding the school organisation proposals. I would expect this to include a general child rights impact assessment (to include a child poverty assessment). In many communities, a school is also a community resource which will have an impact on families' access to services.

Providing a new framework for the determination of proposals should lead to greater clarity and understanding. Any proposal should consider the best interest of the child at the very core of any determination.

There are particular policy issues relating to the powers of Ministers in the field of SEN and restructuring of sixth form education which will to be discussed in detail as Ministerial proposals are developed and consulted upon. It will be incumbent upon Welsh Ministers to pay due regard to the UNCRC in developing associated policies.

Part 4 – Welsh in Education Strategic Plans (sections 85-88)

I very much welcome the Welsh Government's endeavour, at a national and strategic level, to ensure the development and growth of Welsh-medium education which has, too often been piece-meal and dependent on campaigning and lobbying at a local level rather than having a consistent, coherent and transparent approach.

I have been supportive of the Government underpinning strategic aims within its Welsh-Medium Education Strategy, but would also raised some questions about implementation and targets within the submission.

As the guidance is developed and the political commitment is translated into policy we will be able to examine to what extent these developments will have the desired effect, that we are able to see the democratisation of Welsh medium education and that key issues such as pre-school provision, transport and SEN provision may be addressed.

The Minister may wish to consider whether or not the current wording of the Bill will enable Ministers to implement the policy aim of implementing the Welsh Medium Education Strategy with the 5 and 10 year targets to increase provision at all stages of the education process. The Bill states that the Welsh in Education Strategic plans should:

(i) improve the planning of the provision of education through the medium of Welsh ("Welsh medium education") in its area;
(ii) improve the standards of Welsh medium education and of the teaching of Welsh in its area;

There is a difference between planning and improving standards and increasing the provision, which is the stated aim of the Welsh Medium Education Strategy.

The proposals within this Bill may assist in this regard. I stated that it would be preferable that the method of measurement of demand is structured and consistent and that there is a consistency regarding the mechanisms for collating information and publishing findings.

The issue of responding to identified need was a challenge and a discussion on regulatory powers would be welcome. Accessibility to SEN and travel provision would need to form part of this discussion.

Part 5 – Miscellaneous School Functions (sections 89 – 97)

Parents' Meetings

There appears to be a consensus that taking away this requirement is a sensible decision. I would, however, suggest that Welsh Government should carefully consider the effectiveness of schools' engagement with parents/carers and the positive impact that positive engagement can have on educational attainment. The National Behaviour and Attendance Review was clear about the need to engage with parents and encourage parents to engage with their children's school work. It may be worth considering the recommendations within the NBAAR report – particularly those relating to liaising with parents/carers.

I am aware of schools with a good level of engagement with parents, where parents are consulted in relation to needs and where initiatives such as homework clubs, adult learning and community activities take place within the school. There is a need to encourage further practice of this type so that parents feel confident about their relationship with the school and teaching staff and in turn, their role in the education of their child.

I also accept the risk of affording the right of 5% of parents to initiate a meeting. Effective consultation and engagement will be needed to identify ways of ensuring the effective implementation of such an approach.

Placing school based counselling in statute and cost implications

I very much welcome the move towards placing school based counselling on a statute to safeguard funding as it is transferred into the Revenue Support Grant (RSG). It is an opportunity to further develop the impressive policy drive resulting from recommendations within the Children's Commissioner for Wales' *Clywch Inquiry Report*; and to implement one of the key actions (2.35) set out in the National Service Framework for Children, Young People and Maternity Services in Wales.

The national strategy published in April 2008 is a sound and coherent strategy[6] and I am supportive of the identified actions within it. These include actions regarding inspection, training and qualifications, data and outcome evaluation, consulting pupils etc. The Bill offers an opportunity to further drive forward those actions and the regulatory impact assessment states that the legislation will: "firmly embed the Welsh Government's policy of school based counselling in Wales".

I would however, seek clarification regarding Welsh Government's policy on entitlement to counselling services. The cost and benefits assessment states that the Bill will: "ensure that young people continue to have the support they have had since the introduction of the strategy in 2008," and that the duty would "largely formalise existing practice. The existing level of budget provision at the point of transfer should therefore provide for reasonable provision, given that there is currently a service available in all secondary schools."

However, the explanatory memorandum states that the intention is that there will essentially be universal provision for 11-18 year olds: "local authorities will be required to make reasonable provision for an independent counselling service to be provided to: pupils receiving secondary education or year 6 primary education at a school in its area; other persons aged 11 to 18 who belong to the authority's area and such other persons receiving primary education as the Welsh Ministers may set out in regulations."

This indicates that there is an expansion of counselling services to those who are not within school settings.

The explanatory memorandum also notes: "local authorities will be required to provide a counselling service on the site of each school they maintain that provides secondary education. They may provide additional counselling services at other locations should they wish to do so."

A logical question to ask is why such discretion is offered to local authorities, if the policy intention is to extend entitlement to "other persons aged 11 to 18 who belong to the authority's area"?

The extension of the entitlement is something I welcome and there are positive examples of out -of-school provision in Wales. My office has received a case of a young person in a private school with no access to such counselling services within her school but who was eventually directed to community based provision in a neighbouring authority. A question also arises with regard to children and young people educated at home.

If the policy is one of extending the entitlement, then it is logical to question whether or not the true cost implications have been considered as part of the cost benefit analysis.

One of the principles outlined in the *School Based Counselling Services in Wales – a National Strategy*[7] is that: "A service that is given appropriate levels of funding over the long term".

---

[6] http://wales.gov.uk/dcells/publications/publications/guidanceandinformation/counsellingstrategy/counsellingstrategy-e.pdf;jsessionid=4bGxPfwJyM9RZrgd2y7zg1Z0Qy60sK3WRYdyKLKW21bHyFM4x0Bf!-1822353977?lang=en

[7] http://wales.gov.uk/topics/educationandskills/publications/guidance/counsellingservicesstrategy/;jsessionid=SmDtPqVZT3j1GgJpJcWLQN8v4K1L21G3GB2M053JWJ1pb3Vj0kZz!1674108250?lang=en

The Evaluation of the Welsh School-based Counselling Strategy: Final Report referred to the need for secure streams of funding so it would be useful to identify how this may be achieved, especially in light of any expansion.

Clarifying intention regarding guidance

The national strategy states as an action:

"Action 3: Standards and guidance for counsellors and counselling services working with children and young people in Wales will be developed drawing extensively on the NSF and guidance and research produced by BACP and other relevant professional bodies. The guidance will be designed to assist schools and local authorities to develop services. [8]"

The memorandum notes:

"Welsh Ministers will be able to issue guidance regarding the provision of school-based counselling to which local authorities must have regard."

A commitment to develop such guidance would be welcomed. This would enable the Government to further pursue the initial actions within the national strategy as well as address particular concerns identified within the evaluation – such as Welsh medium provision and the need to ensure access to all groups of children and young people.

Defining reasonable

Within the regulatory impact assessment, under the disadvantages of the preferred option of transferring the funding with underpinning statute, it states:

"There is the risk that a local authority might provide services at a lower level than under the current arrangements. In these circumstances however, the LA would still need to demonstrate that the provision it made was reasonable. The continued collation of anonymised demographic and outcome data would indicate whether the provision was reasonable."

In my opinion, the "collation of anonymised demographic and outcome data" would not enable an indication as to whether the provision was reasonable. This mechanism would not demonstrate the level of access to provision, but only the outcome of provision and the characteristics of such provision.

I would therefore ask that the work on defining "reasonable" is developed further in order to assuage the concern rightly outlined in the impact assessment of the danger of reduction of service provision.

Commissioning arrangements

One area to which subsequent guidance may be useful is commissioning. Action 12 of the National Strategy states: "Children and Young People's Partnerships are identified as having a strategic lead in developing commissioning of school-based counselling services."

[8] ibid

I am currently unsure about the commissioning arrangements for school based counselling, however within the context of rationalisation of partnerships and the termination of some CYP Partnerships, clarity is needed in terms of accountability and responsibility of commissioning.

Primary school breakfast scheme

The Welsh Government free school breakfasts programme was introduced due to the well-established evidence of its nutritional and educational benefits. The evidence in relation to these benefits still stands. Once introduced the programme was the focus of some criticism in relation to the use of sessions as free childcare for working parents. However in the absence of sufficient affordable childcare and in view of the need to tackle child poverty this was accepted as a welcome added benefit of provision. In view of the current economic situation and Welsh Government commitment to the priority to tackle child poverty the decision to leave further implementation to local discretion is questionable.

I am not clear what evidence has been used to form Welsh Government's view that: "the vast majority of schools who want to participate have already signed up," when just under a third of schools across Wales still do not offer free school breakfasts. UK research highlights the need to address breakfast consumption amongst school children. In school surveys, 5% of pupils have been found to have gone without breakfast, 3% to have only consumed a drink and 10% to only have eaten low nutrition food such as crisps or chocolate. Furthermore, skipping breakfast has been found to be significantly higher amongst obese children and those from more deprived backgrounds.

The universal offer of free school breakfasts in primary schools in Wales therefore has an important role to play in supporting the realisation of children's rights to be healthy and to participate fully in learning.

I am concerned about the methods to be used to decide if the duty to meet pupils entitlement to free breakfast is met. Specifically what measures will be put in place to ensure:

- That all pupils are aware of and understand their right to free school breakfasts;
- That pupils have access to systems and adults who can act on their behalf to request free school breakfasts;
- That where a decision is made that there are 'reasonable grounds' for a refusal of such a request such reasons are clearly explained to pupils and to the adults acting on their behalf.

It is not sufficient that pupils' entitlement to free school breakfasts should be reliant on decisions made by adults without consultation with pupils themselves.

I have some concerns over the Bill's proposals in relation to the circumstances through which the local authority's duty to provide breakfasts will not apply or will cease to apply. Where a governing body has asked the local authority to stop providing breakfasts what measures will be put in place to ensure that such a request is based on the wishes of pupils and their parents? The Bill suggests that the local authority's duty to provide breakfasts will apply where a request is made by or on behalf of the pupils. I would therefore suggest that decisions in relation to cases where the duty will cease to apply should

also be based on the requests made by or on behalf of pupils. The Bill is not clear on the circumstances under which local authorities can decide that it is unreasonable to provide or to continue to provide breakfasts.

Guidance issued in relation to free school breakfasts under the proposed Bill must set out a clearly defined process supported by clear definitions of terms such as “unreasonable” through which the local authority duty will cease to apply. Guidance should include a clear mechanism through which pupils, parents and governing bodies can challenge incidents where a decision is made that the duty will not apply or will cease to apply.

The Bill states that: “Welsh Government remains committed to the free breakfast initiative”. However this commitment does not appear to be reflected in acceptance of the fact that nearly a third of schools have not taken up the initiative, an acceptance of 'dwindling applications' and the lack of definition in relation to the circumstances under which the duty will not apply or will cease to apply. I would like to see a continued commitment by Welsh Government to the monitoring of the free breakfast initiative and clear lines of accountability in relation to decisions about non-application of the duty.

Flexible charging for milk, meals and other refreshments

I welcome the proposals to allow for flexible charging arrangements in relation to school meals. The growing reliance of families in Wales on emergency food supplies through food banks is a source of concern to me and tackling food poverty must be considered a priority.

Poorer families can often struggle to give their children a healthy diet due to low income, lack of access to reasonably priced shops, or inadequate knowledge and information about healthy eating. The food budget is often the only flexible part of the family budget and suffers if there is an unexpected expense.

I also welcome the policy’s aim to enable schools to use the flexible arrangements to encourage uptake of school meals, especially given the roll out of the Healthy Eating in Schools (Wales) Measure.

In-work poverty is a growing issue in Wales with half of children in poverty coming from working families.[9] Additional support through reduced costs for school meals could make a real difference to low-income families. The proposal to include larger families makes sense in relation to assisting families who do not meet the eligibility criteria for free school meals but who may struggle to meet the costs of school meals.

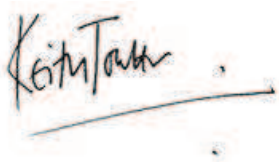
The explanatory memorandum notes particular groups who may benefit from such initiatives. Whilst we would not expect to be provided with an exhaustive list, it would be useful to consider other categories, perhaps the Minister would want to consider defining the types of families who could benefit from such an initiative within a school. One example would be families with a disabled child who may experience poverty without reaching eligibility criteria, because although household income sits above the poverty line the additional costs of supporting a disabled child mean that household income is actually very limited.[10]

[9] http://www.jrf.org.uk/sites/files/jrf/poverty-social-exclusion-Wales-summary.pdf
[10] http://www.dcmw.org.uk/resources/PolicyBriefingPoverty.pdf

The End Child Poverty Network Wales resource for schools on tackling child poverty sets out the need to increase the uptake of free school meals by providing information about entitlement and availability and by introducing non-stigmatising provision, e.g. swipe card systems. Many children entitled to free school meals do not claim them due to fear of stigma and bullying.[11] Care must be taken to ensure that in introducing any flexible charging arrangements in schools methods for administration are selected on the basis of the need for a non-stigmatising approach.

Financial Implications

I have referred in previous questions for the need to clarify particular policy intentions in order that the financial implications can be fully understood, namely with regards to counselling services and free school breakfasts.



Keith Towler
Children's Commissioner for Wales
27 June 2012

[11] http://www.swamwac.org/addressing_deprivation/docs/Tackling_Child_Poverty_in_Wales.pdf

Children and Young People Committee Inquiry into Neonatal Care

Additional information from Aneurin Bevan Local Health Board

During the meeting on 17 May, Aneurin Bevan Local Health Board were asked to comment on transfers in and out of their area. Their response is below:

1. Whether any babies condition has deteriorated whilst being transferred by an ambulance from Powys?

I can confirm that from 1 January 2011 we have had no babies transferred from Powys to Aneurin Bevan Health Board.

2. Number of unplanned transfers out of the South East Wales Community

The number of unplanned or acute transfers out of the South East Wales Community was taken from data on the Badgernet transfer entries for 2011. There were 14 transfers to University Hospital of Wales, 2 to St Michaels Hospital in Bristol and 1 to Singleton Hospital in Swansea. For 2012 (up to 31st May 2012) there have been the following transfers: 9 to University Hospital of Wales, 1 to Royal Glamorgan Hospital, 1 to West Wales and 1 to St Michaels Hospital in Bristol.

Judith Paget

Director of Planning and Operations/Deputy Chief Executive
Aneurin Bevan Local Health Board

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol
Betsi Cadwaladr
University Health Board

Ty Matthew/Matthew House
Llys Edmund Prys,
Parc Busses Llanelwy/St Asaph Business Park,
Llanelwy, St Asaph,
Sir Dinbych/Denbighshire, LL17 0JA

Claire Griffiths
Deputy Clerk
Legislation Office
National Assembly for Wales

Claire.Griffiths@Wales.gov.uk

Ein cyf / Our ref: GL/yel
Eich cyf / Your ref:
☎: 01745 586423
Gofynnwch am / Ask for Geoff Lang
Ffacs / Fax: 01745 584606
Geoff.Lang@wales.nhs.uk
Dyddiad/Date: 02 July 2012

Dear Claire

Children and Young People Committee – 17th May 2012

I am pleased to be able to provide the supplementary information requested as part of the evidence session Dr Harrington and I attended on 17th May. I would wish to express my thanks for the extension granted for submitting this data due to my personal circumstances. This has been extremely helpful.

In response to the request made in your email of 17th May the following information is provided:

1) **Mortality Rates** – The latest published data for mortality, which Dr Harrington referred to whilst giving evidence is contained in the follow report:

   All Wales Perinatal Survey – Annual Report 2010. A copy is attached for information.

   This summarised the position by stating on Page 3 that "there were no significant differences in Perinatal and infant mortality rates between Health Boards or NHS Regions (Table 18)"

2) **Outcomes** – I believe that the information above also addresses the Committee's wish to determine whether outcomes in the Units in North Wales were different to other areas. The data shows no statistically significant differences in outcome. The Table on Page 13 and Chart on Page 14 showing Perinatal mortality rates by Local Authority Area may be helpful here.

3) **Audit of Low Dependency Activity** – In the evidence session we were asked whether this work was underway and when its findings would be known. I am pleased to report that this work is ongoing and the initial findings will be available in August. As a result of the findings of the Capacity Review and our local work we will instigate a number of strands of work to increase the appropriate use of low dependency cots thereby optimising the capacity of our skilled nursing staff to care for the most ill infants.

These workstreams include:

Reviewing Admission and Discharge criteria; Transitional Care; Outreach Services; Discharge Planning.

4) **Ambulance Delay Incidents** – We have reviewed the incident reports made at the time and the following factors have been identified as contributing to the delays:

   a) On three occasions there were difficulties arising as a result of vehicles being dispatched which were not compatible with the security clamps on the newer models of transport incubator. Therefore a delay was incurred waiting for a replacement vehicle. We understand that fleet changes ongoing will remove this problem as all vehicles will be compatible with the newer incubators.

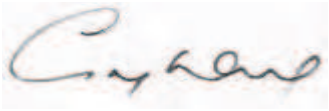
   b) On one occasion there was a delay in providing an ambulance for transfer within North Wales.

   c) On one occasion there was a delay in providing transport for an infant to attend a routine cardiac appointment in Liverpool. This was not an emergency or urgent clinical situation.

5) **Ambulance Transfer Times** – We have been advised by colleagues from WAST that the average journey times from various locations around Welshpool and Newtown in 2011/12 was approximately 45 minutes. These times are for emergency journeys to the Wrexham Maelor Hospital.

I trust that the above provides all the information required. Should you require any further clarification please do not hesitate to contact me.

Yours sincerely



Geoff Lang
Director Primary Care, Community & Mental Health

Enc – All Wales Perinatal Survey - Annual Report 2010

All Wales Perinatal Survey

Annual Report 2010

Available online as a pdf, addendum containing additional data also available at:

http://www.cf.ac.uk/medic/awps/

Dr S Paranjothy
Senior Clinical Lecturer in Public Health Medicine

Mrs K Rolfe
Data Manager

Mrs JM Hopkins
Project Administrator

Dr R Adappa
Consultant in Neonatal Medicine

Dr W John Watkins
Statistician

Professor Frank Dunstan
Professor of Medical Statistics

Professor S Kotecha
Head of Department of Child Health
Director of the AWPS

Perinatal Survey Office
Department of Child Health
School of Medicine, Cardiff University
Heath Park, Cardiff, CF14 4XN
Telephone: 029 2074 4499 Fax: 029 2074 4302
Email: rolfek@cardiff.ac.uk

ISBN: 978-0-9555226-5-9

Contents

Foreword

We present the eighteenth annual report of the All Wales Perinatal Survey (AWPS). The Survey has been running since 1993 and is well established as an accurate and complete surveillance of perinatal and infant mortality in Wales.

In this report we present data by Welsh NHS Region, the seven Health Boards and 22 Local Authorities in Wales and individual hospitals. The mortality rates presented are not adjusted for variables known to influence mortality rate such as social deprivation and case mix, therefore we urge readers to exercise caution when interpreting the data. Any increase noted in mortality rates either at Health Board level or at hospital level may be explored further locally. It is not intended that the results of these reports are considered to be evidence of poor performance in any specific instance but rather that they are taken as suggesting that further exploration is needed at a local level. We have not presented numbers in the data for Health Boards, hospitals or birth units to preserve confidentially, but hospitals and birth units can be provided with their own data upon request.

In order to provide timely surveillance of perinatal mortality, AWPS ideally requires notification and completed proformas within 8 weeks of death. We carried out an audit of reporting times for 2008, 2009 and 2010 and found that only 7 out of 14 units had returned at least 50% of proformas within 8 weeks. It is important for AWPS to receive data in a timely manner in order to be able to produce a report and to report on trends contemporaneously. This year we will again be contacting maternity and neonatal units to identify reasons for delays in reporting in order to try to improve the timeliness of data collection.

This year we welcome Cate Langley, Acting Head of Midwifery, to the executive steering group of the survey.

We are extremely grateful for the continued support of the unit coordinators, paediatricians, obstetricians, midwives, other health professionals and administrative staff throughout Wales who are involved with data collection for the survey.

Dr Shantini Paranjothy
Dr Roshan Adappa
Professor Sailesh Kotecha

30th October 2011

Summary findings of the 2010 Annual Report

Key Messages

- Data on stillbirths and infant mortality rates are presented in Table 1 below. Perinatal, stillbirth, neonatal, post neonatal and infant mortality rates in Wales have changed little since 2006. There have been slight reductions in late neonatal deaths and post neonatal deaths in 2010. These rates include all gestations, birthweights, and lethal congenital anomalies, but exclude late terminations.
- There were no significant differences in perinatal and infant mortality rates between Health Boards or NHS Regions (Table18). Annual stillbirth and infant mortality rates for the period 1993 – 2010 by Welsh NHS Region, Health Boards and individual hospitals are available from **http://www.cf.ac.uk/medic/awps/**.
- Maternal cigarette smoking, obesity and advancing maternal age are major risk factors for stillbirth, and public health initiatives to address these should be a priority.
- For 41.7% of stillbirths the cause is unexplained. This represents a large proportion and warrants research into the risk factors and causes of stillbirth.
- Autopsies are important in order to understand cause of death. Autopsy rates for stillbirths continue to decline and require urgent attention.
- Neonatal and post neonatal mortality rates are persistently higher in the most deprived fifth of the population compared with the least deprived fifth, although there is some evidence that this gap is narrowing.
- The main causes of infant mortality remain prematurity and congenital anomaly.

Table 1 Mortality statistics in Wales, numbers and rates per 1,000 with 95% confidence intervals

EXCLUDING TERMINATIONS 24 weeks and over

	Wales			
	2006-2008	2007-2009	2008-2010	2010
Births				
Registrable	104431	105622	107194	36217
Live	103911	105092	106652	36028
Stillbirths				
Number	470	474	488	167*
Rate (/1000 registrable births)	4.5	4.5	4.6	4.6
95% CI	(4.1, 4.9)	(4.1, 4.9)	(4.2, 5.0)	(4.0, 5.4)
Perinatal deaths				
Number	689	714	721	245**
Rate (/1000 registrable births)	6.6	6.8	6.7	6.8
95% CI	(6.1, 7.1)	(6.3, 7.3)	(6.3, 7.2)	(6.0, 7.7)
Early neonatal deaths				
Number	219	240	233	78***
Rate (/1000 live births)	2.1	2.3	2.2	2.2
95% CI	(1.8, 2.4)	(2.0, 2.6)	(1.9, 2.5)	(1.7, 2.7)
Late neonatal deaths				
Number	96	89	77	19
Rate (/1000 live births)	0.9	0.8	0.7	0.5
95% CI	(0.8, 1.1)	(0.7, 1.0)	(0.6, 0.9)	(0.3, 0.8)
Neonatal deaths				
Number	315	329	310	97***
Rate (/1000 live births)	3.0	3.1	2.9	2.7
95% CI	(2.7, 3.4)	(2.8, 3.5)	(2.6, 3.2)	(2.2, 3.3)
Post neonatal deaths****				
Number	154	154	153	48
Rate (/1000 live births)	1.5	1.5	1.4	1.3
95% CI	(1.3, 1.7)	(1.3, 1.7)	(1.2, 1.7)	(1.0, 1.8)
Infant deaths****				
Number	469	483	463	145***
Rate (/1000 live births)	4.5	4.6	4.3	4.0
95% CI	(4.1, 4.9)	(4.2, 5.0)	(4.0, 4.8)	(3.4, 4.7)

Source: NCCHD & AWPS

Data on late fetal losses, stillbirths and neonatal deaths relate to the date of birth, while data on post neonatal deaths relate to the date of death in 2010.

*Excludes 22 late terminations in 2010

**Excludes 26 late terminations in 2010

***Excludes 4 late terminations in 2010

****The post neonatal and infant death rates for 2010 are based on babies who died in 2010; these will be approximate measures. They will be updated in the Annual report 2011, when post neonatal deaths in 2010 will be presented by date of birth. Likewise rates for post neonatal deaths pre 2010 are based on date of birth.

Definitions/Glossary of terms

Registrable Births	stillbirths and livebirths

Spontaneous miscarriage spontaneous late fetal deaths before 24 weeks of gestation	rates per thousand live and stillbirths plus spontaneous miscarriages
Therapeutic abortion therapeutic late fetal deaths before 24 weeks of gestation	rates per thousand live and stillbirths plus therapeutic abortions
Stillbirths late fetal deaths from 24 weeks of gestation	rates per thousand live and stillbirths
Perinatal deaths stillbirths, and deaths in the first week of life	
Early neonatal deaths deaths in the first 6 days of life	rates per thousand livebirths
Late neonatal deaths deaths at ages 7-27 completed days of life	
Neonatal deaths deaths in the first 27 completed days of life	
Post neonatal deaths deaths at ages 28 days and over but under one year	
Infant deaths deaths at ages under one year	

Late terminations (registered as stillbirth or live birth) therapeutic late fetal deaths from 24 weeks of gestation, registered as stillbirth or live birth	

LSOA **Lower-Layer Super Output Areas**	Wales is divided into 1,896 Lower-Layer Super Output Areas (LSOA) each having about 1,500 people.
WIMD **The Welsh Index of Multiple Deprivation** **http://wales.gov.uk/topics/statistics/theme/wimd/?lang=en**	The official measure of deprivation in small areas in Wales. It is a relative measure of concentrations of deprivation at the small area level. We use an index prepared in 2008 (WIMD_2008)
Quintile of deprivation	WIMD_2008 categorises each LSOA into 5 relative levels of deprivation graded 1 to 5. 1=least deprived to 5=most deprived

All Wales Perinatal Survey

Background

Wales has a population of around 3 million. It has large rural areas in Mid, West and North Wales in addition to the densely populated urban areas of South East Wales, and in total has an area of 8,016 square miles. The annual number of births in Wales over the last 18 years has ranged between 29,943 (in 2002) and 36,771 (in 1993). In 2010 there were 36,217 births to women who were Welsh residents.

Stillbirth and infant mortality rates are globally used as indicators of population health. Perinatal mortality (stillbirth and early neonatal deaths) is an indicator of quality of antenatal and perinatal care, while infant mortality is an indicator of child health. Infant mortality is usually examined according to timing of death in relation to the neonatal period: early (death in the first 6 days of life), late (between 7-27 days) and post-neonatal (28 days – <1 year). In developed countries infant mortality rates have declined substantially over time, although socio-economic inequalities have been shown to persist in Wales and elsewhere in the UK[1]. The Welsh Government is committed to eradicating child poverty in Wales and giving every child a healthy start[2, 3].

The All Wales Perinatal Survey is a continuous survey of stillbirths and infant mortality in Wales. The survey aims to collect accurate, complete, and comparable data on stillbirths and infant mortality to identify any important geographical differences or unrecognised variations in the cause of death. These form the basis for a review of local policies aimed at reducing excess mortality.

The report is based on the deaths of babies from 20 weeks gestation to one year of age and includes:

- **fetal losses of 20 completed weeks of gestation or more (including therapeutic abortions),**
- **stillbirths,**
- **early and late neonatal deaths and**
- **post neonatal deaths.**

In this report we present data on stillbirth, early, late and post neonatal mortality rates by Welsh NHS regions, Health Boards, Local Authorities, individual hospitals and midwifery led units.

Survey Methods

The survey includes all babies who died in Welsh hospitals and deaths of babies whose mother is usually resident in Wales regardless of their place of birth or death.

Notification of relevant deaths to the perinatal survey office is dependent on a network of unit coordinators. Coordinators are responsible for completion of the form along with the clinical staff. The form is sent to the perinatal survey office along with a clinical summary and post mortem report if applicable.

The Office of National Statistics (ONS) is used to ascertain deaths which have not been reported through the

perinatal survey system. In addition, a small number of deaths are notified directly by the regional paediatric pathologist or other regional managers for CMACE (Centre for Maternal and Child Enquiries).

The perinatal survey team checks that the form is complete and resolves any ambiguities, with particular attention to gestational age. Gestational age is calculated using an algorithm (see Appendix D). The address and postcode are checked to identify the Local Authority, Health Board, Welsh NHS Region before the appropriate lower super output codes (LSOA) are assigned. Live births with birthweight <1000g or gestational age <28 weeks are also checked with unit coordinators to ensure accuracy of these data and survival status.

Each death is classified using the Aberdeen (Obstetric) and the modified and extended Clinico-Pathological (Wigglesworth) systems, by a senior midwife and/or neonatologist (see Appendix E). These are also coded according to the CMACE coding system [4].

For each current year the data are analysed by calendar year of birth, except for post neonatal deaths which are by year of death. Exceptions are birthweight and gestation specific mortality data, which relate to the date of birth. Therefore, an annual cohort will include:

- Babies born in that year who die before the 28th January of the following year (neonatal deaths only);
- Babies who die in that year who were born the previous year (post neonatal deaths only).

The residential address, marital status, employment and occupational details are those current at the date of birth of the baby, except post neonatal deaths which relate to the date of death.

Denominator data for Wales are provided by the National Community Child Health Database (NCCHD) held by NHS Wales Informatics Service (NWIS). This database has been established as a centrally held extract from Child Health Systems in Health Boards throughout Wales. The births denominator data provided by NCCHD includes all births in Welsh hospitals and births to women who are usually resident in Wales, regardless of the place of birth.

In addition, unit coordinators return the total number of births, mode of delivery and homebirths in their unit for the calendar year, irrespective of a woman's usual place of residence (see Appendix G).

The presentation of epidemiological data in this report follows a similar format to that used in previous reports. We present annual rates for the combined 3 years rolling and for the combined 5 years, by Welsh NHS Region, Health Board and Local Authority. This format was chosen to reduce random variation and hence increase reliability of data. We also provide 95% confidence intervals for rates to facilitate interpretation. These confidence intervals were calculated using the Wilson score interval method[5, 6].

In this report we have excluded terminations 24 weeks and over to enable more meaningful analysis of the data.

We compare mortality rates between hospitals and between Local Authorities using funnel plots. These funnel plots show the mortality rate for each hospital or Local Authority plotted against the number of births in each. The average mortality rate in Wales is indicated by the solid horizontal line. The curved lines represent limits within

which 95% of results should lie if the average rate in Wales applied to all. Rates above or below these dashed lines are considered to be statistically significantly different from the average rate. The plots are calculated using the Wilson score interval. This method is generally regarded as an improvement over the normal approximation interval[7, 8] and has the advantage that the lower line of the funnel plot cannot reach implausible values i.e. below zero. These funnel plots are calculated assuming that the populations of women giving birth are directly comparable between units. Therefore they do not allow for any heterogeneity (for example differences in case mix) between units. Hence there may be plausible reasons for the significantly higher or lower rates in the units that are identified as outliers.

Data from the Office for National Statistics (ONS) are available on our website when they are published, to facilitate comparisons between England and Wales. **http://www.cf.ac.uk/medic/awps/**

References

1. Oakley L, Maconochie N, Doyle P, Dattani N, Moser K. Multivariate analysis of infant death in England and Wales in 2005-06, with focus on socio-economic status and deprivation. *Health statistics quarterly / Office for National Statistics* 2009(42):22-39
2. Welsh Government. Child Poverty Strategy for Wales and Delivery Plan 'Available at:' http://wales.gov.uk/consultations/childrenandyoungpeople/cpstrategy/?lang=en. Accessed August 2011.
3. Welsh Government. Our Healthy Future 'Available at:' http://wales.gov.uk/topics/health/ocmo/healthy/?lang=en. Accessed August 2011.
4. Centre for Maternal and Child health Enquiries (CMACE). Perinatal Mortality 2008. United Kingdom. CMACE. London; 2010.
5. Wilson EB. Probable inference, the law of succession, and statistical inference. *Journal of the American Statistical Association* 1927;22:209-12
6. Newcombe RG. Two-sided confidence intervals for the single proportion: comparison of seven methods. *Statistics in Medicine* 1998;17(8):857-72
7. Agresti A, Caffo B. Simple and effective confidence intervals for proportions and differences of proportions result from adding two successes and two failures. *The American Statistician* 2000;54: 280-8
8. Agresti A, Coull BA. Approximate is better than “exact” for interval estimation of binomial proportions. *The American Statistician* 1998;52:119-26

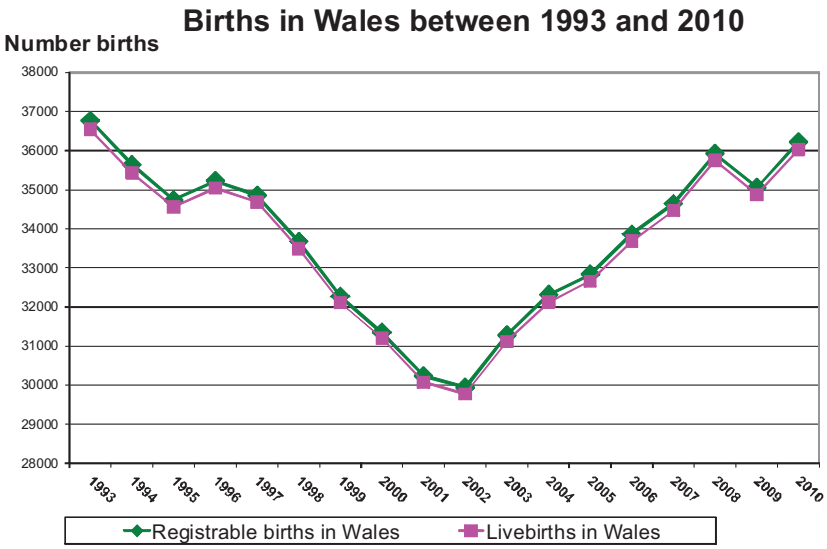
AWPS Annual Report 2010

Section A: Birth statistics in Wales

In this section we present birth statistics in Wales including data provided by unit coordinators.

Birth statistics in Wales (1993-2010)

Figure 1



Source: NCCHD & AWPS

- There were 36,217 registrable births (livebirths and stillbirths) in 2010, to mothers resident in Wales at the time of birth (Figure 1). This represents an increase of 21% since 2002, and an increase of 3% since 2009. The observed trend in number of births follows a similar pattern in Scotland and England.
- Not all women who are resident in Wales have their baby in Wales and similarly some babies whose mothers are not resident in Wales are born in Wales.
- In total there were 35,274 births in Welsh Health Boards, 96% of births occurred in Hospitals & Midwifery Led units, 3.7% of births were homebirths and 0.3% births occurred elsewhere (e.g. in transit).
- The overall caesarean section rate has been increasing steadily from 16% in 1993 to 25.1% in 2006. (Figure 2) There was a slight reduction in this rate in 2010 to 24.3%. Over half of these were emergency caesarean sections (12.7%). The elective caesarean section rate was 11.6%. In 2010, where known*, 11.5% of babies had an instrumental birth (6.3% by ventouse and 5.2% by forceps); the induction of labour rate was 14.1%.
- Following a steady increase in the rate of planned homebirths between 1993 and 2005, the rate has remained at around 3% for the last 5 years. (Figure 3)

*Data unavailable in 2/17 hospitals

Figure 2

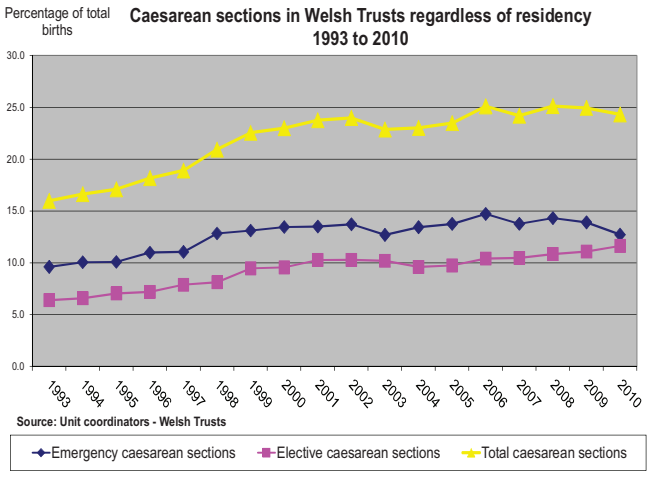
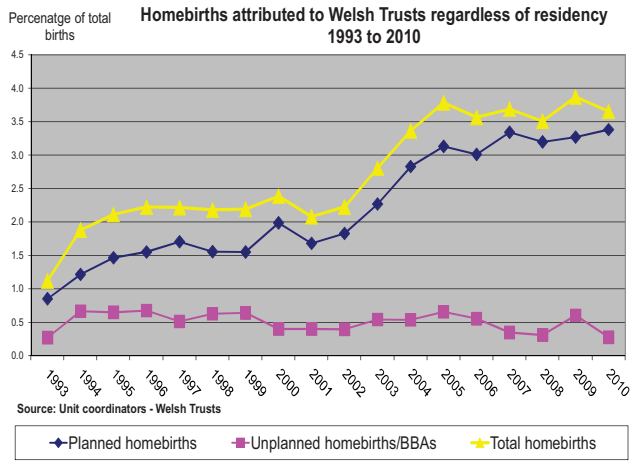


Figure 3



Section B: Mortality Statistics in Wales

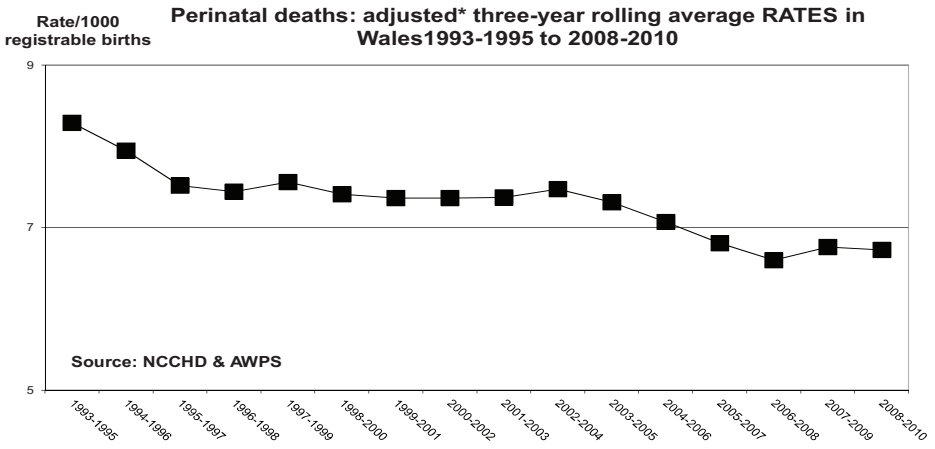
In this section we present AWPS data on babies born to women who are usually resident in Wales. This year we present adjusted rates for Local Authority, Health Board and Welsh NHS region, where late terminations (gestations of 24 weeks and over) are removed from the rates. Denominator data are provided by the NCCHD.

Perinatal mortality in Wales

Perinatal mortality includes stillbirths and early neonatal deaths. The perinatal mortality rate in 2010 was 7.5 per 1,000 registrable births, similar to the annual rate for the combined three years 2007-2009 (7.3 per 1,000 registrable births). These rates include late terminations. The perinatal mortality rate in Wales excluding late terminations in 2010 was 6.8 per 1,000 registrable births. There has been little change in the perinatal mortality rate in Wales since 1996 (Figure 4).

Perinatal mortality rates for 2010 are as yet unpublished for England and Scotland. In 2009 the perinatal mortality rates were 7.5 per 1,000 registrable births in England, (ONS), 7.4 per 1,000 registrable births in Scotland[1], and 7.6 per 1,000 registrable births in Wales (these rates include late terminations).

Figure 4



Adjusted perinatal mortality rates (excluding late terminations) for 2010 and 3 year rolling average rates between 1999 and 2009 were similar between NHS regions (Table 2). Between Health Boards adjusted perinatal mortality rates for 2010 ranged from 4.8 (95% CI 3.0,7.4) in Hywel Dda and 9.3 (95% CI 7.2, 12.1) in Abertawe Bro Morgannwg (Table 2).

Table 2 Perinatal deaths: adjusted* three-year rolling average RATES by Heath Board and NHS Region 1999-2001 to 2008-2010 and 2010 with 95% CI

Health Board and NHS Region	1999-2001	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2010	95% CI
Abertawe Bro Morgannwg University Health Board	7.91	7.70	7.21	6.80	6.72	7.36	7.50	7.04	6.53	7.23	9.3	(7.2, 12.1)
Hywel Dda Health Board	6.93	6.27	5.48	6.20	6.56	6.59	7.14	7.05	7.27	6.09	4.8	(3.0, 7.4)
Powys Teaching Health Board	7.79	6.39	7.56	8.39	9.00	8.27	7.25	5.32	7.09	7.28	5.9	(2.8, 12.1)
Mid and West Wales	**7.55**	**7.04**	**6.64**	**6.77**	**6.93**	**7.19**	**7.34**	**6.84**	**6.86**	**6.84**	**7.4**	**(5.9, 9.1)**
Betsi Cadwaladr University Health Board	7.25	7.51	7.45	7.00	6.97	6.79	6.71	6.05	6.68	6.28	6.0	(4.5, 8.0)
North Wales	**7.25**	**7.51**	**7.45**	**7.00**	**6.97**	**6.79**	**6.71**	**6.05**	**6.68**	**6.28**	**6.0**	**(4.5, 8.0)**
Aneurin Bevan Health Board	6.26	6.92	7.71	8.32	7.50	7.51	6.79	7.02	6.64	6.67	6.7	(5.0, 8.9)
Cardiff and Vale University Health Board	8.35	8.49	7.88	8.01	8.05	7.08	6.70	7.02	7.53	7.98	7.7	(5.8, 10.2)
Cwm Taf Health Board	7.75	7.24	7.98	8.14	7.90	6.93	6.34	6.34	6.34	5.99	5.7	(3.7, 8.6)
South East Wales	**7.29**	**7.52**	**7.83**	**8.17**	**7.78**	**7.23**	**6.66**	**6.87**	**6.90**	**7.00**	**6.8**	**(5.7, 8.2)**
WALES	**7.36**	**7.36**	**7.37**	**7.47**	**7.31**	**7.07**	**6.81**	**6.60**	**6.76**	**6.73**	**6.8**	**(6.0, 7.7)**

*excludes terminations 24 weeks and over

Table 3 Perinatal deaths: adjusted* three-year rolling average RATES by Local Authority and NHS Region 1999-2001 to 2008-2010 and 2010 with 95% CI

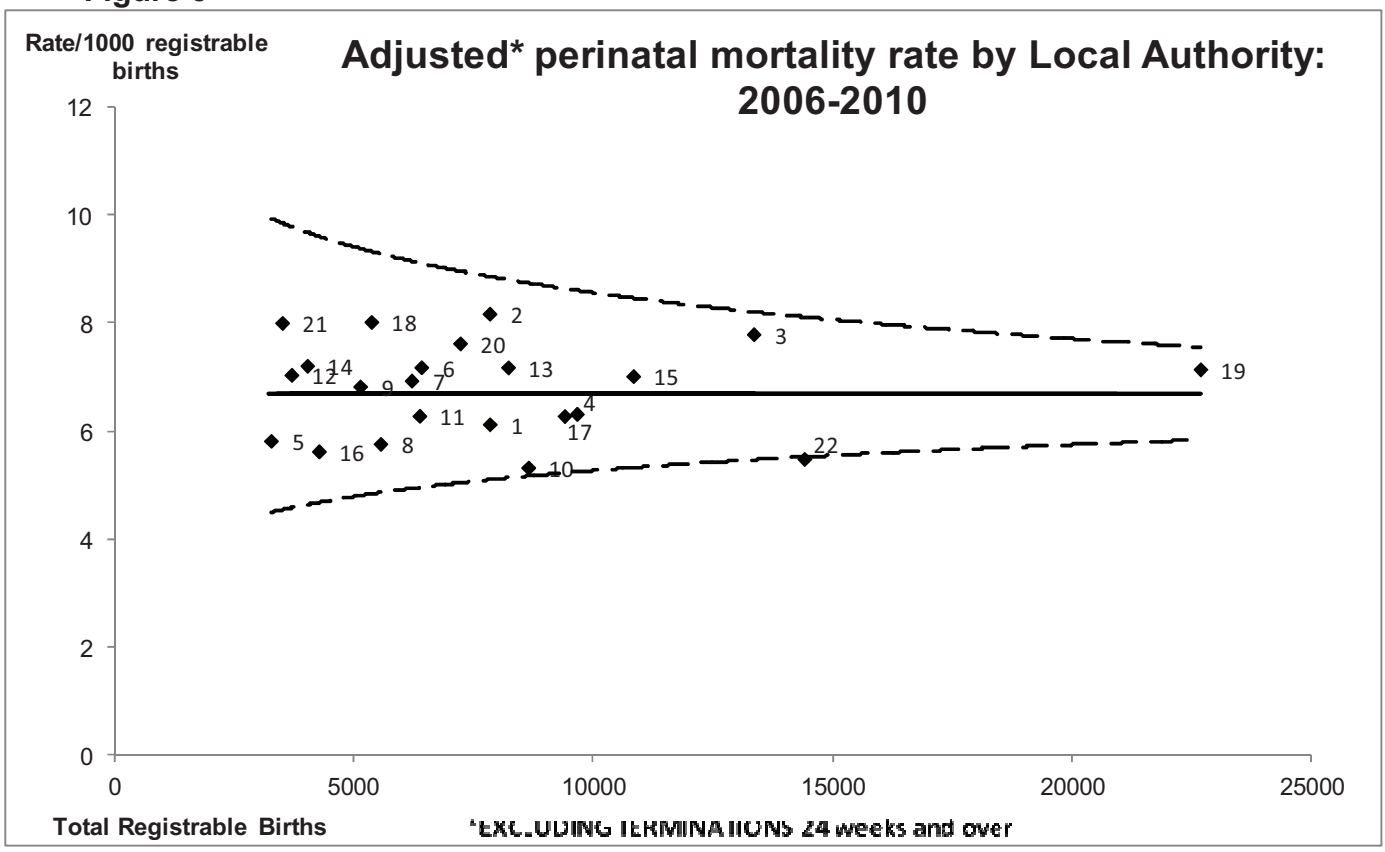
Health Board	Local Authority and NHS Region	1999-2001	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2010	95% CI
Abertawe Bro Morganwg University Health Board	Bridgend	6.28	5.80	7.23	8.25	9.34	7.95	6.32	4.74	3.64	6.92	12.7	(8.3 19.3)
	Neath Port Talbot	7.79	8.47	8.29	6.78	5.99	7.55	8.33	8.01	7.06	7.76	9.2	(5.6 15.2)
	Swansea	8.96	8.44	6.59	5.93	5.54	6.89	7.71	7.82	7.92	7.11	7.5	(4.9 11.4)
Hywel Dda Health Board	Carmarthenshire	5.42	5.29	3.95	4.95	6.23	6.61	7.88	6.55	7.07	5.85	4.6	(2.4 8.7)
	Ceredigion	8.96	7.50	5.83	7.27	7.17	5.55	4.82	5.85	8.21	6.52	4.1	(1.4 12.0)
	Pembrokeshire	8.14	7.13	7.57	7.54	6.76	7.07	7.18	8.39	7.08	6.23	5.4	(2.6 11.1)
Powys Teaching Health Board	Powys	7.79	6.39	7.56	8.39	9.00	8.27	7.25	5.32	7.09	7.28	5.9	(2.8 12.1)
Mid and West Wales		**7.55**	**7.04**	**6.64**	**6.77**	**6.93**	**7.19**	**7.34**	**6.84**	**6.86**	**6.84**	**7.4**	**(5.9 9.1)**
Betsi Cadwaladr University Health Board	Conwy	6.50	8.30	7.19	5.83	5.48	5.29	7.80	6.64	7.58	4.46	2.7	(0.9 7.8)
	Denbighshire	8.99	8.41	10.44	9.85	8.96	7.19	4.41	4.57	6.47	8.62	10.5	(5.9 18.7)
	Flintshire	7.36	8.00	7.45	6.78	6.27	6.53	6.30	5.43	5.38	4.61	3.4	(1.6 7.4)
	Gwynedd	4.67	4.01	6.47	6.96	7.24	5.31	5.26	6.30	7.12	7.34	7.2	(3.8 13.6)
	Isle of Anglesey	6.49	7.04	6.56	6.33	5.61	7.55	6.72	5.60	6.31	7.49	7.6	(3.5 16.4)
	Wrexham	9.17	8.97	6.79	6.50	7.85	8.73	9.06	7.23	7.40	6.43	6.5	(3.6 11.6)
North Wales		**7.25**	**7.51**	**7.45**	**7.00**	**6.97**	**6.79**	**6.71**	**6.05**	**6.68**	**6.28**	**6.0**	**(4.5 8.0)**
Aneurin Bevan Health Board	Blaenau Gwent	9.38	7.60	7.60	9.45	10.07	9.25	8.72	7.05	7.00	6.86	9.8	(5.0 19.2)
	Caerphilly	6.91	6.97	7.26	7.97	7.23	7.63	6.89	6.85	6.86	6.65	6.2	(3.7 10.3)
	Monmouthshire	3.88	4.26	4.10	5.46	4.26	5.14	5.25	6.96	6.65	5.37	3.4	(1.2 10.1)
	Newport	6.06	8.22	9.40	9.06	8.30	8.16	6.72	6.38	5.23	6.62	7.6	(4.6 12.5)
	Torfaen	4.77	6.12	8.97	9.45	7.61	6.90	6.53	8.51	8.45	7.70	6.4	(3.1 13.1)
Cardiff and Vale University Health Board	Cardiff	9.15	8.56	6.97	7.32	7.81	7.56	7.05	7.11	6.73	7.48	8.5	(6.3 11.6)
	The Vale of Glamorgan	6.41	8.29	10.53	9.99	8.77	5.61	5.62	6.75	9.99	9.56	4.9	(2.4 10.0)
Cwm Taf Health Board	Merthyr Tydfil	6.85	8.22	8.16	9.05	5.71	6.61	5.92	8.35	9.01	8.56	7.1	(3.0 16.5)
	Rhondda Cynon Taff	7.97	7.01	7.94	7.92	8.41	7.00	6.44	5.83	5.69	5.38	5.3	(3.3 8.6)
South East Wales		**7.29**	**7.52**	**7.83**	**8.17**	**7.78**	**7.23**	**6.66**	**6.87**	**6.90**	**7.00**	**6.8**	**(5.7 8.2)**
WALES		**7.36**	**7.36**	**7.37**	**7.47**	**7.31**	**7.07**	**6.81**	**6.60**	**6.76**	**6.73**	**6.8**	**(6.0 7.7)**

*excludes terminations 24 weeks and over

Between Local Authorities adjusted perinatal mortality rates for 2010 ranged from 2.7 per 1,000 (95% CI 0.9,7.8) in Conwy Local Authority to 12.7 per 1,000 (95% CI 8.3,19.3) in Bridgend Local Authority (Table 3).

The funnel plot shows the perinatal mortality rates over a 5 year period for Local Authorities (Figure 5).

Figure 5



1	Bridgend	Abertawe Bro Morganwg University Health Board
2	Neath Port Talbot	Abertawe Bro Morganwg University Health Board
3	Swansea	Abertawe Bro Morganwg University Health Board
4	Carmarthenshire	Hywel Dda Health Board
5	Ceredigion	Hywel Dda Health Board
6	Pembrokeshire	Hywel Dda Health Board
7	Powys	Powys Teaching Health Board
8	Conwy	Betsi Cadwaladr University Health Board
9	Denbighshire	Betsi Cadwaladr University Health Board
10	Flintshire	Betsi Cadwaladr University Health Board
11	Gwynedd	Betsi Cadwaladr University Health Board
12	Isle of Anglesey	Betsi Cadwaladr University Health Board
13	Wrexham	Betsi Cadwaladr University Health Board
14	Blaenau Gwent	Aneurin Bevan Health Board
15	Caerphilly	Aneurin Bevan Health Board
16	Monmouthshire	Aneurin Bevan Health Board
17	Newport	Aneurin Bevan Health Board
18	Torfaen	Aneurin Bevan Health Board
19	Cardiff	Cardiff and Vale University Health Board
20	The Vale of Glamorgan	Cardiff and Vale University Health Board
21	Merthyr Tydfil	Cwm Taf Health Board
22	Rhondda Cynon Taff	Cwm Taf Health Board

References

1. Information Services Division NHSScotland. Scottish Perinatal & Infant Mortality & Morbidity Report (SPIMMR) 2009 'Available at:' http://www.healthcareimprovementscotland.org/programmes/reproductive,_maternal__child/programme_resources/spimmr_2009.aspx. Accessed August 2011.

Stillbirths in Wales

In the UK stillbirth is defined as late fetal death from 24 weeks gestation. The stillbirth rate in Wales in 2010 was 5.2 per 1000 births, which is similar to the 2009 rate and to the annual rate for the combined 3 years 2007-2009. Data on stillbirths in other parts of the UK are at present unavailable for 2010. The stillbirth rate in 2009 was 5.2 per 1,000 registrable births in England (ONS), 5.3 per 1,000 registrable births in Scotland, 4.8 per 1,000 registrable births in Northern Ireland[1] and 5.2 per 1,000 in Wales. These rates include late terminations. The stillbirth rate in Wales excluding late terminations in 2010 was 4.6 per 1,000 registrable births.

The declining trend of recent years seems to have reached a plateau (Figure 6). Similar trends are observed for stillbirth rates in Welsh NHS regions and Health Boards (Table 3).

Within Europe data on stillbirths are available for 2004, collated in the European Perinatal Health Report[2]. Stillbirth rates (from 28 weeks gestation) ranged from 1.7 per 1,000 births in the Slovak Republic to 4.9 per 1,000 births in Latvia and France. However, differences in ascertainment and registration may contribute to some of this observed variation such that direct comparisons between countries may be inaccurate[3]. Within the UK the rate for stillbirths (from 28 weeks gestation) was 4.6 per 1,000 births in Scotland, 3.8 per 1,000 births in Northern Ireland and 4.1 per 1,000 births in Wales in 2004. Data on stillbirths using this definition were not available for England.

A report on stillbirth rates published earlier this year[4] estimated there were 2.6 million stillbirths (at least 1000g birthweight or at least 28 completed weeks gestation) globally in 2009. Globally the stillbirth rate has declined by 14.5% from 22.1 per 1,000 births in 1995 to 18.9 per 1,000 births in 2009. The estimated rate for the UK using this definition was 3.4 per 1,000 total births. The rate for Wales using this definition was 3.9 per 1,000 births in 2009 and 4.0 per 1,000 births in 2010.

Figure 6

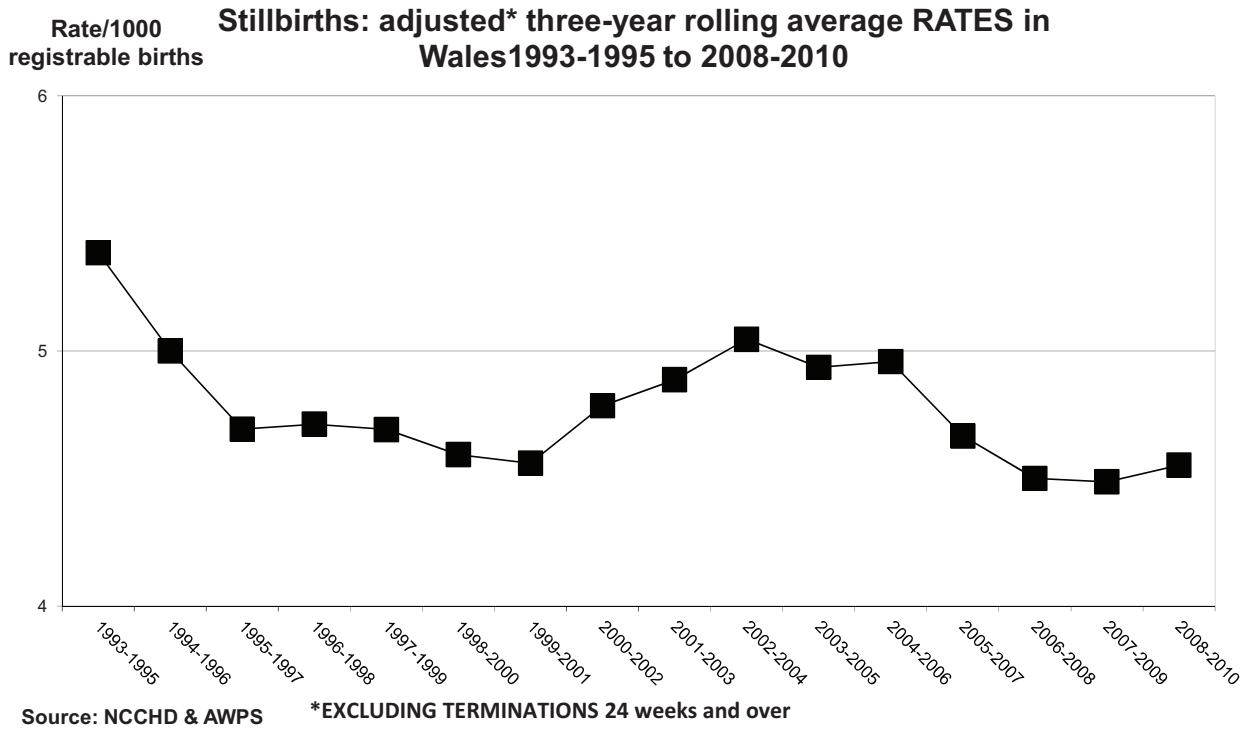


Table 4 Stillbirths: adjusted* three-year rolling average RATES by Health Board and NHS Region 1999-2001 to 2008-2010 and 2010 with 95% CI

Health Board and NHS Region	1999-2001	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2010	95% CI
Abertawe Bro Morgannwg University Health Board	4.66	4.77	4.68	4.32	4.31	5.19	5.65	5.29	4.74	5.20	6.9	(5.1, 9.3)
Hywel Dda Health Board	3.85	3.63	3.33	4.10	4.31	4.21	4.37	4.35	4.76	3.77	2.3	(1.2, 4.3)
Powys Teaching Health Board	4.67	4.73	5.81	6.65	6.47	6.06	4.30	3.72	5.25	5.66	3.4	(1.3, 8.6)
Mid and West Wales	**4.38**	**4.36**	**4.34**	**4.51**	**4.56**	**4.95**	**5.04**	**4.78**	**4.81**	**4.75**	**4.9**	**(3.7, 6.3)**
Betsi Cadwaladr University Health Board	4.74	5.31	4.91	4.53	4.29	4.41	4.37	3.85	4.03	3.75	3.7	(2.5, 5.3)
North Wales	**4.74**	**5.31**	**4.91**	**4.53**	**4.29**	**4.41**	**4.37**	**3.85**	**4.03**	**3.75**	**3.7**	**(2.5, 5.3)**
Aneurin Bevan Health Board	3.96	4.36	5.14	5.90	5.78	5.87	5.04	4.83	4.38	4.75	5.3	(3.8, 7.2)
Cardiff and Vale University Health Board	5.38	5.19	4.70	5.02	5.24	4.93	4.61	4.91	5.26	5.43	4.8	(3.4, 6.9)
Cwm Taf Health Board	4.71	5.22	6.30	6.10	5.46	4.81	4.07	4.29	3.92	4.24	4.6	(2.9, 7.3)
South East Wales	**4.60**	**4.83**	**5.25**	**5.65**	**5.52**	**5.30**	**4.67**	**4.74**	**4.60**	**4.89**	**5.0**	**(4.0, 6.1)**
WALES	**4.56**	**4.79**	**4.89**	**5.05**	**4.94**	**4.96**	**4.67**	**4.50**	**4.49**	**4.55**	**4.6**	**(4.0, 5.4)**

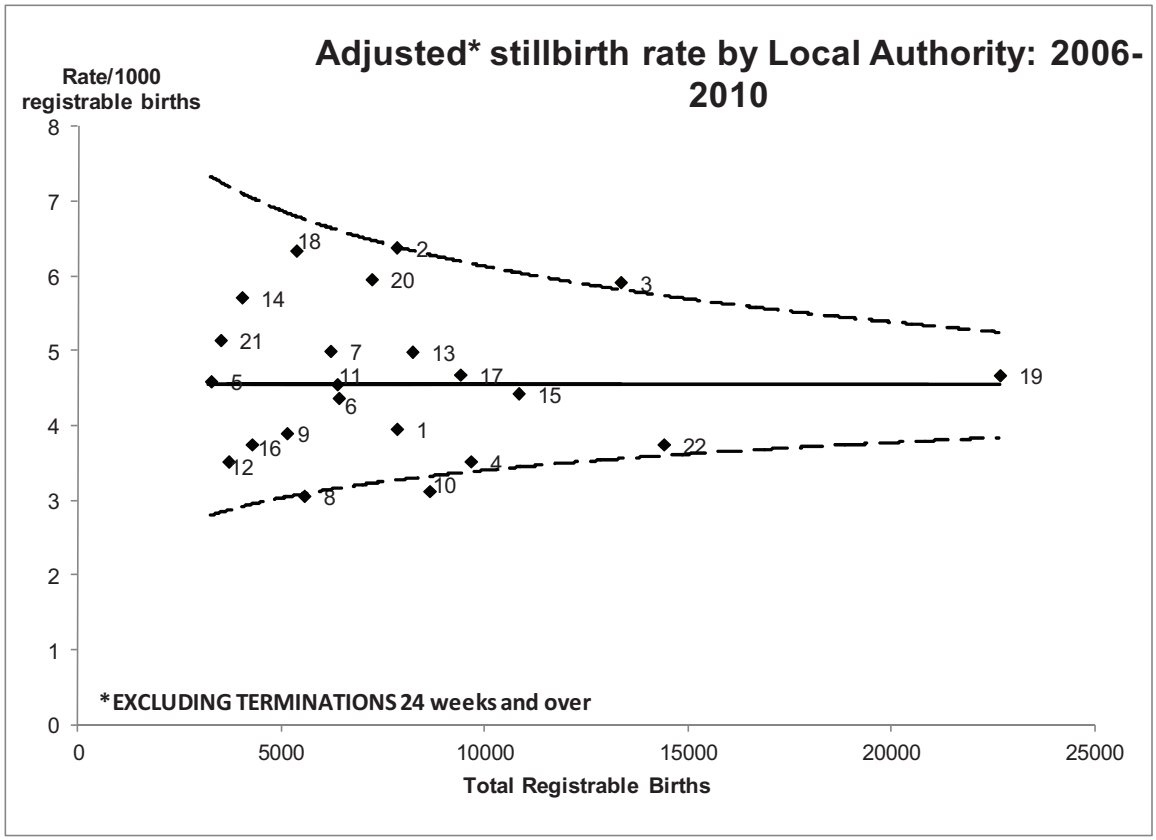
*excludes terminations 24 weeks and over

Table 5 Stillbirths: adjusted* three-year rolling average RATES by Local Authority and NHS Region 1999-2001 to 2008-2010 and 2010 with 95% CI

Health Board	Local Authority and NHS Region	1999-2001	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2010	95% CI
Abertawe Bro Morganwg University Health Board	Bridgend	4.71	4.41	4.67	4.81	5.56	5.30	4.14	3.02	1.93	4.62	9.0	(5.5 14.9)
	Neath Port Talbot	3.38	3.85	5.02	4.12	3.69	4.66	6.36	6.49	5.78	5.87	6.8	(3.8 12.1)
	Swansea	5.29	5.49	4.49	4.14	3.92	5.43	6.14	5.93	5.78	5.15	5.7	(3.5 9.2)
Hywel Dda Health Board	Carmarthenshire	3.29	3.53	2.77	3.43	4.15	4.59	5.01	4.14	4.14	3.10	1.5	(0.5 4.5)
	Ceredigion	5.60	5.19	3.50	4.48	3.86	3.33	3.21	3.73	6.15	5.51	4.1	(1.4 12.0)
	Pembrokeshire	3.78	2.97	4.08	4.93	4.79	4.08	3.99	4.98	4.98	3.90	2.3	(0.8 6.8)
Powys Teaching Health Board	Powys	4.67	4.73	5.81	6.65	6.47	6.06	4.30	3.72	5.25	5.66	3.4	(1.3 8.6)
Mid and West Wales		**4.38**	**4.36**	**4.34**	**4.51**	**4.56**	**4.95**	**5.04**	**4.78**	**4.81**	**4.75**	**4.9**	**(3.7 6.3)**
Betsi Cadwaladr University Health Board	Conwy	3.71	5.42	4.58	3.89	2.90	3.11	3.74	3.62	3.64	2.38	1.8	(0.5 6.4)
	Denbighshire	5.03	5.12	6.12	6.69	6.20	5.14	3.05	2.61	2.91	4.79	8.6	(4.5 16.2)
	Flintshire	4.91	5.89	4.47	3.91	3.03	3.56	4.13	3.49	3.46	2.31	1.1	(0.3 4.2)
	Gwynedd	3.02	2.86	4.12	4.35	4.73	3.72	3.42	3.94	4.75	5.77	6.4	(3.2 12.6)
	Isle of Anglesey	4.99	5.41	5.46	5.28	4.59	5.04	3.84	3.26	3.60	3.52	2.5	(0.7 9.1)
	Wrexham	6.52	6.73	5.28	4.09	4.93	6.11	6.90	5.37	5.20	4.09	3.0	(1.3 6.9)
North Wales		**4.74**	**5.31**	**4.91**	**4.53**	**4.29**	**4.41**	**4.37**	**3.85**	**4.03**	**3.75**	**3.7**	**(2.5 5.3)**
Aneurin Bevan Health Board	Blaenau Gwent	4.92	5.22	4.28	6.61	7.78	8.37	7.41	4.97	4.94	5.25	8.6	(4.2 17.6)
	Caerphilly	4.44	4.70	5.21	5.74	5.62	5.40	5.13	4.36	4.05	4.08	4.4	(2.4 8.1)
	Monmouthshire	2.16	2.56	3.28	4.29	3.87	3.95	3.23	3.86	4.30	4.22	3.4	(1.2 10.1)
	Newport	3.92	4.59	6.13	6.50	6.37	6.22	4.80	5.10	3.66	4.58	5.1	(2.8 9.3)
	Torfaen	3.75	4.08	5.52	6.07	5.29	5.96	4.97	5.99	5.95	6.47	6.4	(3.1 13.1)
Cardiff and Vale University Health Board	Cardiff	5.64	5.10	4.00	4.66	5.27	5.38	4.83	4.84	4.39	4.77	5.2	(3.5 7.7)
	The Vale of Glamorgan	4.75	5.44	6.75	6.05	5.16	3.57	3.91	5.12	7.95	7.51	3.5	(1.5 8.1)
Cwm Taf Health Board	Merthyr Tydfil	4.21	7.12	7.07	6.92	4.15	5.08	4.44	5.10	5.22	5.23	5.7	(2.2 14.5)
	Rhondda Cynon Taff	4.83	4.76	6.11	5.91	5.77	4.75	3.98	4.08	3.60	4.00	4.3	(2.5 7.4)
South East Wales		**4.60**	**4.83**	**5.25**	**5.65**	**5.52**	**5.30**	**4.67**	**4.74**	**4.60**	**4.89**	**5.0**	**(4.0 6.1)**
WALES		**4.56**	**4.79**	**4.89**	**5.05**	**4.94**	**4.96**	**4.67**	**4.50**	**4.49**	**4.55**	**4.6**	**(4.0 5.4)**

*excludes terminations 24 weeks and over

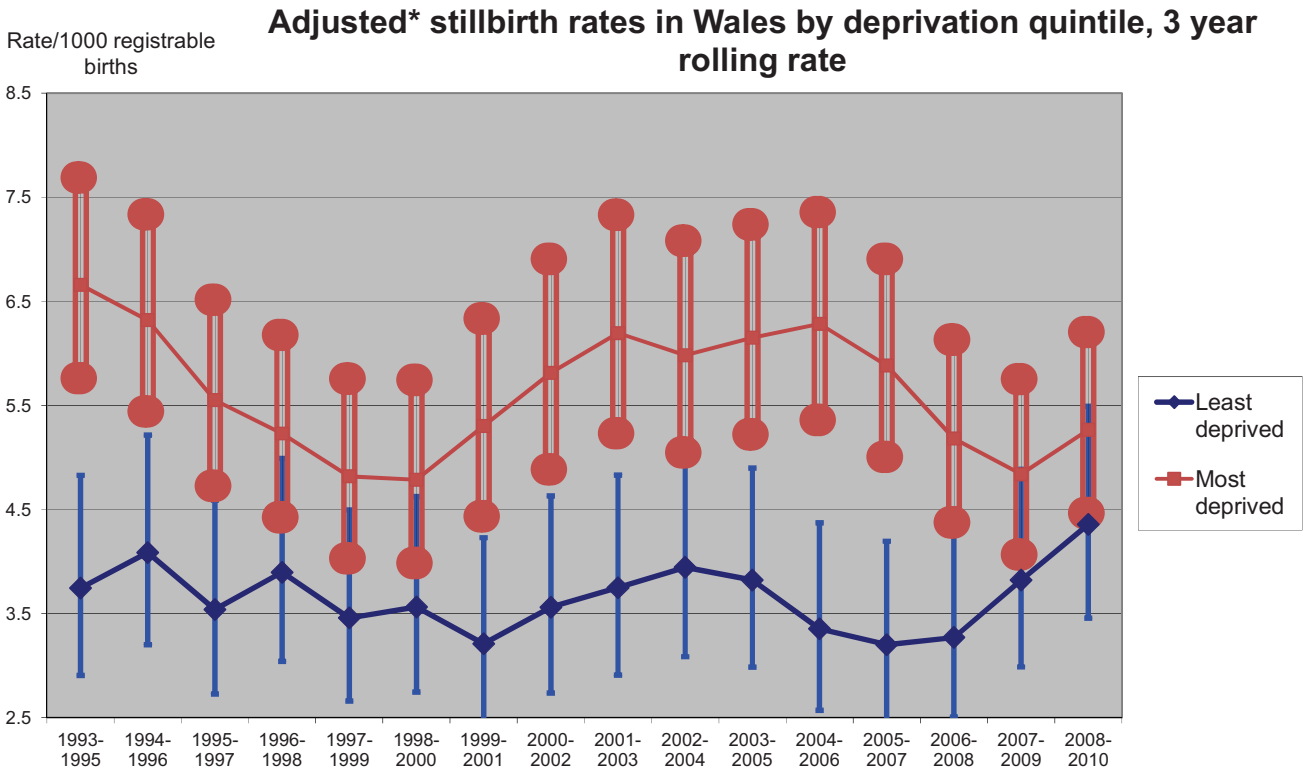
Figure 7



1	Bridgend	Abertawe Bro Morganwg University Health Board
2	Neath Port Talbot	Abertawe Bro Morganwg University Health Board
3	Swansea	Abertawe Bro Morganwg University Health Board
4	Carmarthenshire	Hywel Dda Health Board
5	Ceredigion	Hywel Dda Health Board
6	Pembrokeshire	Hywel Dda Health Board
7	Powys	Powys Teaching Health Board
8	Conwy	Betsi Cadwaladr University Health Board
9	Denbighshire	Betsi Cadwaladr University Health Board
10	Flintshire	Betsi Cadwaladr University Health Board
11	Gwynedd	Betsi Cadwaladr University Health Board
12	Isle of Anglesey	Betsi Cadwaladr University Health Board
13	Wrexham	Betsi Cadwaladr University Health Board
14	Blaenau Gwent	Aneurin Bevan Health Board
15	Caerphilly	Aneurin Bevan Health Board
16	Monmouthshire	Aneurin Bevan Health Board
17	Newport	Aneurin Bevan Health Board
18	Torfaen	Aneurin Bevan Health Board
19	Cardiff	Cardiff and Vale University Health Board
20	The Vale of Glamorgan	Cardiff and Vale University Health Board
21	Merthyr Tydfil	Cwm Taf Health Board
22	Rhondda Cynon Taff	Cwm Taf Health Board

Within Wales, stillbirth rates are persistently higher in the most deprived quintile of social deprivation measured using the Welsh Index of Multiple Deprivation (WIMD_2008), although rates over the last decade suggest a slight narrowing of the gap between the most deprived and least deprived quintiles (Figure 8). Similar trends have been observed in England[5].

Figure 8



The chart shows the rates in the highest and lowest quintiles of the population as given by the Welsh Index of Multiple Deprivation (WIMD_2008). The vertical lines show the 95% CI at each point. Cases were allocated to the appropriate quintile of deprivation based on mother's residence and LSOA. These scores were based on the mothers, not babies, and for multiple pregnancies only the first born babies were assigned a deprivation score, to avoid double counting.

References

1. Northern Ireland Statistics and Research Agency. Registrar General Annual Reports 'Available at:' http://www.nisra.gov.uk/demography/default.asp99.htm. Accessed November.
2. Euro-Peristat PROJECT. The European Perinatal Health Report 'Available at:' http://www.europeristat.com/bm.doc/european-perinatal-health-report.pdf. Accessed August 2011.
3. Draper ES. Evaluating and comparing neonatal outcomes. *Archives of disease in childhood. Fetal and neonatal edition* 2010;95(3):F158-9
4. Cousens S, Blencowe H, Stanton C, Chou D, Ahmed S, Steinhardt L, et al. National, regional, and worldwide estimates of stillbirth rates in 2009 with trends since 1995: a systematic analysis. *Lancet* 2011;377(9774):1319-30
5. Seaton SE, Smith LK, Draper ES, Mankelow BN, Springett A, Field DJ. Socio-economic inequalities in the rate of stillbirths: A population based study. *Arch Dis Child Fetal Neonatal Ed* 2011;96(Suppl 1):Fa17-Fa53

Risk factors for stillbirth

A systematic review of major risk factors for stillbirth in high income countries has identified maternal overweight and obesity (body-mass index >25 kg/m^2), advanced maternal age and maternal smoking as the highest ranking modifiable risk factors[1]. In the UK smoking accounts for 7% of all stillbirths but it is estimated that in disadvantaged populations maternal smoking contributes to up to 20% of stillbirths. These findings highlight the importance of public health initiatives to tackle smoking and obesity in women of reproductive age. Data from the Infant Feeding Survey for Wales 2005[2] show that 22% of pregnant women smoke throughout pregnancy. Data published in the CMACE report on maternal obesity shows that Wales has the highest prevalence of obesity in pregnancy in the UK at 6.5%, compared with 5.5% in Scotland, 4.9% in England and 5.3% in Northern Ireland[3].

Cause of death in stillbirths

Classification systems for stillbirths are used to give as much insight as possible into the underlying cause of death or events leading up to death, in order to explore any trends or variation in causes of death and identify areas that can be addressed.

We present stillbirths (excluding late terminations) by the Aberdeen classification (also known as the 'Obstetric' classification) (Table 4). These systems allow for the classification of deaths according to the clinical factors that preceded death, for example preterm labour, congenital abnormalities and fetal growth restriction. However the limitation of this system is that a large proportion of stillbirths are classified as 'unexplained', 61.7% of stillbirths in 2010. A new classification that takes account of both obstetric and fetal factors was proposed and adapted for use by CMACE in 2008[4]. This year we also present data on cause of death in stillbirths using this CMACE classification (Figure 9). Using the CMACE classification only 41.7% of stillbirths were 'unexplained'.

Ante-partum haemorrhage and congenital anomalies remain leading causes of stillbirth. Screening and monitoring in pregnancy are used to identify high risk pregnancies to provide appropriate clinical management. However a recent systematic review of screening and monitoring interventions in pregnancy has reported there is limited evidence for the impact of these interventions on stillbirth[5]. Screening and interventions to reduce antepartum stillbirth as a result of placental dysfunction has been identified as a priority for future research[6-8].

References

1. Flenady V, Koopmans L, Middleton P, Froen JF, Smith GC, Gibbons K, et al. Major risk factors for stillbirth in high-income countries: a systematic review and meta-analysis. *Lancet* 2011;377(9774):1331-40
2. NHS Information Centre for Health and Social Care. Infant feeding survey 'Available at:' http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles-related-surveys/infant-feeding-survey/infant-feeding-survey-2005. Accessed November.
3. Royal College of Obstetricians and Gynaecologists. CMACE release: National enquiry into maternal obesity – Implications for women, babies and the NHS 'Available at:' http://www.rcog.org.uk/news/cmace-release-national-enquiry-maternal-obesity-%E2%80%93-implications-women-babies-and-nhs. Accessed August.
4. Centre for Maternal and Child health Enquiries (CMACE). Perinatal Mortality 2008. United Kingdom. CMACE. London; 2010.
5. Haws RA, Yakoob MY, Soomro T, Menezes EV, Darmstadt GL, Bhutta ZA. Reducing stillbirths: screening and monitoring during pregnancy and labour. *BMC pregnancy and childbirth* 2009;9 Suppl 1:S5
6. Goldenberg RL, Culhane JF, Iams JD, Romero R. Epidemiology and causes of preterm birth. *Lancet* 2008;371(9606):75-84
7. Iams JD, Romero R, Culhane JF, Goldenberg RL. Primary, secondary, and tertiary interventions to reduce the morbidity and mortality of preterm birth. *Lancet* 2008;371(9607):164-75
8. Saigal S, Doyle LW. An overview of mortality and sequelae of preterm birth from infancy to adulthood. *Lancet* 2008;371(9608):261-9

Table 6 Aberdeen Classification* by Welsh NHS Region 2006-2010 – Stillbirths**

Aberdeen Classification 2006-2010	MW n=268	N n=147	SE n=386	WALES n=801
Antepartum haemorrhage (APH)	9.7%	10.9%	10.4%	10.2%
Congenital anomaly	7.1%	3.4%	6.7%	6.2%
Maternal Disorder	8.6%	7.5%	6.0%	7.1%
Mechanical	9.3%	4.1%	4.4%	6.0%
Miscellaneous	4.1%	6.1%	6.5%	5.6%
Pre-eclampsia	1.9%	4.1%	2.1%	2.4%
Unclassifiable	0.4%	2.0%	0.5%	0.7%
Unexplained	59.0%	61.9%	63.5%	61.7%

*For definitions see Appendix E
**excludes 91 terminations of pregnancy from 24 weeks gestation (87 congenital anomalies, 2 maternal disorder, 2 miscellaneous)

Table 7 Aberdeen Classification* 3 year rolling rates – Stillbirths**

	1993-1995	1994-1996	1995-1997	1996-1998	1997-1999	1998-2000	1999-2001	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Antepartum haemorrhage	17.5	17.4	19.7	20.0	20.7	17.0	15.9	14.4	15.7	17.6	16.8	16.3	12.1	9.6	7.0	9.0
Congenital anomaly	3.1	3.0	3.7	4.7	6.3	7.4	10.0	9.1	8.9	6.8	7.1	6.5	7.0	6.2	6.3	6.1
Iso-immunisation	0.3	0.2	0.2	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maternal Disorder	7.3	7.6	9.6	9.6	8.7	8.1	6.3	6.4	6.3	8.9	8.2	7.1	5.9	6.8	7.4	7.4
Mechanical	3.1	4.0	4.3	4.1	2.3	2.0	2.1	3.2	3.6	3.2	2.5	4.1	5.5	6.4	5.1	5.3
Miscellaneous	4.7	4.0	4.9	4.9	5.3	5.1	4.0	2.5	2.9	2.5	2.9	1.6	2.1	3.0	6.3	8.0
Pre-eclampsia	5.5	6.4	7.7	8.0	6.6	4.5	3.5	4.8	5.6	6.4	5.5	4.9	4.7	3.4	2.5	1.2
Unclassifiable	0.2	0.0	0.0	0.0	0.4	0.7	0.9	0.7	0.4	0.4	0.4	0.4	0.4	0.6	1.3	1.0
Unexplained	58.2	57.4	50.0	48.7	49.7	55.3	57.0	58.7	56.4	54.2	56.5	59.1	62.4	64.0	64.1	61.9
	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Total	577	528	492	489	473	447	428	438	447	472	476	491	473	470	474	488

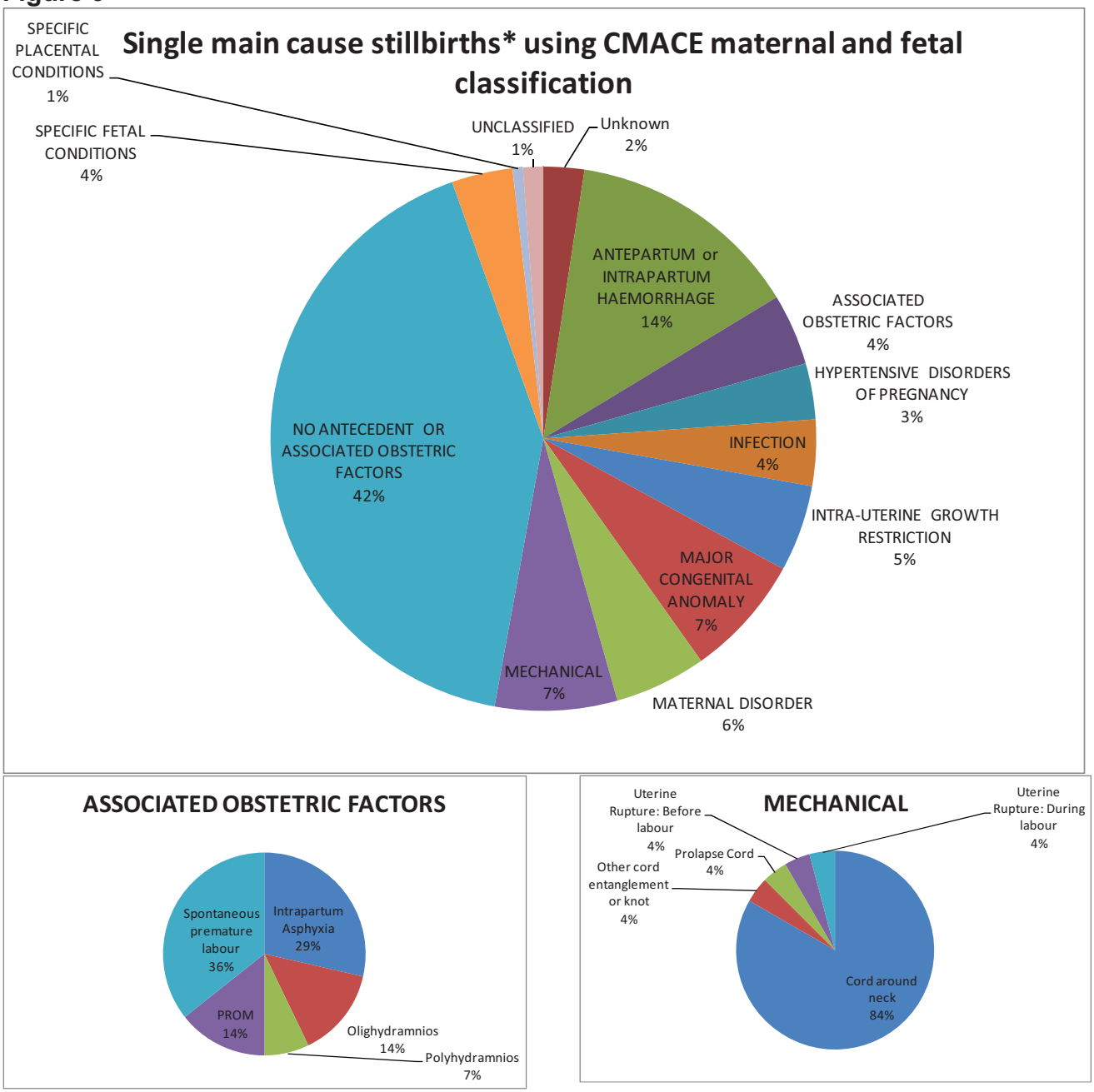
*For definitions see Appendix E
**excludes terminations of pregnancy from 24 weeks gestation

Table 8 CMACE classifications* for stillbirths by Welsh NHS Region 2009-2010**

Single main cause stillbirths using CMACE maternal and fetal classification 2009-2010	MW n=113	N n=61	SE n=157	WALES n=331
Unknown	2.7%	1.6%	2.5%	2.4%
ANTEPARTUM or INTRAPARTUM HAEMORRHAGE	15.0%	14.8%	12.7%	13.9%
ASSOCIATED OBSTETRIC FACTORS	6.2%	0.0%	4.5%	4.2%
HYPERTENSIVE DISORDERS OF PREGNANCY	2.7%	4.9%	3.2%	3.3%
INFECTION	3.5%	9.8%	1.9%	3.9%
INTRA-UTERINE GROWTH RESTRICTION	4.4%	3.3%	6.4%	5.1%
MAJOR CONGENITAL ANOMALY	8.0%	6.6%	7.0%	7.3%
MATERNAL DISORDER	4.4%	0.0%	8.3%	5.4%
MECHANICAL	10.6%	8.2%	4.5%	7.3%
NO ANTECEDENT OR ASSOCIATED OBSTETRIC FACTORS	38.1%	42.6%	43.9%	41.7%
SPECIFIC FETAL CONDITIONS	2.7%	4.9%	3.8%	3.6%
SPECIFIC PLACENTAL CONDITIONS	0.9%	0.0%	0.6%	0.6%
UNCLASSIFIED	0.9%	3.3%	0.6%	1.2%

*For definitions see Appendix E
**excludes 41 terminations of pregnancy from 24 weeks gestation, all congenital anomalies (6 Cardiovascular System, 13 Central Nervous System, 8 Chromosomal Disorders, 8 Multiple Anomalies, 3 Musculo-Skeletal System, 1 Other major congenital anomaly, 2 Urinary Tract)

Figure 9



*excludes 41 terminations of pregnancy from 24 weeks gestation, all congenital anomalies (6 Cardiovascular System, 13 Central Nervous System, 8 Chromosomal Disorders, 8 Multiple Anomalies, 3 Musculo-Skeletal System, 1 Other major congenital anomaly, 2 Urinary Tract)

Neonatal mortality in Wales (deaths after livebirth to 27 completed days)

The neonatal mortality rate in Wales in 2010 was 2.8 per 1000 live births, which is similar to the annual rate for the combined 3 years 2007-2009. There has been little change in neonatal mortality rates since 2004 (Figure 10). These rates include late terminations. The neonatal mortality rate in Wales excluding late terminations in 2010 was 2.7 per 1,000 live births. Similar trends are observed for neonatal mortality rates in the Welsh NHS regions and Health Boards (Table 7).

Data on neonatal mortality in other parts of the UK are at present unavailable for 2010. The neonatal mortality rate in 2009 was 3.1 per 1,000 live births in England (ONS), 2.8 per 1,000 live births in Scotland[1], 3.8 per 1,000 live births in Northern Ireland[2] and 3.2 per 1,000 in Wales.

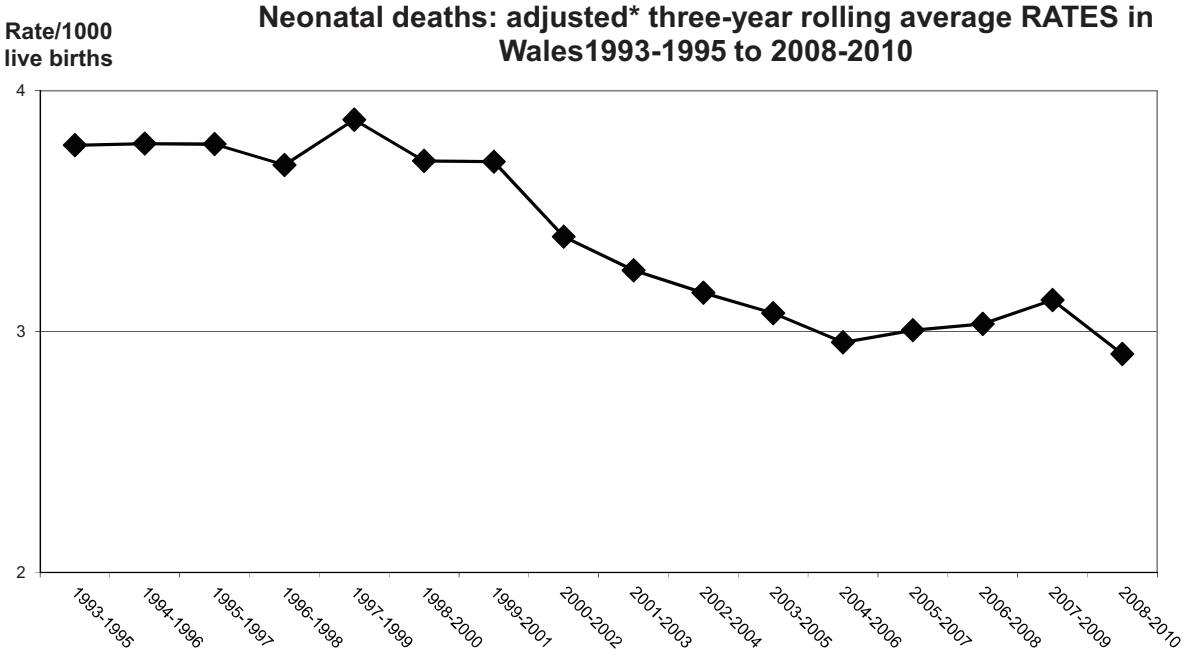
Within Europe, data on neonatal mortality are available for 2004, collated in the Euopean Perinatal Health Report[3]. Neonatal mortality rates ranged from 1.6 per 1,000 live births in Cyprus to 5.7 per 1,000 live births in Latvia. The neonatal death rate was 3.0 per 1,000 live births in Scotland, 3.0 per 1,000 births in Northern Ireland and 3.2 per 1,000 births in Wales in 2004 and 3.2 per 1,000 live births in England and Wales. However, differences in ascertainment and registration may contribute to some of this observed variation such that direct comparisons between countries may be inaccurate[4].

Neonatal mortality has been studied extensively in the UK, where the focus has been on addressing socio-economic inequalities. A Public Service Agreement target was set in 2003 to reduce the relative deprivation gap in England and Wales by 10%, by 2010. Recent analysis of trends in the neonatal mortality rate in England up to and including the year 2007 showed that substantial inequalities still persist, and much of this gap is explained by premature births and congenital anomalies[5]. Although this analysis did not distinguish between early and late neonatal deaths, previous work in Wales has shown that the association with deprivation is stronger in the late neonatal period[6]. Preterm birth is a major cause of neonatal mortality but there is little socio-economic variation in survival following preterm birth, indicating good access to high quality perinatal and neonatal services. However, the incidence of pre-term birth is higher in more deprived areas, driving the observed socio-economic inequalities in neonatal mortality rates[7].

References

1. Information Services Division NHSScotland. Scottish Perinatal & Infant Mortality & Morbidity Report (SPIMMR) 2009 'Available at:' http://www.healthcareimprovementscotland.org/programmes/reproductive,_maternal__child/programme_resources/spimmr_2009.aspx. Accessed August 2011.
2. Northern Ireland Statistics and Research Agency. Registrar General Annual Reports 'Available at:' http://www.nisra.gov.uk/demography/default.asp99.htm. Accessed November.
3. Euro-Peristat PROJECT. The European Perinatal Health Report 'Available at:' http://www.europeristat.com/bm.doc/european-perinatal-health-report.pdf. Accessed August 2011.
4. Draper ES. Evaluating and comparing neonatal outcomes. *Archives of disease in childhood. Fetal and neonatal edition* 2010;95(3):F158-9
5. Smith LK, Manktelow BN, Draper ES, Springett A, Field DJ. Nature of socioeconomic inequalities in neonatal mortality: population based study. *BMJ* 2010;341:c6654
6. Guildea ZE, Fone DL, Dunstan FD, Sibert JR, Cartlidge PH. Social deprivation and the causes of stillbirth and infant mortality. *Archives of Disease in Childhood* 2001;84(4):307-10
7. Smith LK, Draper ES, Manktelow BN, Dorling JS, Field DJ. Socioeconomic inequalities in very preterm birth rates. *Archives of disease in childhood. Fetal and neonatal edition* 2007;92(1):F11-4

Figure 10



Source: NCCHD & AWPS

Table 9 Neonatal deaths: adjusted* three-year rolling average RATES by Health Board and NHS Region 1999-2001 to 2008-2010 and 2010 with 95% CI

Health Board and NHS Region	1999-2001	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2010	95% CI
Abertawe Bro Morgannwg University Health Board	4.36	4.00	3.66	3.57	3.03	3.09	2.63	2.75	2.56	2.67	3.0	(1.9, 4.7)
Hywel Dda Health Board	3.86	3.15	2.85	2.78	3.01	3.22	3.49	3.23	3.04	2.84	2.8	(1.5, 4.9)
Powys Teaching Health Board	3.91	2.23	2.63	2.04	3.12	3.05	3.78	2.14	1.85	1.90	3.4	(1.3, 8.6)
Mid and West Wales	**4.13**	**3.49**	**3.25**	**3.12**	**3.04**	**3.13**	**3.07**	**2.85**	**2.65**	**2.65**	**2.9**	**(2.1, 4.1)**
Betsi Cadwaladr University Health Board	3.06	2.77	3.31	3.07	3.36	3.13	3.42	3.28	3.56	3.33	3.1	(2.1, 4.7)
North Wales	**3.06**	**2.77**	**3.31**	**3.07**	**3.36**	**3.13**	**3.42**	**3.28**	**3.56**	**3.33**	**3.1**	**(2.1, 4.7)**
Aneurin Bevan Health Board	2.78	3.05	3.07	3.23	2.52	2.59	2.38	2.90	3.02	2.51	1.4	(0.8, 2.6)
Cardiff and Vale University Health Board	4.44	4.66	3.82	3.75	3.75	3.24	3.07	3.21	3.39	3.60	3.7	(2.5, 5.6)
Cwm Taf Health Board	4.52	3.21	2.64	2.46	2.75	2.51	3.33	3.37	3.84	2.69	1.9	(0.9, 3.9)
South East Wales	**3.72**	**3.62**	**3.23**	**3.23**	**2.99**	**2.80**	**2.84**	**3.12**	**3.34**	**2.95**	**2.4**	**(1.7, 3.2)**
WALES	**3.70**	**3.39**	**3.25**	**3.16**	**3.08**	**2.95**	**3.01**	**3.03**	**3.13**	**2.91**	**2.7**	**(2.2, 3.3)**

*excludes terminations 24 weeks and over

Table 10 Neonatal deaths: adjusted* three-year rolling average RATES by Local Authority and NHS Region 1999-2001 to 2008-2010 and 2010 with 95% CI

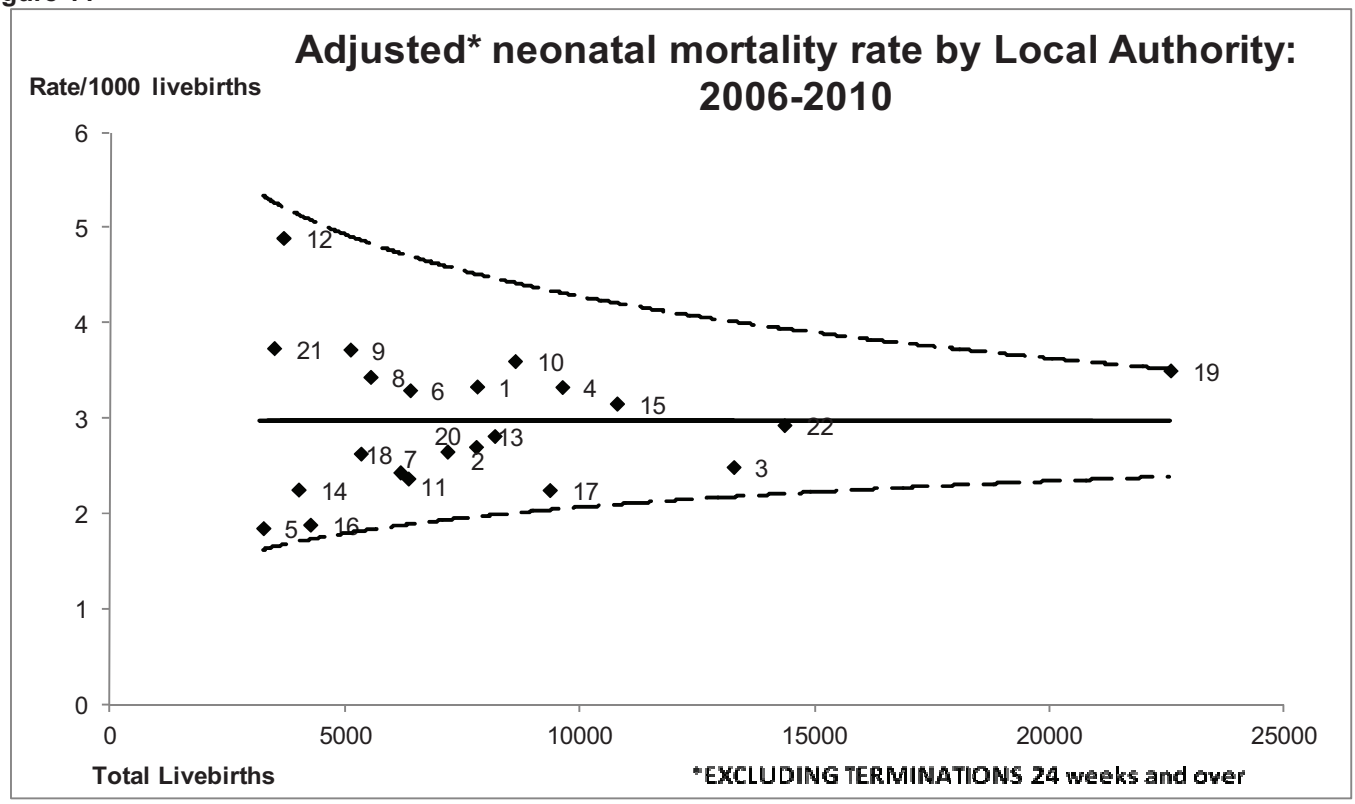
Health Board	Local Authority and NHS Region	1999-2001	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2010	95% CI
Abertawe Bro Morganwg University Health Board	Bridgend	1.80	1.63	2.82	3.92	4.03	2.89	3.06	2.59	3.22	3.37	4.9	(2.5 9.6)
	Neath Port Talbot	5.74	5.41	4.80	4.14	3.47	4.02	2.65	2.83	1.94	2.74	3.1	(1.3 7.2)
	Swansea	5.18	4.67	3.53	3.05	2.17	2.67	2.37	2.79	2.53	2.22	1.8	(0.8 4.2)
Hywel Dda Health Board	Carmarthenshire	3.11	1.97	1.39	1.72	2.65	3.14	3.96	3.12	3.29	2.93	3.1	(1.4 6.7)
	Ceredigion	3.38	3.48	4.10	4.50	3.87	2.23	1.61	2.67	3.10	2.02	0.0	(0.0 5.3)
	Pembrokeshire	5.26	4.77	4.39	3.50	3.11	3.82	3.74	3.69	2.64	3.13	3.9	(1.7 9.0)
Powys Teaching Health Board	Powys	3.91	2.23	2.63	2.04	3.12	3.05	3.78	2.14	1.85	1.90	3.4	(1.3 8.6)
Mid and West Wales		**4.13**	**3.49**	**3.25**	**3.12**	**3.04**	**3.13**	**3.07**	**2.85**	**2.65**	**2.65**	**2.9**	**(2.1 4.1)**
Betsi Cadwaladr University Health Board	Conwy	2.80	3.21	3.28	2.60	2.91	2.50	5.01	4.25	4.87	2.39	0.9	(0.2 5.0)
	Denbighshire	5.42	4.05	5.08	3.54	3.82	3.10	2.38	2.62	3.89	4.81	3.8	(1.5 9.8)
	Flintshire	2.88	2.54	3.64	3.10	3.45	3.57	3.56	3.89	3.48	3.28	2.9	(1.2 6.7)
	Gwynedd	1.93	1.72	3.25	3.79	3.64	2.67	2.64	2.90	2.92	2.37	1.6	(0.4 5.8)
	Isle of Anglesey	1.51	2.18	2.20	2.12	1.54	3.54	4.34	4.22	3.62	4.87	6.3	(2.7 14.7)
	Wrexham	3.64	3.01	2.28	2.90	3.83	3.30	3.04	2.28	3.02	3.13	4.2	(2.0 8.6)
North Wales		**3.06**	**2.77**	**3.31**	**3.07**	**3.36**	**3.13**	**3.42**	**3.28**	**3.56**	**3.33**	**3.1**	**(2.1 4.7)**
Aneurin Bevan Health Board	Blaenau Gwent	5.84	3.35	4.30	3.81	3.23	2.22	2.20	3.33	2.49	2.03	1.2	(0.2 7.0)
	Caerphilly	2.65	2.61	2.38	2.57	1.94	2.56	2.26	2.97	3.76	3.19	1.8	(0.7 4.6)
	Monmouthshire	2.60	2.99	1.64	1.96	0.78	1.59	2.03	3.10	2.36	1.16	0.0	(0.0 4.4)
	Newport	2.68	3.65	3.29	3.57	3.50	4.11	3.09	2.20	2.10	2.56	2.5	(1.1 5.9)
	Torfaen	1.03	2.73	4.52	4.76	3.00	1.26	1.88	3.49	4.10	2.48	0.0	(0.0 3.5)
Cardiff and Vale University Health Board	Cardiff	4.89	4.84	3.64	3.13	3.09	2.87	3.11	3.35	3.53	3.80	4.2	(2.7 6.5)
	The Vale of Glamorgan	3.34	4.17	4.35	5.56	5.70	4.35	2.95	2.81	2.98	2.98	2.1	(0.7 6.1)
Cwm Taf Health Board	Merthyr Tydfil	3.17	2.21	2.74	3.75	2.61	2.04	2.48	4.20	5.25	3.82	1.4	(0.3 8.0)
	Rhondda Cynon Taff	4.86	3.45	2.62	2.15	2.78	2.62	3.53	3.16	3.50	2.41	2.0	(0.9 4.4)
South East Wales		**3.72**	**3.62**	**3.23**	**3.23**	**2.99**	**2.80**	**2.84**	**3.12**	**3.34**	**2.95**	**2.4**	**(1.7 3.2)**
WALES		**3.70**	**3.39**	**3.25**	**3.16**	**3.08**	**2.95**	**3.01**	**3.03**	**3.13**	**2.91**	**2.7**	**(2.2 3.3)**

*excludes terminations 24 weeks and over

Between Local Authorities the neonatal mortality rates for 2010 ranged from 0.0 (95% CI 0.0,5.3) in Ceredigion Local Authority to 6.3 per 1,000 (95% CI 2.7,14.7) in Isle of Anglesey (Table 16).

The funnel plot shows the neonatal mortality rates over a 5 year period for Local Authorities (Figure 11). Although Isle of Anglesey has a neonatal mortality rate that is just outside the envelope of the funnel plot, these rates are not adjusted for case mix and the majority of the neonatal deaths in Isle of Anglesey are < 25 weeks gestation.

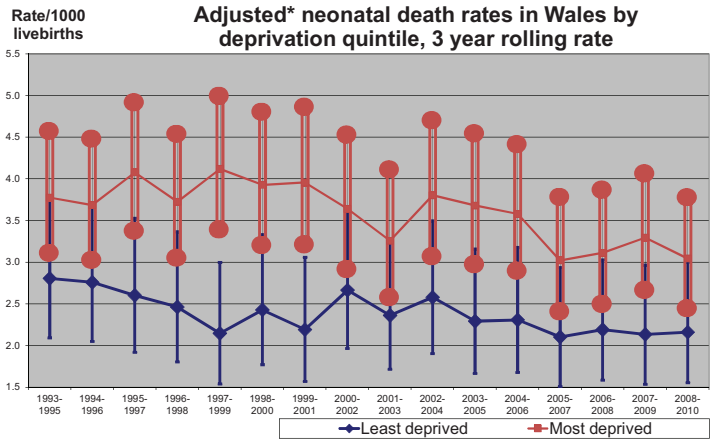
Figure 11



1	Bridgend	Abertawe Bro Morganwg University Health Board
2	Neath Port Talbot	Abertawe Bro Morganwg University Health Board
3	Swansea	Abertawe Bro Morganwg University Health Board
4	Carmarthenshire	Hywel Dda Health Board
5	Ceredigion	Hywel Dda Health Board
6	Pembrokeshire	Hywel Dda Health Board
7	Powys	Powys Teaching Health Board
8	Conwy	Betsi Cadwaladr University Health Board
9	Denbighshire	Betsi Cadwaladr University Health Board
10	Flintshire	Betsi Cadwaladr University Health Board
11	Gwynedd	Betsi Cadwaladr University Health Board
12	Isle of Anglesey	Betsi Cadwaladr University Health Board
13	Wrexham	Betsi Cadwaladr University Health Board
14	Blaenau Gwent	Aneurin Bevan Health Board
15	Caerphilly	Aneurin Bevan Health Board
16	Monmouthshire	Aneurin Bevan Health Board
17	Newport	Aneurin Bevan Health Board
18	Torfaen	Aneurin Bevan Health Board
19	Cardiff	Cardiff and Vale University Health Board
20	The Vale of Glamorgan	Cardiff and Vale University Health Board
21	Merthyr Tydfil	Cwm Taf Health Board
22	Rhondda Cynon Taff	Cwm Taf Health Board

Within Wales, neonatal death rates are higher in the most deprived quintile of social deprivation compared to the least deprived quintile, however there is evidence that this gap has narrowed since 2002 (Figure 12).

Figure 12



The chart shows the rates in the highest and lowest quintiles of the population as given by the Welsh Index of Multiple Deprivation (WIMD 2008). The vertical lines show the 95% CI at each point. Cases were allocated to the appropriate quintile of deprivation based on mother's residence and LSOA. These scores were based on the mothers, not babies, and for multiple pregnancies only the first born babies were assigned a deprivation score, to avoid double counting.

Cause of neonatal death in Wales

We use a classification system for neonatal deaths to give as much insight as possible into the underlying cause of death or events leading up to death. This helps us explore any trends or variation in causes of death and identify areas that can be addressed. Deaths after livebirth are presented by Clinico-Pathological (extended Wigglesworth) Classification. Unlike the Aberdeen classification, this classification system focuses more on cause of death, rather than the events leading up to it.

Preterm birth remains the leading cause of neonatal death, followed by congenital anomaly and infection. Examination of three year rolling average proportions by cause of death show a declining trend for preterm birth and small increases in the rate for infection. About 12% of neonatal deaths were attributed to intrapartum events. There has been little change in the proportion of neonatal deaths attributed to sudden unexpected death since 2005.

Table 11 Clinico-Pathological Classification* of deaths (after livebirth) – Neonatal Deaths to <28 days by Welsh NHS Region 2006-2010**

CP Classification NEONATAL DEATHS only 2006-2010	*MW n=154*	*N n=125*	*SE n=239*	*WALES n=518*
Congenital anomaly	18.2%	15.2%	23.0%	19.7%
Intrapartum events	16.2%	9.6%	10.5%	12.0%
Conditions consequent upon preterm birth	41.6%	49.6%	40.6%	43.1%
Infection	11.0%	12.0%	11.7%	11.6%
Specific conditions	8.4%	8.8%	9.2%	8.9%
Sudden unexpected death	2.6%	0.8%	2.9%	2.3%
Unclassifiable	1.9%	4.0%	2.1%	2.5%

*For definitions see Appendix E
**excludes 9 terminations of pregnancy from 24 weeks gestation (all congenital anomalies)

Figure 13

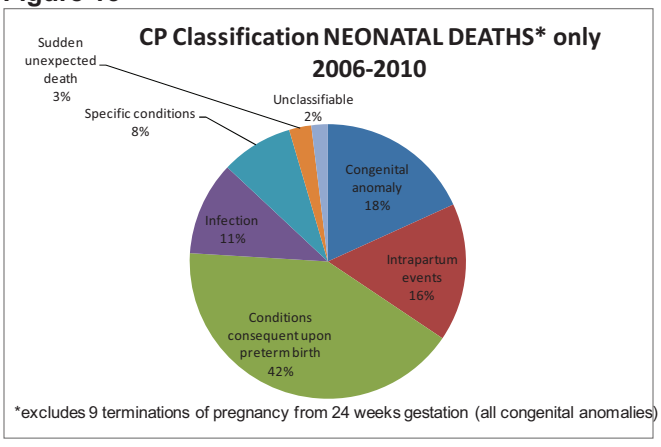


Table 12 Clinico-Pathological Classification* of deaths (after livebirth) – Neonatal Deaths to <28 days – 3 year rolling rates**

	1993-1995	1994-1996	1995-1997	1996-1998	1997-1999	1998-2000	1999-2001	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Congenital anomaly	24.1%	23.9%	22.8%	21.8%	19.5%	18.7%	21.7%	22.3%	22.0%	17.7%	15.9%	16.5%	19.1%	21.0%	19.8%	19.0%
Intrapartum events	11.4%	11.3%	10.4%	10.2%	8.7%	10.3%	9.5%	12.3%	9.8%	10.9%	10.2%	13.4%	15.5%	14.3%	12.2%	8.4%
Conditions consequent upon preterm birth	53.0%	53.4%	53.6%	53.8%	54.5%	55.2%	52.9%	51.5%	51.4%	47.6%	50.8%	46.4%	49.2%	43.5%	44.7%	41.3%
Infection	4.7%	3.8%	4.6%	6.3%	8.0%	8.6%	7.2%	6.8%	6.1%	8.5%	7.8%	8.6%	6.6%	9.8%	12.2%	14.8%
Specific conditions	5.0%	5.5%	6.1%	5.8%	6.4%	4.7%	5.5%	3.9%	6.1%	9.5%	9.5%	8.9%	4.6%	7.0%	7.0%	11.6%
Accidental death	0.5%	0.3%	0.0%	0.0%	0.3%	0.3%	0.6%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sudden unexpeced death	1.2%	1.8%	2.5%	2.1%	2.6%	2.2%	2.6%	2.6%	3.7%	5.1%	4.7%	4.1%	2.6%	2.5%	2.4%	2.3%
Unclassifiable	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.7%	0.7%	1.0%	2.1%	2.3%	1.9%	1.8%	2.6%
Total	402	397	394	381	389	359	346	309	296	294	295	291	303	315	329	310

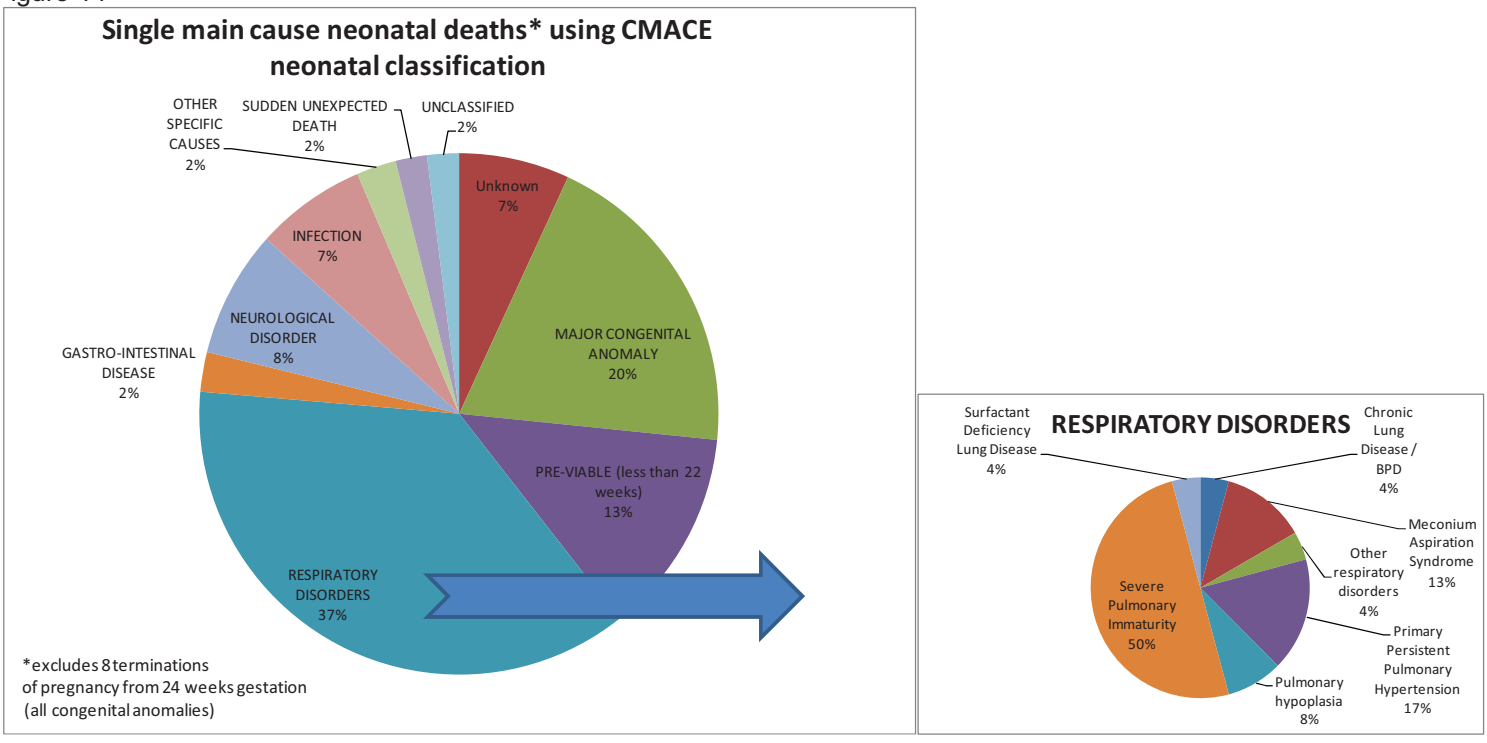
*For definitions see Appendix E
**excludes terminations of pregnancy from 24 weeks gestation

Table 13 CMACE classifications* for neonatal deaths by Welsh NHS Region 2009-2010**

Single main cause neonatal deaths using CMACE neonatal classification 2009-2010	MW n=62	N n=52	SE n=89	WALES n=203
Unknown	4.8%	9.6%	6.7%	6.9%
MAJOR CONGENITAL ANOMALY	24.2%	11.5%	21.3%	19.7%
PRE-VIABLE (less than 22 weeks)	8.1%	11.5%	16.9%	12.8%
RESPIRATORY DISORDERS	38.7%	38.5%	34.8%	36.9%
GASTRO-INTESTINAL DISEASE	3.2%	1.9%	2.2%	2.5%
NEUROLOGICAL DISORDER	12.9%	1.9%	7.9%	7.9%
INFECTION	4.8%	15.4%	3.4%	6.9%
OTHER SPECIFIC CAUSES	0.0%	3.8%	3.4%	2.5%
SUDDEN UNEXPECTED DEATH	3.2%	0.0%	2.2%	2.0%
UNCLASSIFIED	0.0%	5.8%	1.1%	2.0%
TOTAL	0.0%	0.0%	0.0%	0.0%

*For definitions see Appendix E
**excludes 8 terminations of pregnancy from 24 weeks gestation (all congenital anomalies)

Figure 14



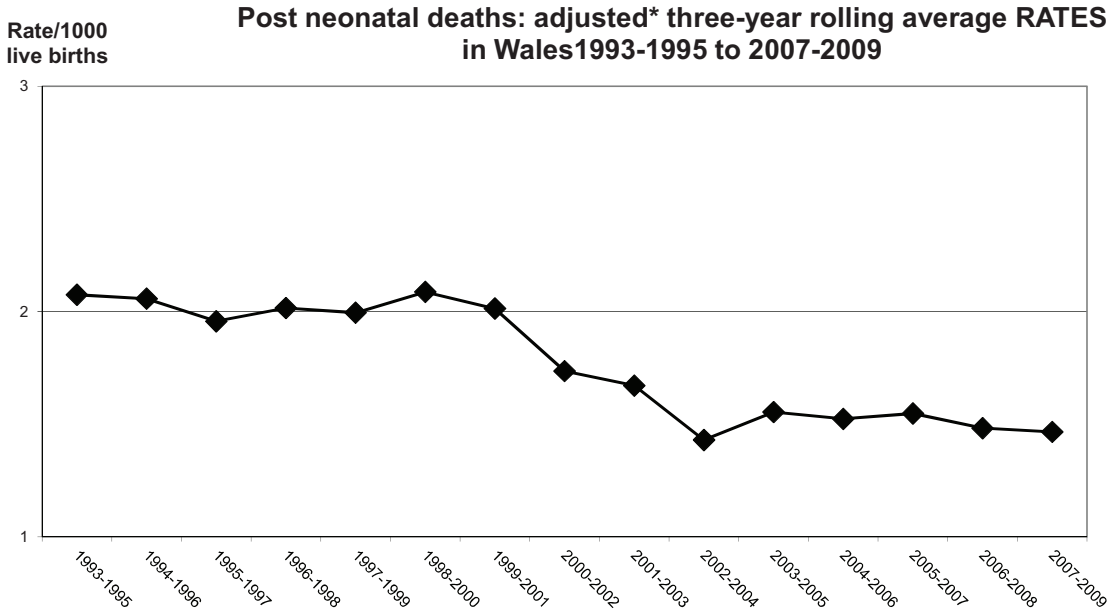
Post Neonatal mortality in Wales (deaths from 28 days to 1 year of age)

The greatest effect of deprivation in infant mortality is in the post-neonatal period[1, 2]. The post neonatal mortality rate in Wales in 2010 was 1.3 per 1000 births, which is similar to the annual rate for the combined 3 years 2007-2009. There has been little change in post neonatal mortality rates since 2002. (Figure 15) Post neonatal mortality rates in 2010 were similar in South East Wales (1.3 per 1,000 livebirths (95% CI 0.9, 2.0)) and Mid and West Wales (1.2 per 1,000 live births (95% CI 0.7, 2.0)), but higher in North Wales (1.7 per 1,000 live births (95% CI 1.0, 2.9)) (Table 14).

Sudden unexpected death remains a leading cause of post neonatal mortality. However examination of trends in cause of post neonatal deaths shows steady reductions in the proportions of deaths due to Sudden unexpected death (SUDI/SIDS), accidents and prematurity. This is accompanied by small increases in the proportions of deaths due to infection and specific causes (Table 16).

About 10% of post neonatal deaths were attributed to prematurity, and all of these babies died in hospital suggesting that they had not been discharged since birth.

Figure 15



Source: NCCHD & AWPS

Table 14 Post neonatal deaths: three-year rolling average RATES by Health Board and NHS Region 1998-2000 to 2007-2009 and 2010 with 95% CI

Health Board and NHS Region	1999-2001	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2010	95% CI
Abertawe Bro Morgannwg University Health Board	1.99	1.71	1.37	0.96	1.18	1.39	1.62	1.17	0.93	1.5	(0.8, 2.8)
Hywel Dda Health Board	1.84	1.38	1.57	1.15	1.70	1.47	1.43	1.05	0.96	0.8	(0.3, 2.2)
Powys Teaching Health Board	1.83	1.68	0.58	1.17	1.70	3.33	2.97	2.94	1.06	0.8	(0.1, 4.8)
Mid and West Wales	**1.91**	**1.59**	**1.35**	**1.05**	**1.42**	**1.65**	**1.71**	**1.33**	**0.95**	**1.2**	**(0.7, 2.0)**
Betsi Cadwaladr University Health Board	1.85	1.41	1.48	1.14	1.34	1.49	1.39	1.17	1.33	1.7	(1.0, 2.9)
North Wales	**1.85**	**1.41**	**1.48**	**1.14**	**1.34**	**1.49**	**1.39**	**1.17**	**1.33**	**1.7**	**(1.0, 2.9)**
Aneurin Bevan Health Board	2.30	1.93	1.78	1.80	1.89	1.55	1.76	2.05	2.13	1.0	(0.5, 2.1)
Cardiff and Vale University Health Board	2.57	2.47	2.50	2.11	1.71	1.21	1.14	1.38	1.67	1.3	(0.7, 2.5)
Cwm Taf Health Board	1.26	1.39	1.59	1.43	1.57	1.74	1.81	1.78	1.78	1.9	(0.9, 3.9)
South East Wales	**2.16**	**1.99**	**1.98**	**1.82**	**1.75**	**1.48**	**1.55**	**1.75**	**1.88**	**1.3**	**(0.9, 2.0)**
WALES	**2.01**	**1.74**	**1.67**	**1.43**	**1.55**	**1.52**	**1.55**	**1.48**	**1.47**	**1.3**	**(1.0, 1.8)**

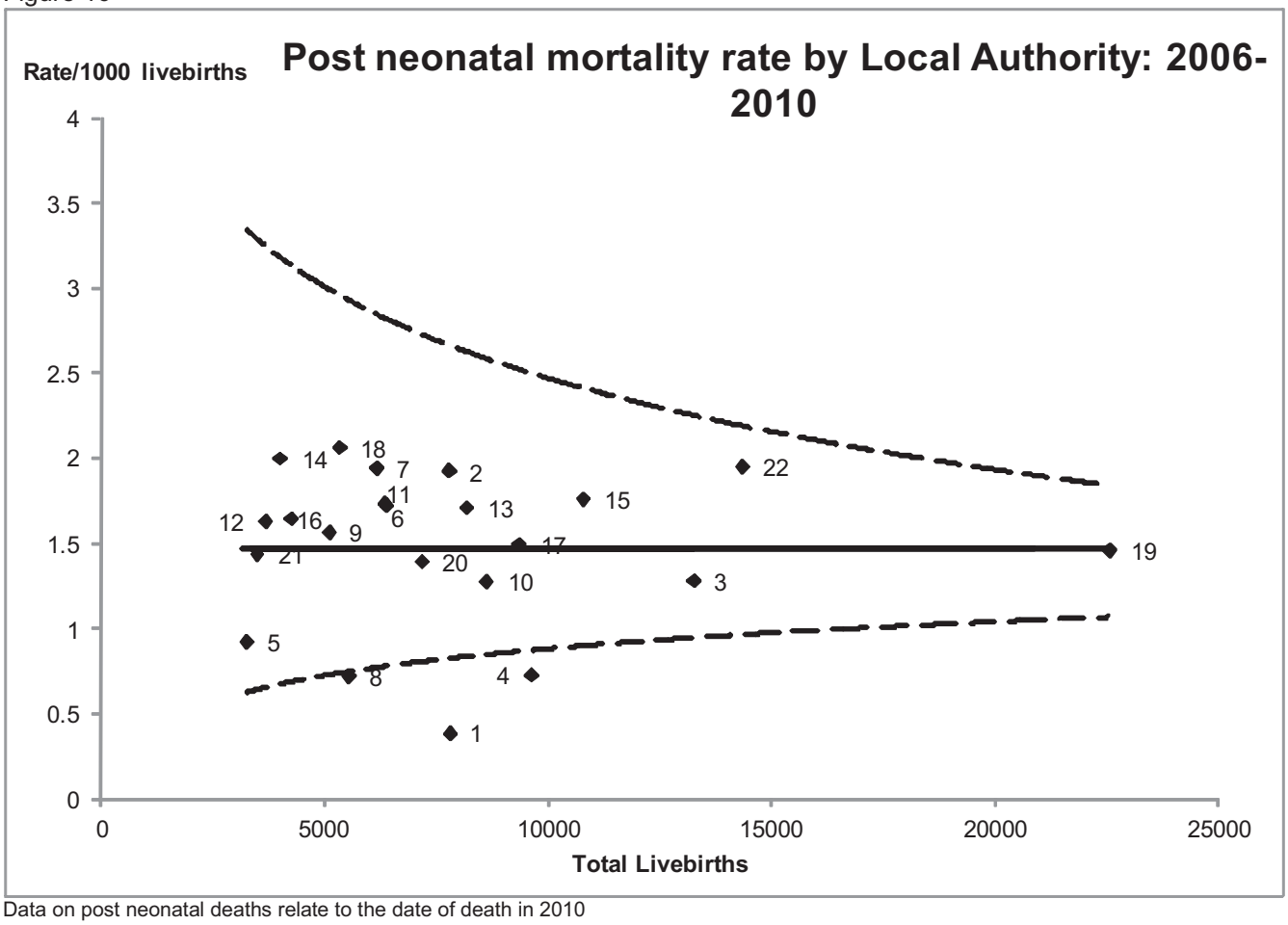
Data on post neonatal deaths relate to the date of death in 2010

Table 15 Post neonatal deaths: three-year rolling average RATES by Local Authority and NHS Region 1998-2000 to 2007-2009 and 2010 with 95% CI

Health Board	Local Authority and NHS Region	1999-2001	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2010	95% CI
Abertawe Bro Morganwg University Health Board	Bridgend	2.03	1.86	1.41	0.69	0.90	1.11	1.09	0.43	0.21	0.0	(0.0 2.3)
	Neath Port Talbot	1.30	1.03	1.01	1.46	1.39	2.01	1.77	1.96	1.08	2.5	(1.0 6.4)
	Swansea	2.32	1.98	1.55	0.83	1.22	1.20	1.84	1.14	1.26	1.8	(0.8 4.2)
Hywel Dda Health Board	Carmarthenshire	1.94	1.38	1.19	0.96	1.33	1.11	0.90	0.87	0.87	0.0	(0.0 2.0)
	Ceredigion	1.69	1.74	2.93	1.69	1.66	1.11	1.07	1.07	0.00	1.4	(0.2 7.8)
	Pembrokeshire	1.75	1.19	1.46	1.17	2.26	2.18	2.40	1.32	1.58	1.5	(0.4 5.6)
Powys Teaching Health Board	Powys	1.83	1.68	0.58	1.17	1.70	3.33	2.97	2.94	1.06	0.8	(0.1 4.8)
Mid and West Wales		**1.91**	**1.59**	**1.35**	**1.05**	**1.42**	**1.65**	**1.71**	**1.33**	**0.95**	**1.2**	**(0.7 2.0)**
Betsi Cadwaladr University Health Board	Conwy	2.18	1.28	2.30	2.28	2.91	1.87	1.88	0.91	0.91	0.0	(0.0 3.4)
	Denbighshire	1.45	1.10	0.73	1.06	1.39	1.72	1.70	1.64	2.27	0.0	(0.0 3.7)
	Flintshire	2.47	2.33	2.14	1.03	1.01	1.19	1.19	0.97	1.16	1.7	(0.6 5.0)
	Gwynedd	1.10	0.86	0.59	0.87	1.40	2.14	1.58	1.06	1.06	3.2	(1.3 8.2)
	Isle of Anglesey	2.01	2.18	2.20	1.59	1.02	1.01	1.45	2.34	2.26	0.0	(0.0 4.8)
	Wrexham	1.70	0.75	1.01	0.48	0.68	1.10	0.87	0.83	1.01	3.6	(1.6 7.8)
North Wales		**1.85**	**1.41**	**1.48**	**1.14**	**1.34**	**1.49**	**1.39**	**1.17**	**1.33**	**1.7**	**(1.0 2.9)**
Aneurin Bevan Health Board	Blaenau Gwent	1.35	1.43	0.96	0.95	0.92	1.33	2.20	2.50	2.90	0.0	(0.0 4.7)
	Caerphilly	2.15	1.79	1.74	2.08	2.59	1.92	1.77	1.88	2.04	1.3	(0.5 3.9)
	Monmouthshire	1.30	0.43	1.23	0.78	1.17	0.79	2.03	1.94	1.96	1.2	(0.2 6.5)
	Newport	2.86	3.07	2.67	2.58	2.33	1.76	1.74	1.83	1.75	1.0	(0.3 3.7)
	Torfaen	3.08	1.71	1.39	1.36	1.00	1.26	1.25	2.54	2.52	0.9	(0.2 5.2)
Cardiff and Vale University Health	Cardiff	3.23	2.90	2.61	2.02	1.59	1.01	1.04	1.22	1.62	1.7	(0.9 3.3)
	Glamorgan	0.95	1.30	2.17	2.38	2.07	1.79	1.47	1.87	1.83	0.0	(0.0 2.7)
Cwm Taf Health Board	Merthyr Tydfil Rhondda Cynon Taff	1.06	0.55	1.10	0.54	0.52	1.02	0.99	1.86	1.43	0.0	(0.0 5.5)
		1.31	1.59	1.70	1.64	1.81	1.91	2.00	1.76	1.87	2.3	(1.1 4.8)
South East Wales		**2.16**	**1.99**	**1.98**	**1.82**	**1.75**	**1.48**	**1.55**	**1.75**	**1.88**	**1.3**	**(0.9 2.0)**
WALES		**2.01**	**1.74**	**1.67**	**1.43**	**1.55**	**1.52**	**1.55**	**1.48**	**1.47**	**1.3**	**(1.0 1.8)**

Data on post neonatal deaths relate to the date of death in 2010

Figure 16



Data on post neonatal deaths relate to the date of death in 2010

1	Bridgend	Abertawe Bro Morganwg University Health Board
2	Neath Port Talbot	Abertawe Bro Morganwg University Health Board
3	Swansea	Abertawe Bro Morganwg University Health Board
4	Carmarthenshire	Hywel Dda Health Board
5	Ceredigion	Hywel Dda Health Board
6	Pembrokeshire	Hywel Dda Health Board
7	Powys	Powys Teaching Health Board
8	Conwy	Betsi Cadwaladr University Health Board
9	Denbighshire	Betsi Cadwaladr University Health Board
10	Flintshire	Betsi Cadwaladr University Health Board
11	Gwynedd	Betsi Cadwaladr University Health Board
12	Isle of Anglesey	Betsi Cadwaladr University Health Board
13	Wrexham	Betsi Cadwaladr University Health Board
14	Blaenau Gwent	Aneurin Bevan Health Board
15	Caerphilly	Aneurin Bevan Health Board
16	Monmouthshire	Aneurin Bevan Health Board
17	Newport	Aneurin Bevan Health Board
18	Torfaen	Aneurin Bevan Health Board
19	Cardiff	Cardiff and Vale University Health Board
20	The Vale of Glamorgan	Cardiff and Vale University Health Board
21	Merthyr Tydfil	Cwm Taf Health Board
22	Rhondda Cynon Taff	Cwm Taf Health Board

Table 16 Clinico-Pathological Classification* of deaths (after livebirth) – POST Neonatal Deaths from 28 days to < 1 year by Welsh NHS Region 2006-2010

CP Classification POST neonatal deaths only 2006-2010	MW n=64	N n=47	SE n=125	UNK n=1	WALES n=237
Congenital anomaly	18.8%	34.0%	18.4%	0.0%	21.5%
Intrapartum events	3.1%	0.0%	2.4%	0.0%	2.1%
Conditions consequent upon preterm birth	7.8%	10.6%	10.4%	0.0%	9.7%
Infection	14.1%	17.0%	12.8%	0.0%	13.9%
Specific conditions	6.3%	6.4%	8.0%	0.0%	7.2%
Accidental death	3.1%	4.3%	0.8%	0.0%	2.1%
Sudden unexpected death	31.3%	17.0%	24.8%	0.0%	24.9%
Unclassifiable	15.6%	10.6%	22.4%	100.0%	18.6%

*For definitions see Appendix C

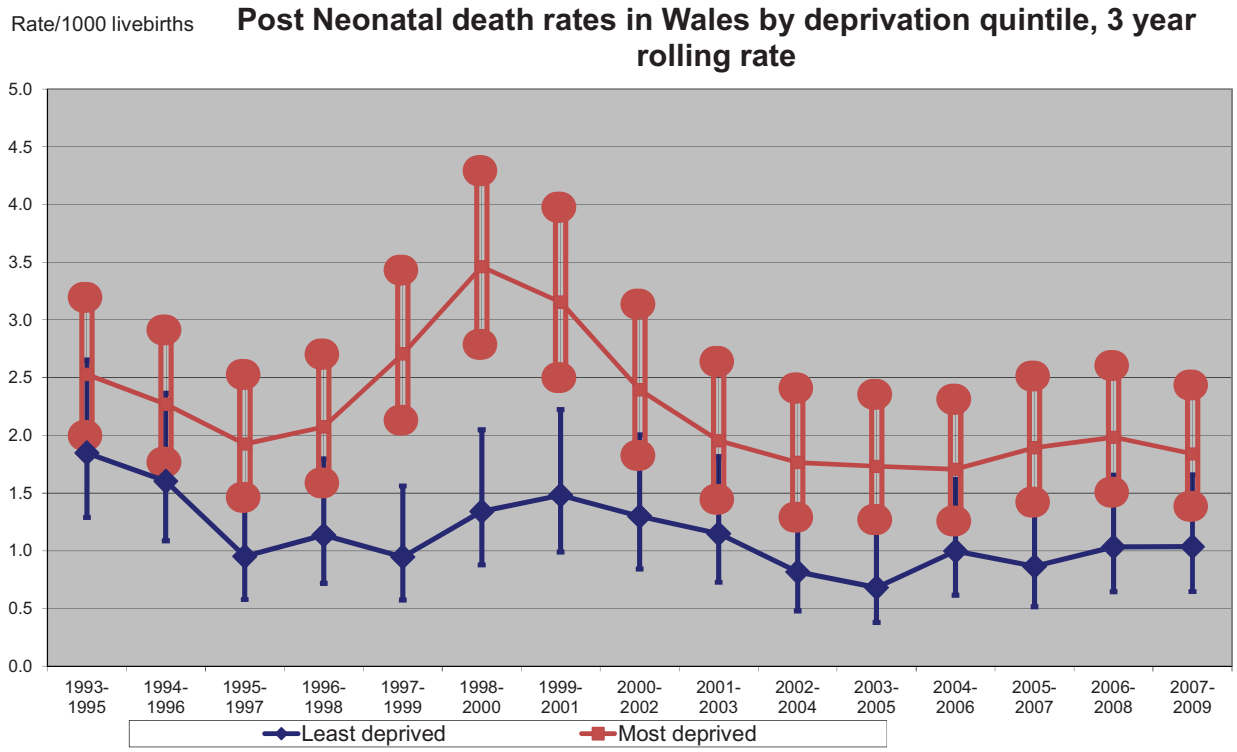
Data on post neonatal deaths relate to the date of death in 2010

Table 17 Clinico-Pathological Classification* of deaths (after livebirth) – POST Neonatal Deaths from 28 days to < 1 year

	1993-1995	1994-1996	1995-1997	1996-1998	1997-1999	1998-2000	1999-2001	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Congenital anomaly	24.9%	25.0%	20.6%	20.2%	21.0%	23.3%	24.5%	26.6%	28.3%	25.6%	23.5%	20.7%	19.2%	20.8%	23.4%
Intrapartum events	1.4%	1.4%	2.5%	4.3%	5.0%	4.0%	1.6%	0.0%	0.7%	1.5%	1.3%	2.0%	1.9%	3.2%	1.9%
Conditions consequent upon preterm birth	12.2%	14.4%	16.2%	16.8%	17.5%	15.8%	16.0%	12.7%	11.8%	14.3%	14.8%	16.0%	12.8%	11.7%	9.7%
Infection	12.7%	12.0%	12.3%	9.6%	9.0%	9.4%	10.1%	10.1%	8.6%	6.8%	9.4%	12.7%	14.1%	13.0%	13.0%
Specific conditions	10.9%	12.0%	8.3%	7.7%	7.5%	7.9%	6.9%	8.2%	9.9%	10.5%	8.1%	5.3%	7.7%	6.5%	6.5%
Accidental death	4.1%	3.7%	4.4%	4.8%	6.0%	4.5%	5.3%	7.0%	7.2%	9.0%	4.7%	4.7%	1.9%	3.2%	1.9%
Sudden unexpected death	33.9%	31.5%	35.8%	36.5%	33.5%	34.7%	34.6%	34.8%	32.9%	31.6%	34.9%	33.3%	33.3%	29.9%	24.7%
Unclassifiable	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	1.1%	0.6%	0.7%	0.8%	3.4%	5.3%	9.0%	11.7%	18.8%
Total	221	216	204	208	200	202	188	158	152	133	149	150	156	154	154

Within Wales, post neonatal death rates are higher in the most deprived quintile of social deprivation compared to the least deprived quintile; however the gap has narrowed since 2000 (Figure 17). Sudden Infant Deaths, specific conditions and accidental death and infection were causes of death that were strongly associated with deprivation[1].

Figure 17



The chart shows the rates in the highest and lowest quintiles of the population as given by the Welsh Index of Multiple Deprivation (WIMD 2008). The vertical lines show the 95% CI at each point. Cases were allocated to the appropriate quintile of deprivation based on mother's residence and LSOA. These scores were based on the mothers, not babies, and for multiple pregnancies only the first born babies were assigned a deprivation score, to avoid double counting.

References

1. Guildea ZE, Fone DL, Dunstan FD, Sibert JR, Cartlidge PH. Social deprivation and the causes of stillbirth and infant mortality. *Archives of Disease in Childhood* 2001;84(4):307-10
2. Oakley L, Maconochie N, Doyle P, Dattani N, Moser K. Multivariate analysis of infant death in England and Wales in 2005-06, with focus on socio-economic status and deprivation. *Health statistics quarterly / Office for National Statistics* 2009(42):22-39

Table 18 Adjusted* mortality rates by Health Board and Welsh NHS Regions in 2010 – RATES per 1,000 with 95% confidence intervals

Health Board and NHS Region	Registrable Births	Livebirths	Therapeutic abortion rate [20-23 wks]	Spontaneous miscarriage rate [20-23 wks]	Stillbirth rate*	Perinatal mortality rate*	Early neonatal mortality rate*	Late neonatal mortality rate	Neonatal mortality rate	Post neonatal mortality rate	Infant mortality rate
Abertawe Bro Morgannwg University Health Board	**6104**	**6058**	1.0 (0.5, 2.1)	1.8 (1.0, 3.2)	6.9 (5.1, 9.3)	9.3 (7.2, 12.1)	2.5 (1.5, 4.1)	0.5 (0.2, 1.5)	3.0 (1.9, 4.7)	1.5 (0.8, 2.8)	4.5 (3.1, 6.5)
Hywel Dda Health Board	**3994**	**3978**	1.7 (0.8, 3.6)	1.3 (0.5, 2.9)	2.3 (1.2, 4.3)	4.8 (3.0, 7.4)	2.5 (1.4, 4.6)	0.3 (0.0, 1.4)	2.8 (1.5, 4.9)	0.8 (0.3, 2.2)	3.5 (2.1, 5.9)
Powys Teaching Health Board	**1192**	**1188**	1.7 (0.5, 6.1)	0.0 (0.0, 3.2)	3.4 (1.3, 8.6)	5.9 (2.8, 12.1)	2.5 (0.9, 7.4)	0.8 (0.1, 4.8)	3.4 (1.3, 8.6)	0.8 (0.1, 4.8)	4.2 (1.8, 9.8)
Mid and West Wales	11290	11224	1.3 (0.8, 2.2)	1.4 (0.9, 2.3)	4.9 (3.7, 6.3)	7.4 (5.9, 9.1)	2.5 (1.7, 3.6)	0.4 (0.2, 1.0)	2.9 (2.1, 4.1)	1.2 (0.7, 2.0)	4.1 (3.1, 5.5)
Betsi Cadwaladr University Health Board	7665	7635	1.8 (1.1, 3.1)	1.7 (1.0, 2.9)	3.7 (2.5, 5.3)	6.0 (4.5, 8.0)	2.4 (1.5, 3.7)	0.8 (0.4, 1.7)	3.1 (2.1, 4.7)	1.7 (1.0, 2.9)	4.8 (3.5, 6.7)
North Wales	7665	7635	1.8 (1.1, 3.1)	1.7 (1.0, 2.9)	3.7 (2.5, 5.3)	6.0 (4.5, 8.0)	2.4 (1.5, 3.7)	0.8 (0.4, 1.7)	3.1 (2.1, 4.7)	1.7 (1.0, 2.9)	4.8 (3.5, 6.7)
Aneurin Bevan Health Board	7027	6987	1.4 (0.8, 2.6)	1.8 (1.1, 3.2)	5.3 (3.8, 7.2)	6.7 (5.0, 8.9)	1.4 (0.8, 2.6)	0.0 (0.0, 0.5)	1.4 (0.8, 2.6)	1.0 (0.5, 2.1)	2.4 (1.5, 3.9)
Cardiff and Vale University Health Board	6233	6197	2.4 (1.5, 4.0)	1.9 (1.1, 3.4)	4.8 (3.4, 6.9)	7.7 (5.8, 10.2)	2.9 (1.8, 4.6)	0.8 (0.3, 1.9)	3.7 (2.5, 5.6)	1.3 (0.7, 2.5)	5.0 (3.5, 7.1)
Cwm Taf Health Board	3705	3688	2.4 (1.3, 4.6)	2.2 (1.1, 4.3)	4.6 (2.9, 7.3)	5.7 (3.7, 8.6)	1.1 (0.4, 2.8)	0.8 (0.3, 2.4)	1.9 (0.9, 3.9)	1.9 (0.9, 3.9)	3.8 (2.3, 6.4)
South East Wales	16965	16872	2.0 (1.4, 2.8)	1.9 (1.4, 2.7)	5.0 (4.0, 6.1)	6.8 (5.7, 8.2)	1.9 (1.3, 2.7)	0.5 (0.2, 0.9)	2.4 (1.7, 3.2)	1.3 (0.9, 2.0)	3.7 (2.9, 4.7)
Unknown	297	297									
Wales	**36217**	**36028**	1.7 (1.4, 2.2)	1.7 (1.3, 2.2)	4.6 (4.0, 5.4)	6.8 (6.0, 7.7)	2.2 (1.7, 2.7)	0.5 (0.3, 0.8)	2.7 (2.2, 3.3)	1.3 (1.0, 1.8)	4.0 (3.4, 4.7)

Source: NCCHD & AWPS. Data on late fetal losses, stillbirths and neonatal deaths relate to the date of birth, while data on post neonatal deaths relate to the date of death in 2010.

* excludes 26 terminations of pregnancy from 24 weeks gestation (22 stillbirths, 4 early neonatal deaths)

Table 19 Adjusted* mortality rates by Local Authority and Welsh NHS Regions in 2010 – RATES per 1,000 with 95% confidence intervals

Health Board	Local authority and NHS Region	Registrable Births	Livebirths	Therapeutic abortion rate [20-23 wks]	Spontaneous miscarriage rate [20-23	Stillbirth rate*	Perinatal mortality rate*	Early neonatal mortality	Late neonatal mortality	Neonatal mortality rate	Post neonatal mortality	Infant mortality rate
Abertawe Bro Morganwg University Health Board	Bridgend	1660	1645	1.8 (0.6, 5.3)	1.8 (0.6, 5.3)	9.0 (5.5, 14.9)	12.7 (8.3, 19.3)	3.6 (1.7, 7.9)	1.2 (0.3, 4.4)	4.9 (2.5, 9.6)	0.0 (0.0, 2.3)	4.9 (2.5, 9.6)
	Neath Port Talbot	1627	1614	2.5 (1.0, 6.3)	1.8 (0.6, 5.4)	6.8 (3.8, 12.1)	9.2 (5.6, 15.2)	2.5 (1.0, 6.4)	0.6 (0.1, 3.5)	3.1 (1.3, 7.2)	2.5 (1.0, 6.4)	5.6 (2.9, 10.6)
	Swansea	2817	2799	0.0 (0.0, 1.4)	0.0 (0.0, 1.4)	5.7 (3.5, 9.2)	7.5 (4.9, 11.4)	1.8 (0.8, 4.2)	0.0 (0.0, 1.4)	1.8 (0.8, 4.2)	1.8 (0.8, 4.2)	3.6 (1.9, 6.6)
Hywel Dda Health Board	Carmarthenshire	1967	1961	0.5 (0.1, 2.9)	1.0 (0.3, 3.7)	1.5 (0.5, 4.5)	4.6 (2.4, 8.7)	3.1 (1.4, 6.7)	0.0 (0.0, 2.0)	3.1 (1.4, 6.7)	0.0 (0.0, 2.0)	3.1 (1.4, 6.7)
	Ceredigion	730	726	4.1 (1.4, 12.0)	2.7 (0.7, 9.9)	4.1 (1.4, 12.0)	4.1 (1.4, 12.0)	0.0 (0.0, 5.3)	0.0 (0.0, 5.3)	0.0 (0.0, 5.3)	1.4 (0.2, 7.8)	1.4 (0.2, 7.8)
	Pembrokeshire	1297	1291	1.5 (0.4, 5.6)	0.0 (0.0, 3.0)	2.3 (0.8, 6.8)	5.4 (2.6, 11.1)	3.1 (1.2, 7.9)	0.8 (0.1, 4.4)	3.9 (1.7, 9.0)	1.5 (0.4, 5.6)	5.4 (2.6, 11.1)
Powys Teaching Health Board	Powys	1192	1188	1.7 (0.5, 6.1)	5.0 (2.3, 10.9)	3.4 (1.3, 8.6)	5.9 (2.8, 12.1)	2.5 (0.9, 7.4)	0.8 (0.1, 4.8)	3.4 (1.3, 8.6)	0.8 (0.1, 4.8)	4.2 (1.8, 9.8)
Mid and West Wales		11290	11224	1.3 (0.8, 2.2)	1.4 (0.9, 2.3)	4.9 (3.7, 6.3)	7.4 (5.9, 9.1)	2.5 (1.7, 3.6)	0.4 (0.2, 1.0)	2.9 (2.1, 4.1)	1.2 (0.7, 2.0)	4.1 (3.1, 5.5)
Betsi Cadwaladr University Health Board	Conwy	1129	1126	1.8 (0.5, 6.4)	0.9 (0.2, 5.0)	1.8 (0.5, 6.4)	2.7 (0.9, 7.8)	0.9 (0.2, 5.0)	0.0 (0.0, 3.4)	0.9 (0.2, 5.0)	0.0 (0.0, 3.4)	0.9 (0.2, 5.0)
	Denbighshire	1049	1040	1.0 (0.2, 5.4)	4.7 (2.0, 11.1)	8.6 (4.5, 16.2)	10.5 (5.9, 18.7)	1.9 (0.5, 7.0)	1.9 (0.5, 7.0)	3.8 (1.5, 9.8)	0.0 (0.0, 3.7)	3.8 (1.5, 9.8)
	Flintshire	1753	1750	0.0 (0.0, 2.2)	1.7 (0.6, 5.0)	1.1 (0.3, 4.2)	3.4 (1.6, 7.4)	2.3 (0.9, 5.9)	0.6 (0.1, 3.2)	2.9 (1.2, 6.7)	1.7 (0.6, 5.0)	4.6 (2.3, 9.0)
	Gwynedd	1251	1243	4.0 (1.7, 9.3)	0.8 (0.1, 4.5)	6.4 (3.2, 12.6)	7.2 (3.8, 13.6)	0.8 (0.1, 4.5)	0.8 (0.1, 4.5)	1.6 (0.4, 5.8)	3.2 (1.3, 8.2)	4.8 (2.2, 10.5)
	Isle of Anglesey	794	792	0.0 (0.0, 4.8)	1.3 (0.2, 7.1)	2.5 (0.7, 9.1)	7.6 (3.5, 16.4)	5.1 (2.0, 12.9)	1.3 (0.2, 7.1)	6.3 (2.7, 14.7)	0.0 (0.0, 4.8)	6.3 (2.7, 14.7)
	Wrexham	1689	1684	3.5 (1.6, 7.7)	1.2 (0.3, 4.3)	3.0 (1.3, 6.9)	6.5 (3.6, 11.6)	3.6 (1.6, 7.8)	0.6 (0.1, 3.4)	4.2 (2.0, 8.6)	3.6 (1.6, 7.8)	7.7 (4.5, 13.2)
North Wales		7665	7635	1.8 (1.1, 3.1)	1.7 (1.0, 2.9)	3.7 (2.5, 5.3)	6.0 (4.5, 8.0)	2.4 (1.5, 3.7)	0.8 (0.4, 1.7)	3.1 (2.1, 4.7)	1.7 (1.0, 2.9)	4.8 (3.5, 6.7)
Aneurin Bevan Health Board	Blaenau Gwent	818	811	0.0 (0.0, 4.7)	1.2 (0.2, 6.9)	8.6 (4.2, 17.6)	9.8 (5.0, 19.2)	1.2 (0.2, 7.0)	0.0 (0.0, 4.7)	1.2 (0.2, 7.0)	0.0 (0.0, 4.7)	1.2 (0.2, 7.0)
	Caerphilly	2265	2253	1.8 (0.7, 4.5)	2.6 (1.2, 5.8)	4.4 (2.4, 8.1)	6.2 (3.7, 10.3)	1.8 (0.7, 4.6)	0.0 (0.0, 1.7)	1.8 (0.7, 4.6)	1.3 (0.5, 3.9)	3.1 (1.5, 6.4)
	Monmouthshire	872	869	13.6 (7.8, 23.6)	13.6 (7.8, 23.6)	3.4 (1.2, 10.1)	3.4 (1.2, 10.1)	0.0 (0.0, 4.4)	0.0 (0.0, 4.4)	0.0 (0.0, 4.4)	1.2 (0.2, 6.5)	1.2 (0.2, 6.5)
	Newport	1975	1964	0.5 (0.1, 2.9)	0.0 (0.0, 1.9)	5.1 (2.8, 9.3)	7.6 (4.6, 12.5)	2.5 (1.1, 5.9)	0.0 (0.0, 2.0)	2.5 (1.1, 5.9)	1.0 (0.3, 3.7)	3.6 (1.7, 7.3)
	Torfaen	1097	1090	1.8 (0.5, 6.6)	0.0 (0.0, 3.5)	6.4 (3.1, 13.1)	6.4 (3.1, 13.1)	0.0 (0.0, 3.5)	0.0 (0.0, 3.5)	0.0 (0.0, 3.5)	0.9 (0.2, 5.2)	0.9 (0.2, 5.2)
Cardiff and Vale University Health Board	Cardiff	4796	4767	0.6 (0.2, 1.8)	0.6 (0.2, 1.8)	5.2 (3.5, 7.7)	8.5 (6.3, 11.6)	3.4 (2.1, 5.4)	0.8 (0.3, 2.2)	4.2 (2.7, 6.5)	1.7 (0.9, 3.3)	5.9 (4.1, 8.5)
	The Vale of Glamorgan	1437	1430	5.5 (2.8, 10.9)	5.5 (2.8, 10.9)	3.5 (1.5, 8.1)	4.9 (2.4, 10.0)	1.4 (0.4, 5.1)	0.7 (0.1, 3.9)	2.1 (0.7, 6.1)	0.0 (0.0, 2.7)	2.1 (0.7, 6.1)
Cwm Taf Health Board	Merthyr Tydfil	705	701	4.2 (1.4, 12.4)	0.0 (0.0, 5.4)	5.7 (2.2, 14.5)	7.1 (3.0, 16.5)	1.4 (0.3, 8.0)	0.0 (0.0, 5.5)	1.4 (0.3, 8.0)	0.0 (0.0, 5.5)	1.4 (0.3, 8.0)
	Rhondda Cynon Taff	3000	2987	0.3 (0.1, 1.9)	1.0 (0.3, 2.9)	4.3 (2.5, 7.4)	5.3 (3.3, 8.6)	1.0 (0.3, 2.9)	1.0 (0.3, 2.9)	2.0 (0.9, 4.4)	2.3 (1.1, 4.8)	4.4 (2.5, 7.4)
South East Wales		16965	16872	2.0 (1.4, 2.8)	1.9 (1.4, 2.7)	5.0 (4.0, 6.1)	6.8 (5.7, 8.2)	1.9 (1.3, 2.7)	0.5 (0.2, 0.9)	2.4 (1.7, 3.2)	1.3 (0.9, 2.0)	3.7 (2.9, 4.7)
Unknown		297	297									
Wales		36217	36028	1.7 (1.4, 2.2)	1.7 (1.3, 2.2)	4.6 (4.0, 5.4)	6.8 (6.0, 7.7)	2.2 (1.7, 2.7)	0.5 (0.3, 0.8)	2.7 (2.2, 3.3)	1.3 (1.0, 1.8)	4.0 (3.4, 4.7)

Source: NCCHD & AWPS. Data on late fetal losses, stillbirths and neonatal deaths relate to the date of birth, while data on post neonatal deaths relate to the date of death in 2010.

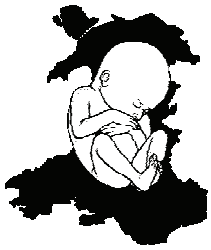
* excludes 26 terminations of pregnancy from 24 weeks gestation (22 stillbirths, 4 early neonatal deaths)

Autopsy data in 2010

Autopsies are useful for understanding underlying causes of death. This important information may not be available if autopsy is not performed. The figures presented in this section include all outcomes - spontaneous miscarriage, therapeutic abortion, stillbirth and early, late and post neonatal deaths where the mother was resident in Wales. Data regarding whether an autopsy was performed was available in 94% of all perinatal and infant deaths, including spontaneous and therapeutic abortions.

- Of these 94% (433/463) of cases:
    - Autopsy was performed in 39% of these deaths (36% in 2009, updated from AWPS annual report 2009).
    - Parents did not give consent in 55% of the cases (55% in 2009, updated from AWPS annual report 2009).
    - Autopsy was not requested by clinicians in 6% of the cases (9% in 2009, updated from AWPS annual report 2009).
    - Overall the autopsy rate, in known cases, has decreased from 56% in 2001 to 39% in 2010.
    - Autopsy was performed most often in unclassifiable death and sudden unexpected death (13/14 cases) and least often in deaths due to prematurity (3/33 cases).

- The decreasing rate of autopsy continues to be of concern.



Section C: Outcome by Gestation and Birthweight

The tables in this section show outcome by gestation and birthweight for 2010 and the annual rate for the combined 5 years for 2006-2010.

Outcome by Gestation and Birthweight

Improvements in perinatal care, antenatal steroids, surfactant therapy and advances in neonatal care have all resulted in improved outcome of very preterm infants. In Wales the survival figures compare with UK figures and international figures[1-3]

The most significant improvement has been in the 24 and 25 weeks gestation infants. In Wales, in 1994 the survival up to 1 year was 19% for 24 weeks and 46% for a 25 weeks gestation infant[4]. In 2010 the survival is nearly 37% for 24 weeks gestation and 67% for a 25 weeks gestation infant. From 26-30 weeks there has been a 10% improvement in survival from 1994 to 2010.
The survival figures for 22 and 23 weeks gestation infants have not shown any significant improvement.

Tables 20-23 in this section show gestation specific and birthweight specific survival in Wales for 2010 and for the 5 years 2006-2010.

We also present survival figures by gestation and birth weight in table 24 and this data should be useful for clinicians while counselling parents antenatally and at birth[5] .It is well recognised that gestation and birthweight influence survival and many clinical decisions in the perinatal and neonatal period are taken based on these two variables. If clinicians use these charts for counselling they should take into consideration that no adjustments have been made for recognised variables that influence survival including sex and ethnicity. If these charts are used to counsel parents in the antenatal period, the accuracy of the antenatal ultrasound scan in predicting birthweight and gestation should be considered.

References

1. Field DJ, Dorling JS, Manktelow BN, Draper ES. Survival of extremely premature babies in a geographically defined population: prospective cohort study of 1994-9 compared with 2000-5. *BMJ* 2008;336(7655):1221-3
2. Larroque B, Breart G, Kaminski M, Dehan M, Andre M, Burguet A, et al. Survival of very preterm infants: Epipage, a population based cohort study. *Arch Dis Child Fetal Neonatal Ed* 2004 89(2):F139-F44
3. Costeloe K, Hennessy E, Gibson AT, Marlow N, Wilkinson A, for the EPICure Study Group. The EPICure Study: Outcomes to Discharge from Hospital for Infants Born at the Threshold of Viability. *Pediatrics* 2000;106(4):659-71
4. Cartlidge PH, Stewart JH. Survival of very low birthweight and very preterm infants in a geographically defined population. *Acta paediatrica* 1997;86(1):105-10
5. Draper ES, Manktelow B, Field DJ, James D. Prediction of survival for preterm births by weight and gestational age: retrospective population based study. *BMJ* 1999;319(7217):1093-7

Outcome by gestation in Wales

Table 20 Outcome by gestation 2010

Gestation [weeks]	Total registrable births	Stillbirths*		Livebirths**		Survivors up to 1 year after livebirth***		
	Number	Number	%	Number	%	Number	%	95%CI
20	1	0	0.0%	1	100.0%	0	0.0%	(0.0, 79.3)
21	2	0	0.0%	2	100.0%	0	0.0%	(0.0, 65.8)
22	5	0	0.0%	5	100.0%	0	0.0%	(0.0, 43.4)
23	19	0	0.0%	19	100.0%	3	15.8%	(5.5, 37.6)
24	35	16	45.7%	19	54.3%	7	36.8%	(19.1, 59.0)
25	42	18	42.9%	24	57.1%	16	66.7%	(46.7, 82.0)
26	35	9	25.7%	26	74.3%	22	84.6%	(66.5, 93.9)
27	56	4	7.1%	52	92.9%	46	88.5%	(77.0, 94.6)
28	76	8	10.5%	68	89.5%	64	94.1%	(85.8, 97.7)
29	63	8	12.7%	55	87.3%	54	98.2%	(90.4, 99.7)
30	91	6	6.6%	85	93.4%	79	92.9%	(85.4, 96.7)
31	99	6	6.1%	93	93.9%	91	97.8%	(92.5, 99.4)
32	147	11	7.5%	136	92.5%	135	99.3%	(96.0, 99.9)
33	185	11	5.9%	174	94.1%	171	98.3%	(95.1, 99.4)
34	347	8	2.3%	339	97.7%	338	99.7%	(98.3, 99.9)
35	515	13	2.5%	502	97.5%	498	99.2%	(98.0, 99.7)
36	928	6	0.6%	922	99.4%	919	99.7%	(99.0, 99.9)
37	1946	9	0.5%	1937	99.5%	1933	99.8%	(99.5, 99.9)
>37	31612	56	0.2%	31556	99.8%	31511	99.9%	(99.8, 99.9)
Unknown	13	0	0.0%	13	100.0%	13	100.0%	(77.2, 100.0)
Total	36217	189	0.5%	36028	99.5%	35900	99.6%	(99.6, 99.7)

Source: NCCHD & AWPS
*includes 22 terminations of pregnancy from 24 weeks gestation
**includes 4 terminations of pregnancy
***interim number for births 2010 as figure is based on date of birth: final number will be available in 2011 report

Table 21 Outcome by gestation (2006-2010) in Wales

Gestation [weeks]	Total registrable births	Stillbirths*		Livebirths**		Survivors up to 1 year after livebirth***		
	Number	Number	%	Number	%	Number	%	95%CI
20	8	0	0.0%	8	100.0%	0	0.0%	(0.0, 32.4)
21	12	0	0.0%	12	100.0%	0	0.0%	(0.0, 24.3)
22	25	0	0.0%	25	100.0%	2	8.0%	(2.2, 25.0)
23	82	0	0.0%	82	100.0%	15	18.3%	(11.4, 28.0)
24	175	84	48.0%	91	52.0%	36	39.6%	(30.1, 49.8)
25	185	64	34.6%	121	65.4%	71	58.7%	(49.8, 67.1)
26	221	56	25.3%	165	74.7%	124	75.2%	(68.0, 81.1)
27	239	41	17.2%	198	82.8%	165	83.3%	(77.5, 87.9)
28	286	27	9.4%	259	90.6%	233	90.0%	(85.7, 93.1)
29	356	35	9.8%	321	90.2%	291	90.7%	(87.0, 93.4)
30	445	34	7.6%	411	92.4%	390	94.9%	(92.3, 96.6)
31	531	37	7.0%	494	93.0%	473	95.7%	(93.6, 97.2)
32	785	35	4.5%	750	95.5%	736	98.1%	(96.9, 98.9)
33	1092	39	3.6%	1053	96.4%	1040	98.8%	(97.9, 99.3)
34	1747	41	2.3%	1706	97.7%	1686	98.8%	(98.2, 99.2)
35	2612	54	2.1%	2558	97.9%	2536	99.1%	(98.7, 99.4)
36	4489	40	0.9%	4449	99.1%	4416	99.3%	(99.0, 99.5)
37	9212	53	0.6%	9159	99.4%	9132	99.7%	(99.6, 99.8)
>37	153141	252	0.2%	152889	99.8%	152641	99.8%	(99.8, 99.9)
Unknown	61	0	0.0%	61	100.0%	61	100.0%	(94.1, 100.0)
Total	175704	892	0.5%	174812	99.5%	174048	99.6%	(99.5, 99.6)

Source: NCCHD & AWPS
* includes 91 terminations of pregnancy from 24 weeks gestation
**includes 9 terminations of pregnancy from 24 weeks gestation
***interim number for births 2010 as figure is based on date of birth: final number will be available in 2011 report.

All spontaneous and therapeutic abortions under 24 weeks have been excluded.

Outcome by birthweight in Wales

Table 22 Outcome by birthweight 2010

Birthweight [grams]	Total registrable births	Stillbirths*		Livebirths**		Survivors up to 1 year after livebirth***		
	Number	Number	%	Number	%	Number	%	95%CI
<400	16	12	75.0%	4	25.0%	1	25.0%	(4.6, 69.9)
400-499	14	4	28.6%	10	71.4%	1	10.0%	(1.8, 40.4)
500-749	84	22	26.2%	62	73.8%	29	46.8%	(34.9, 59.0)
750-999	97	17	17.5%	80	82.5%	72	90.0%	(81.5, 94.8)
1000-1249	131	14	10.7%	117	89.3%	107	91.5%	(85.0, 95.3)
1250-1499	152	13	8.6%	139	91.4%	136	97.8%	(93.8, 99.3)
1500-1999	536	20	3.7%	516	96.3%	507	98.3%	(96.7, 99.1)
2000-2499	1574	20	1.3%	1554	98.7%	1545	99.4%	(98.9, 99.7)
2500-2999	5643	26	0.5%	5617	99.5%	5598	99.7%	(99.5, 99.8)
3000-4499	27269	39	0.1%	27230	99.9%	27206	99.9%	(99.9, 99.9)
>4499	687	0	0.0%	687	100.0%	687	100.0%	(99.4, 100.0)
Not known	14	2	14.3%	12	85.7%	11	91.7%	(64.6, 98.5)
Total	36217	189	0.5%	36028	99.5%	35900	99.6%	(99.6, 99.7)

Source: NCCHD & AWPS
*includes 22 terminations of pregnancy from 24 weeks gestation
**includes 4 terminations of pregnancy
***interim number for births 2010 as figure is based on date of birth: final number will be available in 2011 report.

Table 23 Outcome by birthweight (2006-2010) in Wales

Birthweight [grams]	Total registrable births	Stillbirths*		Livebirths**		Survivors up to 1 year after livebirth***		
	Number	Number	%	Number	%	Number	%	95%CI
<400	69	50	72.5%	19	27.5%	1	5.3%	(0.9, 24.6)
400-499	67	32	47.8%	35	52.2%	3	8.6%	(3.0, 22.4)
500-749	392	129	32.9%	263	67.1%	115	43.7%	(37.9, 49.8)
750-999	485	80	16.5%	405	83.5%	314	77.5%	(73.2, 81.3)
1000-1249	564	52	9.2%	512	90.8%	463	90.4%	(87.6, 92.7)
1250-1499	717	41	5.7%	676	94.3%	640	94.7%	(92.7, 96.1)
1500-1999	2765	98	3.5%	2667	96.5%	2608	97.8%	(97.2, 98.3)
2000-2499	7951	111	1.4%	7840	98.6%	7788	99.3%	(99.1, 99.5)
2500-2999	27767	96	0.3%	27671	99.7%	27573	99.6%	(99.6, 99.7)
3000-4499	131781	188	0.1%	131593	99.9%	131420	99.9%	(99.8, 99.9)
>4499	3081	3	0.1%	3078	99.9%	3074	99.9%	(99.7, 99.9)
Not known	65	12	18.5%	53	81.5%	49	92.5%	(82.1, 97.0)
Total	175704	892	0.5%	174812	99.5%	174048	99.6%	(99.5, 99.6)

Source: NCCHD & AWPS
* includes 91 terminations of pregnancy from 24 weeks gestation
**includes 9 terminations of pregnancy
***interim number for births 20010as figure is based on date of birth: final number will be available in 2011 report.

All spontaneous and therapeutic abortions under 24 weeks have been excluded.

Table 24 Percentage one-year survival all live born* between 2005 and 2009

	23	24	25	26	27	28	29	30	31	32
400 - 499										
500 - 749	10 (37) **27.0%** (15.4%, 43.0%)	16 (49) **32.7%** (21.2%, 46.6%)	15 (24) **62.5%** (42.7%, 78.8%)	12 (22) **54.5%** (34.7%, 73.1%)	14 (18) **77.8%** (54.8%, 91.0%)	7 (10) **70.0%** (39.7%, 89.2%)	5 (9) **55.6%** (26.7%, 81.1%)	4 (4) **100.0%** (51.0%, 100.0)		1 (1) **100.0%** (20.7%, 100.0%)
750 - 999	0 (5) **0.0%** (0.0%, 43.4%)	8 (21) **38.1%** (20.8%, 59.1%)	36 (57) **63.2%** (50.2%, 74.5%)	56 (76) **73.7%** (62.8%, 82.3%)	41 (48) **85.4%** (72.8%, 92.8%)	39 (44) **88.6%** (76.0%, 95.0%)	21 (25) **84.0%** (65.3%, 93.6%)	16 (16) **100.0%** (80.6%, 100.0%)	8 (8) **100.0%** (67.6%, 100.0%)	1 (2) **50.0%** (9.5%, 90.5%)
1000 - 1249			3 (5) **60.0%** (23.1%, 88.2%)	30 (36) **83.3%** (68.1%, 92.1%)	58 (66) **87.9%** (77.9%, 93.7%)	53 (60) **88.3%** (77.8%, 94.2%)	55 (59) **93.2%** (83.8%, 97.3%)	48 (50) **96.0%** (86.5%, 98.9%)	29 (29) **100.0%** (88.3%, 100.0%)	30 (31) **96.8%** (83.8%, 99.4%)
1250 - 1499				2 (3) **66.7%** (20.8%, 93.9%)	8 (11) **72.7%** (43.4%, 90.3%)	42 (45) **93.3%** (82.1%, 97.7%)	68 (71) **95.8%** (88.3%, 98.6%)	91 (93) **97.8%** (92.5%, 99.4%)	60 (62) **96.8%** (89.0%, 99.1%)	55 (57) **96.5%** (88.1%, 99.0%)
1500 - 1749						8 (8) **100.0%** (67.6%, 100.0%)	32 (36) **88.9%** (74.7%, 95.6%)	79 (87) **90.8%** (82.9%, 95.3%)	124 (127) **97.6%** (93.3%, 99.2%)	125 (126) **99.2%** (95.6%, 99.9%)
1750 - 1999					1 (1) **100.0%** (20.7%, 100.0%)	1 (1) **100.0%** (20.7%, 100.0%)	13 (14) **92.9%** (68.5%, 98.7%)	30 (31) **96.8%** (83.8%, 99.4%)	78 (82) **95.1%** (88.1%, 98.1%)	180 (182) **98.9%** (96.1%, 99.7%)
2000 - 2249					1 (1) **100.0%** (20.7%, 100.0%)		3 (5) **60.0%** (23.1%, 88.2%)	4 (4) **100.0%** (51.0%, 100.0%)	23 (23) **100.0%** (85.7%, 100.0%)	92 (93) **98.9%** (94.2%, 99.8%)
2250 - 2499							1 (1) **100.0%** (20.7%, 100.0%)		7 (7) **100.0%** (64.6%, 100.0%)	32 (32) **100.0%** (89.3%, 100.0%)

[Survivors (Live births) in numbers], [Percentage (95% CI)]

*from 500 grams AND between 23 weeks and 32 weeks gestation, singleton births only, excluding congenital anomaly

Section D: Unit Based Data

These data include both Welsh and non-Welsh resident mothers giving birth in Welsh units. The data are supplied by unit coordinators.

Maternity Unit Data 2010

Table 25 Births within maternity unit

		Total Births	Registrable births in Unit	Livebirths in Unit	Caesarean sections (CS)		Emergency CS		Elective CS		Vaginal breech deliveries		Induction of labour		Forceps only delivery		Ventouse only delivery	
					No.	% of total births	No.	% of total births	No.	% of total births	No.	% of total births	No.	% of total births	No.	% of total births	No.	% of total births
Mid and West Wales	Bronglais Hospital	605	577	575	168	27.8%	99	16.4%	69	11.4%	1	0.2%	195	32.2%	22	3.6%	43	7.1%
	Princess of Wales Hospital	2519	2320	2298	634	25.2%	249	9.9%	385	15.3%	8	0.3%	559	22.2%	120	4.8%	127	5.0%
	Singleton Hospital*	3780	3647	3625	973	25.7%	487	12.9%	486	12.9%	32	0.8%	0	0.0%	244	6.5%	183	4.8%
	West Wales General Hospital	1699	1596	1589	485	28.5%	192	11.3%	293	17.2%	unavailable this year		367	21.6%	unavailable this year		unavailable this year	
	Withybush Hospital	1323	1251	1245	322	24.3%	175	13.2%	147	11.1%	0	0.0%	0	0.0%	unavailable this year		unavailable this year	
North Wales	Ysbyty Glan Clwyd	2412	2309	2299	683	28.3%	425	17.6%	258	10.7%	9	0.4%	359	14.9%	105	4.4%	263	10.9%
	Ysbyty Gwynedd**	2232	2172	2162	495	22.2%	302	13.5%	193	8.6%	6	0.3%	400	17.9%	108	4.8%	172	7.7%
	Ysbyty Wrexham Maelor	2632	2560	2552	600	22.8%	380	14.4%	220	8.4%	9	0.3%	571	21.7%	187	7.1%	137	5.2%
South East Wales	Nevill Hall Hospital	2302	2221	2208	608	26.4%	374	16.2%	234	10.2%	9	0.4%	582	25.3%	92	4.0%	161	7.0%
	Prince Charles and Aberdare Hospitals	1800	1765	1755	463	25.7%	240	13.3%	223	12.4%	3	0.2%	429	23.8%	127	7.1%	46	2.6%
	Royal Glamorgan Hospital	2561	2480	2471	825	32.2%	394	15.4%	431	16.8%	5	0.2%	641	25.0%	109	4.3%	97	3.8%
	Royal Gwent Hospital*	3642	3526	3501	865	23.8%	328	9.0%	537	14.7%	26	0.7%	883	24.2%	159	4.4%	226	6.2%
	University Hospital Of Wales*	6176	6031	5995	1454	23.5%	835	13.5%	619	10.0%	49	0.8%	0	0.0%	763	12.4%	235	3.8%
Midwifery Led Units	Caerphilly Birth Centre	427	387	386	0	0.0%	0	0.0%	0	0.0%	1	0.2%	0	0.0%	0	0.0%	0	0.0%
	Llandough Hospital Midwifery Led Unit	367	367	367	0	0.0%	0	0.0%	0	0.0%	3	0.8%	0	0.0%	0	0.0%	0	0.0%
	Neath and Port Talbot Birth Centre	471	425	425	0	0.0%	0	0.0%	0	0.0%	1	0.2%	0	0.0%	0	0.0%	0	0.0%
	Powys Units	326	223	223	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total		**35274**	**33857**	**33676**	**8575**	**24.3%**	**4480**	**12.7%**	**4095**	**11.6%**	**162**	**0.5%**	**4986**	**14.1%**	**2036**	**6.3%**	**1690**	**5.2%**

Data supplied by Unit Coordinators

* includes data from alongside midwifery-led units

** includes data from Bryn Beryl, Dolgellau and Towyn midwifery-led units

Table 26 Livebirths outside maternity unit 2010

		TOTAL registrable BIRTHS (Within and out of Unit)	Total no. of births OUTSIDE Unit		Planned homebirths		Unplanned homebirths		Births elsewhere (E.g. in transit)	
			No.	% of total births	No.	% of total births	No.	% of total births	No.	% of total births
Mid and West Wales	Bronglais Hospital	605	28	4.6%	23	3.8%	5	0.8%	0	0.0%
	Princess of Wales Hospital	2519	199	7.9%	194***	7.7%	Included in planned		5	0.2%
	Singleton Hospital*	3780	133	3.5%	126***	3.3%	Included in planned		7	0.2%
	West Wales General Hospital	1699	103	6.1%	101***	5.9%	Included in planned		2	0.1%
	Withybush Hospital	1323	72	5.4%	70***	5.3%	Included in planned		2	0.2%
North Wales	Ysbyty Glan Clwyd	2412	103	4.3%	103	4.3%	0	0.0%	0	0.0%
	Ysbyty Gwynedd**	2232	60	2.7%	45	2.0%	6	0.3%	9	0.4%
	Ysbyty Wrexham Maelor	2632	72	2.7%	52	2.0%	0	0.0%	20	0.8%
South East Wales	Nevill Hall Hospital	2302	81	3.5%	77	3.3%	4	0.2%	0	0.0%
	Prince Charles and Aberdare Hospitals	1800	35	1.9%	18	1.0%	12	0.7%	5	0.3%
	Royal Glamorgan Hospital	2561	81	3.2%	53	2.1%	24	0.9%	4	0.2%
	Royal Gwent Hospital*	3642	116	3.2%	97	2.7%	19	0.5%	0	0.0%
	University Hospital Of Wales*	6176	145	2.3%	71***	1.1%	Included in planned		74	1.2%
Midwifery Led Units	Caerphilly Birth Centre	427	40	9.4%	33	7.7%	7	1.6%	0	0.0%
	Llandough Hospital Midwifery Led Unit	367	included in UHW MLU figs		0	0.0%	0	0.0%	0	0.0%
	Neath and Port Talbot Birth Centre	471	46	9.8%	27	5.7%	19	4.0%	0	0.0%
	Powys Units	326	103	31.6%	102	31.3%	1	0.3%	0	0.0%
Total		**35274**	**1417**	**4.0%**	**1192**	**3.4%**	**97**	**0.3%**	**128**	**0.4%**

Data supplied by unit coordinators

* includes data from alongside midwifery-led units

** includes data from Bryn Beryl, Dolgellau and Towyn midwifery-led units

***includes unplanned homebirths

Unit Based Mortality Statistics

Tables 27 and 28 presented here illustrate stillbirth and mortality rates by the hospital or midwifery led unit where the baby died and intended hospital of birth as stated at time of booking for antenatal care. Figures 18 to 20 are funnel plots that show the mortality rate for each unit plotted against the number of births in that unit.

These rates are unadjusted for variables known to influence mortality rate such as deprivation, case mix and referral bias. Therefore, we urge readers to exercise caution whilst interpreting the data. Complicated pregnancies are likely to be referred to the regional centre (University Hospital of Wales) or a sub-regional centre (Singleton, Royal Gwent, Glan Clwyd and Wrexham Maelor hospitals) and these may account for the higher rates observed in such units.

This is partly ameliorated by analysing the data according to the intended place of delivery as stated at time of booking for antenatal care but referral bias is still likely. University Hospital of Wales in Cardiff is the only centre in Wales offering fetal medicine interventions and paediatric surgical services and hence can be expected to have higher mortality rates.

Mortality data by intended hospital of birth as stated at time of booking for antenatal care must be treated with caution. Due to a lack of systematic collection of accurate data on the total number of women booking to give birth in each unit, the true denominator data is unknown. This effect will be more apparent in smaller units where there are fewer births and where the true denominator is likely to be greater than shown. The numerator for these rates is based on intended place of birth as stated at time of booking for antenatal, but not necessarily intrapartum, care. A more appropriate measure would be the intended place of birth at time of onset of labour. We have started to collect this data from 2009 and present rates for 2009 and 2010 by intended place of delivery at time of onset of labour (table 29).

It is not intended that the results of these reports are considered to be evidence of poor performance in any specific instance but rather that they are taken as suggesting that further exploration is needed at a local level.

Table 27 Mortality RATES per 1,000 by hospital where baby died

Hospital		2006-2010							2010						
		Total registrable births	Stillbirth rate		Perinatal mortality		Neonatal mortality		Total registrable births	Stillbirth rate		Perinatal mortality		Neonatal mortality	
			rate	95% CI	rate	95% CI	rate	95% CI		rate	95% CI	rate	95% CI	rate	95% CI
Mid and West Wales	Bronglais Hospital	2963	5.7	(3.6, 9.2)	6.7	(4.4, 10.4)	1.0	(0.3, 3.0)	605	3.3	(0.9, 12.0)	3.3	(0.9, 12.0)	0.0	(0.0, 6.3)
	Princess of Wales Hospital	12075	5.2	(4.1, 6.7)	6.3	(5.0, 7.9)	1.2	(0.7, 2.0)	2519	8.3	(5.5, 12.7)	9.5	(6.4, 14.1)	1.2	(0.4, 3.5)
	Singleton Hospital*	18105	6.5	(5.4, 7.8)	9.5	(8.2, 11.0)	4.2	(3.3, 5.2)	3780	6.6	(4.5, 9.7)	11.4	(8.5, 15.3)	5.3	(3.5, 8.2)
	West Wales General Hospital	8248	3.4	(2.3, 4.9)	4.5	(3.3, 6.2)	1.1	(0.6, 2.1)	1699	3.5	(1.6, 7.7)	4.7	(2.4, 9.3)	1.2	(0.3, 4.3)
	Withybush Hospital	6682	4.5	(3.1, 6.4)	5.7	(4.1, 7.8)	1.5	(0.8, 2.8)	1323	4.5	(2.1, 9.9)	5.3	(2.6, 10.9)	1.5	(0.4, 5.5)
North Wales	Ysbyty Glan Clwyd	12240	3.4	(2.5, 4.6)	6.4	(5.1, 7.9)	4.3	(3.3, 5.6)	2412	4.6	(2.5, 8.1)	7.9	(5.0, 12.3)	4.2	(2.3, 7.7)
	Ysbyty Gwynedd**	10848	4.1	(3.1, 5.5)	5.0	(3.8, 6.5)	0.9	(0.5, 1.7)	2232	4.5	(2.4, 8.2)	5.4	(3.1, 9.4)	0.9	(0.2, 3.3)
	Ysbyty Wrexham Maelor	13027	5.1	(4.1, 6.5)	7.5	(6.2, 9.2)	2.8	(2.0, 3.8)	2632	3.0	(1.5, 6.0)	4.9	(2.9, 8.4)	1.9	(0.8, 4.5)
South East Wales	Nevill Hall Hospital	11222	5.1	(3.9, 6.6)	5.7	(4.5, 7.3)	0.8	(0.4, 1.5)	2302	5.6	(3.3, 9.6)	6.1	(3.6, 10.2)	0.4	(0.1, 2.5)
	Prince Charles and Aberdare Hospitals	8588	4.4	(3.2, 6.1)	5.0	(3.7, 6.7)	0.6	(0.2, 1.4)	1800	4.4	(2.3, 8.7)	5.0	(2.6, 9.5)	0.6	(0.1, 3.2)
	Royal Glamorgan Hospital	12633	4.2	(3.2, 5.5)	5.4	(4.2, 6.8)	1.8	(1.2, 2.7)	2561	3.5	(1.8, 6.7)	3.9	(2.1, 7.2)	0.4	(0.1, 2.2)
	Royal Gwent Hospital*	17789	5.3	(4.4, 6.5)	7.6	(6.4, 9.0)	3.0	(2.3, 3.9)	3642	6.6	(4.4, 9.8)	8.0	(5.5, 11.4)	1.4	(0.6, 3.2)
	University Hospital Of Wales*	28342	6.9	(6.0, 7.9)	10.6	(9.5, 11.9)	5.3	(4.5, 6.2)	6176	6.6	(4.9, 9.0)	9.9	(7.7, 12.7)	4.2	(2.9, 6.2)
Midwifery Led Units	Caerphilly Birth Centre	2271	0.4	(0.1, 2.5)	0.4	(0.1, 2.5)	0.0	(0.0, 1.7)	427	2.3	(0.4, 13.1)	2.3	(0.4, 13.1)	0.0	(0.0, 8.9)
	Llandough Hospital Midwifery Led Unit	2479	0.4	(0.1, 2.3)	0.4	(0.1, 2.3)	0.0	(0.0, 1.5)	367	2.7	(0.5, 15.3)	2.7	(0.5, 15.3)	0.0	(0.0, 10.4)
	Neath and Port Talbot Birth Centre	2302	0.4	(0.1, 2.5)	0.4	(0.1, 2.5)	0.0	(0.0, 1.7)	471	0.0	(0.0, 8.1)	0.0	(0.0, 8.1)	0.0	(0.0, 8.1)
	Powys Units	1549	0.0	(0.0, 2.5)	0.0	(0.0, 2.5)	0.0	(0.0, 2.5)	326	0.0	(0.0, 11.6)	0.0	(0.0, 11.6)	0.0	(0.0, 11.6)
	Total	171363	5.0	(4.6, 5.3)	6.9	(6.5, 7.3)	2.6	(2.4, 2.9)	35274	5.3	(4.6, 6.1)	7.2	(6.3, 8.1)	2.2	(1.8, 2.8)

Source: unit coordinator & AWPS
* includes data from alongside midwifery-led units
** includes data from Bryn Beryl, Dolgellau and Towyn midwifery-led units

Table 28 Mortality RATES per 1,000 by intended hospital of birth as stated at time of booking for antenatal care

	Hospital	2006-2010							2010						
		Total registrable births	Stillbirth rate		Perinatal mortality		Neonatal mortality		Total registrable births	Stillbirth rate		Perinatal mortality		Neonatal mortality	
			rate	95% CI	rate	95% CI	rate	95% CI		rate	95% CI	rate	95% CI	rate	95% CI
Mid and West Wales	Bronglais Hospital	2963	6.1	(3.8, 9.6)	7.1	(4.6, 10.8)	1.0	(0.3, 3.0)	605	3.3	(0.9, 12.0)	3.3	(0.9, 12.0)	0.0	(0.0, 6.3)
	Princess of Wales Hospital	12075	3.6	(2.7, 4.9)	5.5	(4.4, 7.0)	2.7	(2.0, 3.8)	2519	6.0	(3.6, 9.8)	9.1	(6.1, 13.7)	4.0	(2.2, 7.3)
	Singleton Hospital*	18105	6.0	(4.9, 7.2)	8.0	(6.8, 9.4)	2.7	(2.1, 3.6)	3780	5.6	(3.6, 8.5)	7.9	(5.6, 11.3)	2.4	(1.3, 4.5)
	West Wales General Hospital	8248	3.5	(2.4, 5.0)	5.8	(4.4, 7.7)	2.9	(2.0, 4.3)	1699	3.5	(1.6, 7.7)	5.9	(3.2, 10.8)	2.4	(0.9, 6.1)
	Withybush Hospital	6682	4.5	(3.1, 6.4)	6.6	(4.9, 8.8)	2.6	(1.6, 4.1)	1323	3.8	(1.6, 8.8)	6.0	(3.1, 11.9)	3.0	(1.2, 7.8)
North Wales	Ysbyty Glan Clwyd	12240	3.0	(2.2, 4.2)	5.5	(4.3, 6.9)	3.4	(2.5, 4.6)	2412	3.7	(2.0, 7.1)	5.8	(3.5, 9.7)	2.5	(1.1, 5.4)
	Ysbyty Gwynedd**	10848	4.1	(3.1, 5.5)	6.3	(4.9, 7.9)	3.0	(2.1, 4.2)	2232	4.9	(2.8, 8.8)	6.7	(4.1, 11.1)	2.7	(1.2, 5.9)
	Ysbyty Wrexham Maelor	13027	4.9	(3.8, 6.3)	7.6	(6.2, 9.2)	3.3	(2.5, 4.5)	2632	2.7	(1.3, 5.5)	5.3	(3.2, 8.9)	3.0	(1.5, 6.0)
South East Wales	Nevill Hall Hospital	11222	4.9	(3.8, 6.4)	6.0	(4.7, 7.6)	1.6	(1.0, 2.5)	2302	4.8	(2.7, 8.5)	5.6	(3.3, 9.6)	0.9	(0.2, 3.2)
	Prince Charles and Aberdare Hospitals	8588	4.8	(3.5, 6.5)	6.8	(5.2, 8.7)	2.9	(2.0, 4.3)	1800	4.4	(2.3, 8.7)	6.1	(3.4, 10.9)	2.2	(0.9, 5.7)
	Royal Glamorgan Hospital	12633	3.8	(2.9, 5.0)	5.7	(4.5, 7.2)	2.7	(1.9, 3.8)	2561	3.5	(1.8, 6.7)	4.3	(2.4, 7.7)	1.6	(0.6, 4.0)
	Royal Gwent Hospital*	17789	4.4	(3.6, 5.5)	6.4	(5.3, 7.6)	2.4	(1.8, 3.2)	3642	5.2	(3.3, 8.1)	6.6	(4.4, 9.8)	1.4	(0.6, 3.2)
	University Hospital Of Wales*	28342	5.2	(4.4, 6.1)	7.7	(6.7, 8.8)	3.5	(2.9, 4.2)	6176	5.0	(3.5, 7.1)	7.8	(5.9, 10.3)	3.4	(2.2, 5.2)
Total		162762	4.4	(4.1, 4.7)	6.3	(6.0, 6.7)	2.7	(2.5, 2.9)	33683	4.6	(3.9, 5.4)	6.6	(5.8, 7.5)	2.5	(2.0, 3.1)

Source: unit coordinator & AWPS
* includes data from alongside midwifery-led units
** includes data from Bryn Beryl, Dolgellau and Towyn midwifery-led units
rates are based on outcomes of women receiving antenatal, but not necessarily intrapartum, care at these centres

Table 29 Mortality RATES per 1,000 by intended hospital of birth at time of onset of labour

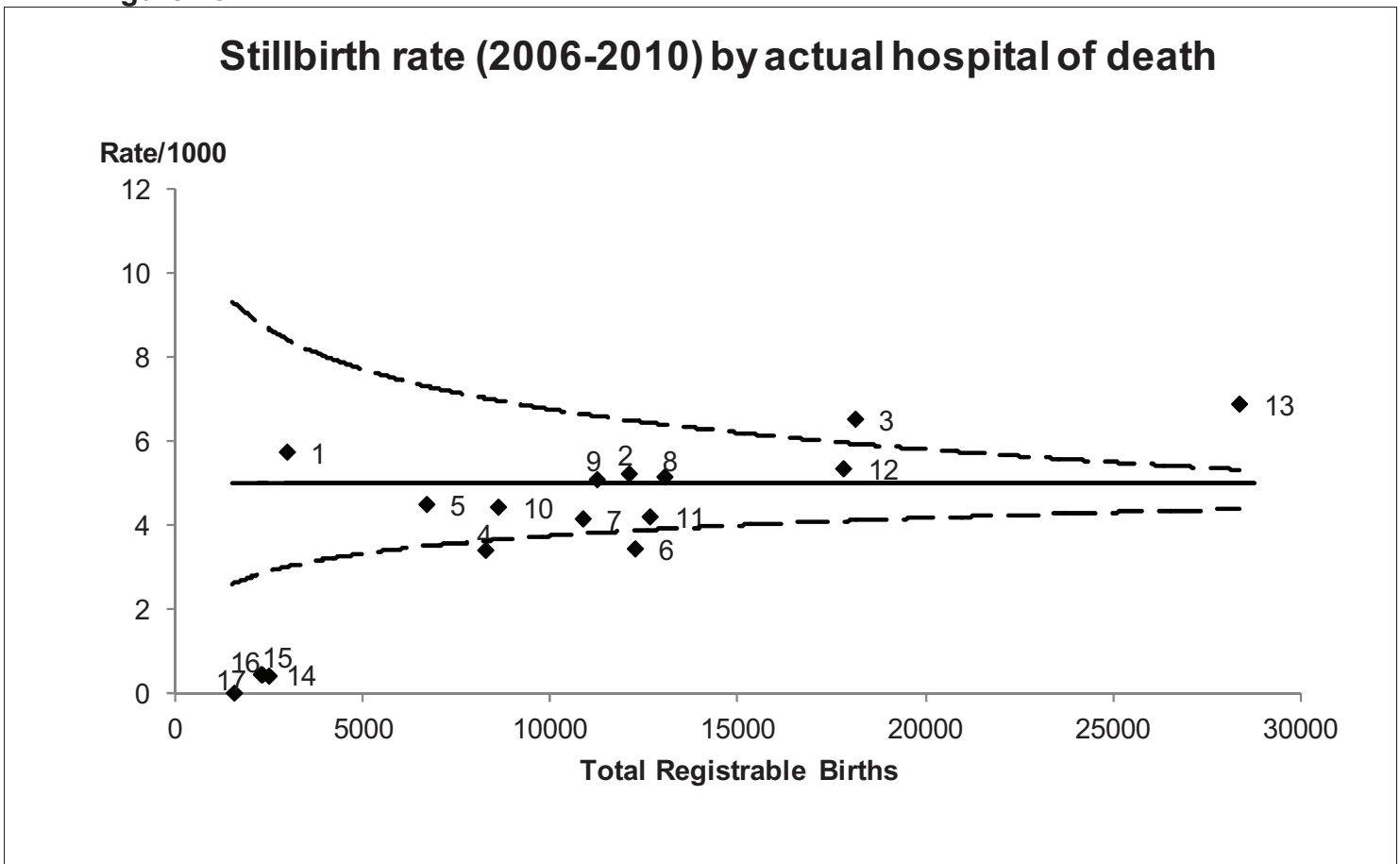
Hospital		2009-2010							2010						
		Total registrable births	Stillbirth rate		Perinatal mortality		Neonatal mortality		Total registrable births	Stillbirth rate		Perinatal mortality		Neonatal mortality	
			rate	95% CI	rate	95% CI	rate	95% CI		rate	95% CI	rate	95% CI	rate	95% CI
Mid and West Wales	Bronglais Hospital	1204	5.8	(2.8, 12.0)	5.8	(2.8, 12.0)	0.0	(0.0, 3.2)	605	1.7	(0.3, 9.3)	1.7	(0.3, 9.3)	0.0	(0.0, 6.3)
	Princess of Wales Hospital	4904	6.1	(4.3, 8.7)	8.2	(6.0, 11.1)	3.1	(1.9, 5.1)	2519	7.5	(4.8, 11.8)	10.3	(7.1, 15.1)	3.6	(1.9, 6.8)
	Singleton Hospital*	7328	6.3	(4.7, 8.4)	8.3	(6.5, 10.7)	2.2	(1.4, 3.6)	3780	5.8	(3.8, 8.8)	8.5	(6.0, 11.9)	2.7	(1.4, 4.9)
	West Wales General Hospital	3268	4.3	(2.6, 7.2)	6.1	(4.0, 9.4)	2.5	(1.2, 4.8)	1699	3.5	(1.6, 7.7)	5.3	(2.8, 10.0)	1.8	(0.6, 5.2)
	Withybush Hospital	2650	3.8	(2.1, 6.9)	5.3	(3.1, 8.8)	2.3	(1.0, 4.9)	1323	3.8	(1.6, 8.8)	5.3	(2.6, 10.9)	2.3	(0.8, 6.7)
North Wales	Ysbyty Glan Clwyd	4858	3.1	(1.9, 5.1)	6.8	(4.8, 9.5)	3.9	(2.5, 6.1)	2412	4.6	(2.5, 8.1)	7.5	(4.7, 11.8)	3.3	(1.7, 6.6)
	Ysbyty Gwynedd**	4421	5.0	(3.3, 7.5)	6.8	(4.8, 9.7)	2.5	(1.4, 4.5)	2232	4.9	(2.8, 8.8)	6.7	(4.1, 11.1)	2.7	(1.2, 5.9)
	Ysbyty Wrexham Maelor	5280	4.4	(2.9, 6.5)	7.4	(5.4, 10.1)	3.6	(2.3, 5.6)	2632	3.0	(1.5, 6.0)	5.7	(3.5, 9.4)	3.0	(1.5, 6.0)
South East Wales	Nevill Hall Hospital	4492	6.2	(4.3, 9.0)	6.5	(4.5, 9.3)	0.4	(0.1, 1.6)	2302	5.6	(3.3, 9.6)	6.1	(3.6, 10.2)	0.4	(0.1, 2.5)
	Prince Charles and Aberdare Hospitals	3472	3.5	(2.0, 6.0)	5.8	(3.7, 8.9)	3.2	(1.8, 5.7)	1800	3.9	(1.9, 8.0)	5.0	(2.6, 9.5)	1.7	(0.6, 4.9)
	Royal Glamorgan Hospital	5080	3.1	(1.9, 5.1)	4.1	(2.7, 6.3)	1.2	(0.5, 2.6)	2561	3.1	(1.6, 6.2)	3.9	(2.1, 7.2)	1.2	(0.4, 3.4)
	Royal Gwent Hospital*	7184	4.9	(3.5, 6.8)	6.8	(5.2, 9.0)	2.4	(1.5, 3.8)	3642	6.0	(4.0, 9.1)	7.4	(5.1, 10.8)	1.4	(0.6, 3.2)
	University Hospital Of Wales*	11888	6.9	(5.6, 8.6)	10.3	(8.6, 12.2)	4.4	(3.4, 5.8)	6176	6.6	(4.9, 9.0)	9.7	(7.6, 12.5)	3.9	(2.6, 5.8)
Midwifery Led Units	Caerphilly Birth Centre	917	3.3	(1.1, 9.6)	3.3	(1.1, 9.6)	0.0	(0.0, 4.2)	427	4.7	(1.3, 16.9)	4.7	(1.3, 16.9)	0.0	(0.0, 9.0)
	Llandough Hospital Midwifery Led Unit	871	2.3	(0.6, 8.3)	3.4	(1.2, 10.1)	1.2	(0.2, 6.5)	367	2.7	(0.5, 15.3)	5.4	(1.5, 19.6)	2.7	(0.5, 15.3)
	Neath and Port Talbot Birth Centre	925	2.2	(0.6, 7.8)	4.3	(1.7, 11.1)	2.2	(0.6, 7.9)	471	4.2	(1.2, 15.3)	4.2	(1.2, 15.3)	0.0	(0.0, 8.1)
	Powys Units	616	3.2	(0.9, 11.8)	3.2	(0.9, 11.8)	0.0	(0.0, 6.2)	326	6.1	(1.7, 22.1)	6.1	(1.7, 22.1)	0.0	(0.0, 11.7)
Total		69358	5.0	(4.5, 5.6)	7.2	(6.6, 7.8)	2.7	(2.3, 3.1)	35274	5.1	(4.4, 5.9)	7.1	(6.3, 8.0)	2.4	(1.9, 3.0)

Source: unit coordinator & AWPS
* includes data from alongside midwifery-led units
** includes data from Bryn Beryl, Dolgellau and Towyn midwifery-led units

Mortality RATES per 1,000 by hospital (2006 – 2010)

These funnel plots show the mortality rate for each hospital plotted against the number of births in that hospital. The average mortality rate is indicated by the solid horizontal line. The curved lines represent limits within which 95% of hospitals' results should lie if the average rate across Wales applied to all hospitals. Hospitals above or below these dashed lines have a mortality rate that is significantly different from the average rate. The plots are calculated using the Wilson score interval. This method is generally regarded as an improvement over the normal approximation interval and has the advantage that the lower line of the funnel plot cannot reach implausible values i.e. below zero. These funnel plots are calculated assuming that the populations of women giving birth are directly comparable between units. Therefore they do not allow for any heterogeneity (for example differences in case mix) between units. Hence there may be plausible reasons for the significantly higher or lower rates in the units that are identified as outliers.

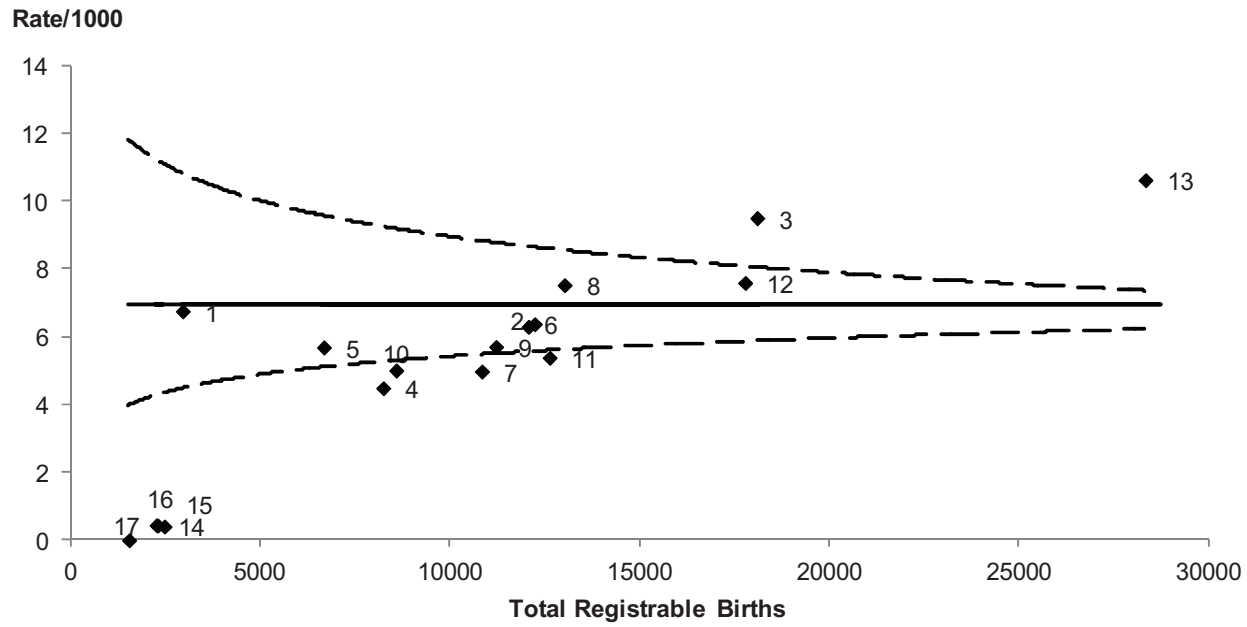
Figure 18



1 Bronglais Hospital	9 Nevill Hall Hospital
2 Princess of Wales Hospital	10 Prince Charles and Aberdare Hospitals
3 Singleton Hospital*	11 Royal Glamorgan Hospital
4 West Wales General Hospital	12 Royal Gwent Hospital*
5 Withybush Hospital	13 University Hospital Of Wales*
6 Ysbyty Glan Clwyd	14 Caerphilly Birth Centre
7 Ysbyty Gwynedd**	15 Llandough Hospital Midwifery Led Unit
8 Ysbyty Wrexham Maelor	16 Neath and Port Talbot Birth Centre
	17 Powys Units

* includes data from alongside midwifery-led units
** includes data from Bryn Beryl, Dolgellau and Towyn midwifery-led units

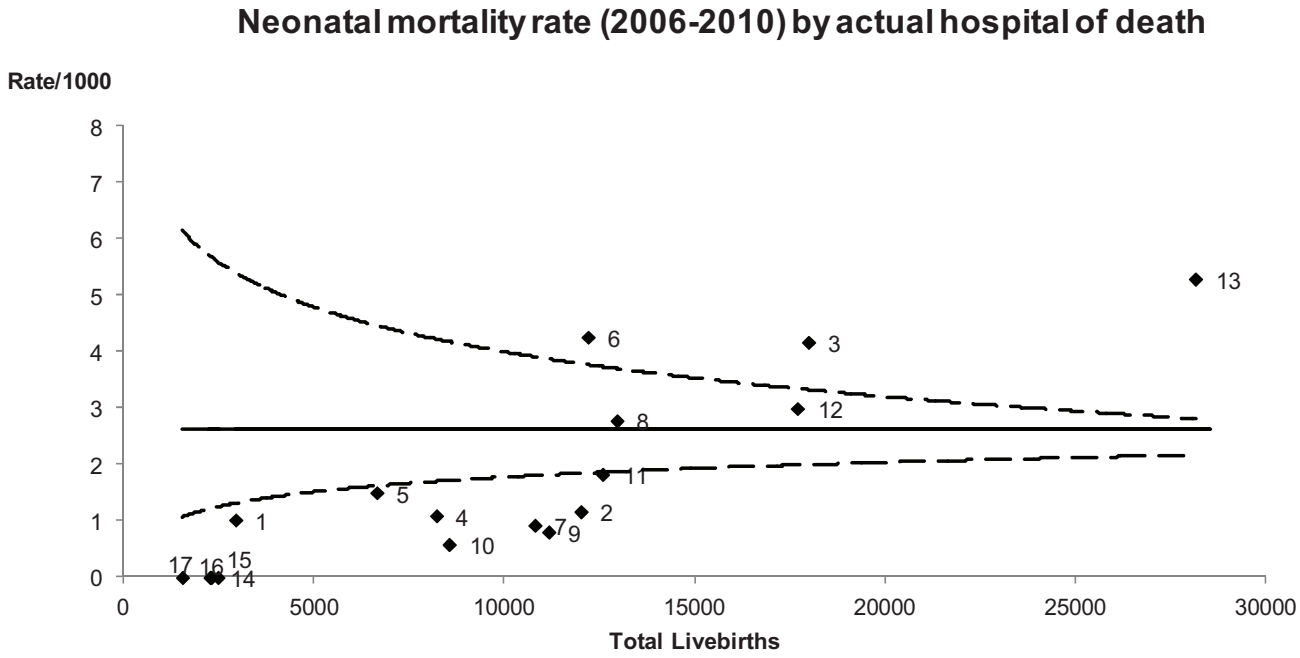
Figure 19



1 Bronglais Hospital	9 Nevill Hall Hospital
2 Princess of Wales Hospital	10 Prince Charles and Aberdare Hospitals
3 Singleton Hospital*	11 Royal Glamorgan Hospital
4 West Wales General Hospital	12 Royal Gwent Hospital*
5 Withybush Hospital	13 University Hospital Of Wales*
6 Ysbyty Glan Clwyd	14 Caerphilly Birth Centre
7 Ysbyty Gwynedd**	15 Llandough Hospital Midwifery Led Unit
8 Ysbyty Wrexham Maelor	16 Neath and Port Talbot Birth Centre
	17 Powys Units

* includes data from alongside midwifery-led units
** includes data from Bryn Beryl, Dolgellau and Towyn midwifery-led units

Figure 20



1 Bronglais Hospital	9 Nevill Hall Hospital
2 Princess of Wales Hospital	10 Prince Charles and Aberdare Hospitals
3 Singleton Hospital*	11 Royal Glamorgan Hospital
4 West Wales General Hospital	12 Royal Gwent Hospital*
5 Withybush Hospital	13 University Hospital Of Wales*
6 Ysbyty Glan Clwyd	14 Caerphilly Birth Centre
7 Ysbyty Gwynedd**	15 Llandough Hospital Midwifery Led Unit
8 Ysbyty Wrexham Maelor	16 Neath and Port Talbot Birth Centre
	17 Powys Units

* includes data from alongside midwifery-led units
** includes data from Bryn Beryl, Dolgellau and Towyn midwifery-led units

Publications and Presentations

AWPS Publications

Cartlidge PH, Dawson AT, Stewart JH, Vujanic GM. **Value and quality of perinatal and infant postmortem examinations: cohort analysis of 400 consecutive deaths.** British Medical Journal 1995; 310: 155-158.

Cartlidge PH, Stewart JH. **Effect of changing the stillbirth definition on evaluation of perinatal mortality rates.** Lancet 1995; 346: 486-8.

Vujanic GM, Cartlidge PH, Stewart JH and Dawson AJ. **Perinatal and infant postmortem examinations: how well are we doing?** Journal of Clinical Pathology 1995; 48: 998-1001.

All Wales Perinatal Survey and Confidential Enquiry into Stillbirths and Deaths in Infancy. Journal of Neonatal Nursing 1996; 2 (2): 14-17.

Cartlidge PH, Stewart JH. **Survival of very low birthweight and very preterm infants in a geographically defined population.** Acta Paediatrica 1997; 86: 105-10.

Stewart J H, Andrews J, and Cartlidge PHT**. Number of deaths related to intrapartum asphyxia and the timing of birth in all Wales perinatal survey: 1993-5.** British Medical Journal 1998; 316: 657-60.

Fillmore EJ; Cartlidge PHT. **Late death of very low birthweight infants.** Acta Paediatrica 1998; 1998; 87:809-810.

Vujanic GM, Cartlidge PH and Stewart JH. **Improving the quality of perinatal and infant necropsy examinations: a follow up study.** Journal of Clinical Pathology 1998; 51: 850-853.

Cartlidge PHT; Jones HP; Stewart JH; Drayton MR; Ferguson DS; Matthes JWA; Minchom PE; Moorcraft J**. Confidential Enquiry into deaths due to Prematurity.** Acta Paediatrica 1999; 88(2): 220-223.

Tuthill DP, Stewart JH, Coles EC, Andrews J, Cartlidge PH. **Maternal cigarette smoking and pregnancy outcome.** Paediatric and Perinatal Epidemiology 1999; 13: 245-253.

Guildea ZES, Fone DL, Dunstan FD, Sibert JR, Cartlidge PHT. **Social Deprivation and the Causes of Stillbirth and Infant Mortality.** Archives of Disease in Childhood 2001; 84: 307-310.

Cartlidge PHT, Thomas S and Stewart JH. **CESDI and Clinical Governance: responding to variations in mortality rates.** Welsh Paediatric Journal 2001; 14: 40-41.

Stewart, JH, Guildea ZE. **How do midwives acquire their knowledge and skills in CTG interpretation?** British Journal of Midwifery 2002; 10: 505-508

Jones H, Guildea Z, Stewart J, Cartlidge P, 15-20. **The Health Status Questionnaire: achieving concordance with published disability criteria**. Archives of Disease in Childhood 2002;86:15-20.

Thomas SC, Guildea ZES, Stewart JH, Cartlidge PHT. **Responding to variations in mortality due to intrapartum asphyxia.** British Journal of Clinical Governance 2003; 8: 296-299.

Guildea ZES, Fone DL, Dunstan FD, Cartlidge PHT. **Differences in risk of mortality under one year between rural and urban areas:an ecological study.** Public Health 2005 May; 119(5): 442-7.

R Adappa, S Paranjothy, Z Roberts, PHT Cartlidge. **Perinatal and infant autopsy.** Archives of Disease in Childhood. Fetal Neonatal Ed. 2007; 92: F49-F50

Papers presented at Scientific Meetings

Evaluating perinatal mortality rates: effect of changing the stillbirth definition. Welsh Paediatric Society. Wrexham. 1995.

Smoking, stillbirths and neonatal deaths. Paediatric Research Society. Nottingham. 1996.

Smoking, social class and sudden infant death syndrome. BPA Annual Meeting. York. 1996.

Survival of very low birthweight and very preterm infants in a geographically defined population. European Congress of Perinatal Medicine. Glasgow. 1996.

Intrapartum related deaths and the timing of birth. BAPM. London. 1997.

Confidential Enquiry into deaths due to prematurity. Paediatric Research Society. Sheffield. 1997.

Confidential Enquiry into deaths due to prematurity. Welsh Paediatric Society. Newport. 1997.

Late death of very low birthweight infants. Welsh Paediatric Society. Newport. 1997.

Disability and perinatal care: validation of the Health Status questionnaire. Paediatric Research Society. Swansea. 1998.

Disability and perinatal care: validation of the Health Status questionnaire. Royal College of Paediatrics and Child Health Annual Meeting. York. 1998.

Outcome at two years of very low birthweight and preterm infants. Welsh Paediatric Society. Chester. 1998.

Confidential Enquiry into deaths due to prematurity. BAPM. London. 1997.

Immunisation status of preterm infants. Welsh Paediatric Society. Cardiff. 1998.

The quality of perinatal and infant postmortem examinations: Reversing the decline. XXII International Congress of the International Academy of Pathology. Nice. 1998.

Social deprivation and the causes of stillbirth and infant mortality. Welsh Paediatric Society. Abergavenny. 2000.

Social deprivation and the causes of stillbirth and infant mortality. Royal College of Paediatrics and Child Health Annual Meeting. York. 2000.

Trends in perinatal and infant autopsy rate. Welsh Paediatric Society. Cardiff. 2004.

Trends in infant mortality rate in Wales and avoidable causes of death in infants between 1994 and 2003. Welsh Paediatric Society. Wrexham. 2005.

Organ retention incident and Perinatal and Infant autopsy rates. BAPM. Belfast. 2005.

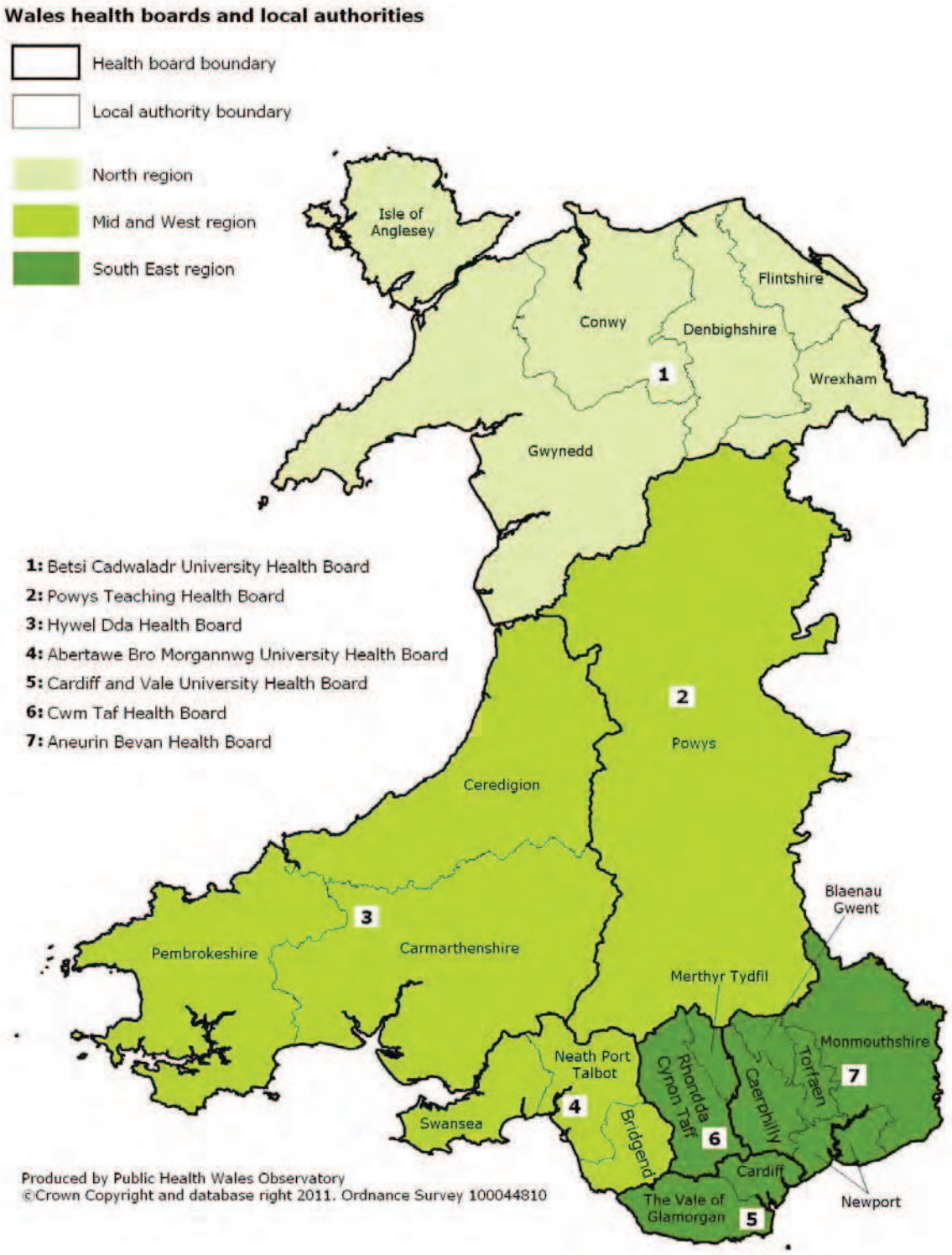
Outcome of pre-term infants receiving cardio-pulmonary resuscitation (CPR) in the delivery room. Welsh Paediatric Society. Ruthin. 2007.

Intensive care needs of premature infants following discharge in South Wales. Welsh Paediatric Society. Llanelli. 2007.

Appendices

Appendix A

Map - The 22 Local Authorities, 7 Health Boards and 3 NHS Regions in Wales



Appendix B

Executive Steering Group 2010

Prof S Kotecha	Professor of Child Health, School of Medicine, Cardiff University
Dr S Paranjothy	Sr Clinical Lecturer, Department of Primary Care and Public Health, School of Medicine, Cardiff University
Dr R Adappa	Consultant in Neonatal Medicine, Cardiff and Vale University Health Board
Prof F Dunstan	Professor of Medical Statistics, Primary Care and Public Health, School of Medicine, Cardiff University
Dr W J Watkins	Statistician, Department of Primary Care and Public Health, School of Medicine, Cardiff University
Mrs JM Hopkins	Project Administrator (AWPS), School of Medicine, Cardiff University
Mrs K Rolfe	Data Manager, School of Medicine, Cardiff University
Dr P Stutchfield	Consultant Paediatrician, Ysbyty Glan Clwyd, Bodelwyddan, Nr Rhyl, Clwyd
Dr J Greenacre	Director of Health Intelligence, Public Health Wales
Mr B Kumar	Consultant Obstetrician, Ysbyty Wrexham Maelor, Wrexham, Clwyd
Prof B Hunter	Professor of Midwifery, College of Human and Health Sciences, Swansea University
Dr E Lazda	Paediatric Pathologist, School of Medicine, Cardiff University
Jane Abbott/ Helen Kirrane	Head of Programmes/Campaigns and Policy Manager, BLISS (for babies born too soon, too small, too sick)
Cate Langley	Acting Head of Midwifery and sexual health, Powys (teaching) Health Board - Women and Childrens Services

Appendix C

Unit Coordinators for Wales 2010

Mid and West Wales

District Coordinators	Dr J Greenacre Dr C Vulliamy
Bronglais General Hospital	Ms S Davies
West Wales General Hospital	Ms J Henderson
Withybush General Hospital	Ms J York
Neath General Hospital	Ms D Jones
Princess of Wales Hospital	Ms C Bartle
Singleton Hospital	Mrs S Calvert

North Wales

Ysbyty Wrexham Maelor	Ms B Evans
Ysbyty Glan Clwyd	Mrs J Butters
Ysbyty Gwynedd	Ms S Williams

South East Wales

Caerphilly District Miners Hospital	Ms D Jackson
Nevill Hall Hospital	Ms P Mullins/Ms C Lewis
Prince Charles Hospital	Ms K Dennett
Royal Glamorgan Hospital	Ms R Evans
Royal Gwent Hospital	Ms J Westwood/Mrs C Bradley
University Hospital of Wales	Ms E Stephenson/Ms H Protheroe-Davies

Appendix D

Calculated Gestation Algorithm

Perinatal Survey Database from Sept 1999

	LMP[1]	Early USS[2]	Working EDD[3]	Clinical Assessment[4]	Test for agreement	Calculated Gestation Outcome
Rule A	Yes	Yes	-	-	Agree within 10 days	Accept LMP
Rule A	Yes	Yes	-	-	Do not agree within 10 days	Accept USS
Rule B	No	Yes	-	-		Accept USS
Rule B1	Yes	No	Yes	-	Agree within 14 days	Accept LMP
Rule B1	Yes	No	Yes	-	Do not agree within 14 days	Accept working EDD
Rule C	Yes	No	No	Yes	Agree within 14 days	Accept LMP
Rule C	Yes	No	No	Yes	Do not agree within 14 days	Accept Clinical Assessment
Rule C	Yes	No	No	No		Accept LMP
Rule D	No	No	Yes	Yes	Agree within 14 days	Accept Working EDD
Rule D	No	No	Yes	Yes	Do not agree within 14 days	Accept Clinical Assessment
Rule D	No	No	Yes	No		Accept Working EDD
Rule D	No	No	No	Yes		Accept Clinical Assessment

Fields used

1. EDD by USS 2. LMP 3. [Date first USS] 4. [Gestation first USS weeks] 5. [Gestation first USS days])	date field date field date field number field number field
6. Date of Birth 7. Gestation Assessment 8. Gestation (days) 9. Calc gest weeks (whole completed weeks – not rounded up) 10. Calc gest days	date field number field number field number field number field

LMP[1]	Early USS[2]	Working EDD[3]	Clinical Assessment[4]
Gestation in days calculated:- [Date of Birth] [LMP] – Number of days difference	Gestation in days calculated:- If there is [Gestation first USS weeks]) And ([Date first USS]) Then = [Gestation first USS weeks]*7 + [Gestation first USS days]+ (DateDiff("d", [Date first USS], [Date of Birth])) Otherwise DateDiff("d", [EDD by USS], [Date of Birth]) + 280	Gestation in days calculated:- DateDiff("d", [Working EDD], [Date of Birth]) + 280	Gestation in days calculated:- [Gestation Assessment] *7+ [Gestation (days)]

Abbreviations
LMP – Last menstrual period
USS – Ultrasound Scan
EDD – Expected Date of Delivery

Appendix E

Classification of Death

Clinico-Pathological Classification:
All deaths

1. Congenital anomaly
Include all major anomalies. Infants with minor or potentially treatable anomalies should not be included here unless they formed part of a complex of at least two malformations and they died before the onset of labour. Deformations - that is abnormalities of form secondary to a fetal disease or functional impairment - could also be included here. Thus, pulmonary hypoplasia that follows oligohydramnios may be included, although this difficult diagnosis should always be supported by the presence of other deformations or malformations.

2. Unexplained death prior to the onset of labour
In the absence of other evidence, the presence of maceration should be taken to indicate that death preceded the onset of labour. Antepartum fetal deaths due to lethal malformations and specific conditions are excluded. Infants with minor isolated lesions (e.g. small VSD) should remain in this group but infants with multiple minor anomalies should be classified in group one.

2a. Death prior to the onset of labour associated with placental abruption
After 20 weeks gestation whether revealed or not, excluding APH secondary to pre-eclampsia. Minor degrees of haemorrhage at the start of labour (a 'show') and haemorrhage due to cervical erosion or polyp should be ignored but significant or recurrent bleeding of uncertain origin that is then fairly closely followed by preterm labour should not be ignored.

3. Intrapartum events
This group should include all fetal deaths of whatever weight without malformations or specific disorder, provided that death occurred during labour. In the absence of other information all fresh stillbirths should be included in this group. Liveborn infants not in group 1, 5 or 6 and weighing over 1000g who died at less than 4 hours should be included in this group. If death occurred during an intervention such as caesarean section, in the absence of labour, the case should be classified in group 3, as should any infant surviving longer than four hours for whom there was evidence of cerebral birth trauma or asphyxia.

4. Conditions consequent upon preterm birth
This group includes only liveborn infants of under 37 weeks gestation. Infants weighing less than 1000g and not in groups 1, 5, 6, 7 or 8 belong to this group irrespective of the age at death. Larger preterm infants are likely to have suffered from birth asphyxia if they died at less than 4 hours of age. Thus any infant dying at less than 4 hours, delivered preterm, and weighing more than 1000g, should be coded to group 3 unless a specific condition or malformation was present. Neonatal death with infection, even congenital infection, should be included here, except specific infections, e.g. group B streptococcal, CMV, rubella which.should be coded group 5. Term infants dying with conditions normally associated with prematurity e.g. HMD, IVH, should be coded group 6.

5. Infection
Infection of the baby before, during or after birth (including death from necrotising enterocolitis). Exclude infection secondary to treatment for HMD.

6. Specific conditions
Include deaths due to: blood group incompatibilities, inborn errors of metabolism, twin to twin transfusion, hydrops not associated with malformation, conditions usually associated with prematurity but occurring in term infants, tumours, hamartomas, feto-maternal bleeds, or anything completely out of the ordinary.

7. Accidental death
Death after delivery due to violence (other than trauma during delivery) whether accidental of deliberate. Deaths due to unattended delivery, suffocation, drowning, smoke inhalation, burns, scalds and poisoning are also included.

8. Sudden infant death
Death after birth that occurs suddenly and unexpectedly and for which no explanation can be found after full review, including detailed autopsy examination.

9. Unclassifiable
Termination of pregnancy for reasons not related to the condition of the fetus. Other deaths with completely inadequate documentation.

Aberdeen (Baird) Classification:
Stillbirths and neonatal deaths

I. Congenital anomaly
Any genetic or structural defect arising at conception or during embryogenesis incompatible with life or potentially treatable but causing death.

II. Isoimmunisation
Death ascribable to blood group incompatibility.

III. Pre - eclampsia:
Only significant pre-eclampsia (a diastolic BP of 90 mm Hg or more on 2 separate days after the 20th week with significant proteinuria) in the absence of existing hypertensive disease prior to pregnancy. The full definition is that given to pre-eclampsia and eclampsia (ICD codes 642.4-642.6) by FIGO.

IV. Antepartum haemorrhage (APH)
After 20 weeks gestation whether revealed or not, excluding APH secondary to pre-eclampsia. Minor degrees of haemorrhage at the start of labour (a 'show') and haemorrhage due to cervical erosion or polyp should be ignored but significant or recurrent bleeding of uncertain origin that is then fairly closely followed by preterm labour should not be ignored.

V. Mechanical
Any death from uterine rupture and those deaths from birth trauma or intrapartum asphyxia that are associated with disproportion, malpresentation, cord compression or breech delivery in babies of >= 1.0 kg. Deaths with anoxia or cerebral trauma should be classified as 'unexplained ' if there is no evidence of difficulty in labour. Antepartum deaths associated with cord entanglement in the absence of strong circumstantial evidence that cord compression caused death (e.g. fetal death soon after external version) should also be classified as 'unexplained'.

VI. Maternal disorder
Include maternal trauma (such as a road traffic accident), diabetes, appendicitis, and cardiac disease etc. if severe enough to jeopardise the baby. Include significant renal disease or essential hypertension known to be present before pregnancy. Also include symptomatic and asymptomatic maternal infection where this results in the death of the baby. Specify the disease or organism.

VII. Miscellaneous
Specific fetal and neonatal conditions. DO NOT include conditions directly attributable to prematurity or anoxia before birth because these deaths are attributable to the relevant underlying obstetric disorder. Include, however, specific fetal conditions (e.g. twin-to-twin transfusion) or neonatal conditions (e.g. inhalation of milk) where these are not directly ascribable to intrapartum anoxia or preterm delivery. Include, also, postnatally acquired infection, except in babies becoming infected as a result of artificial ventilatory support or in babies of < 1.0kg (where the reason for the ventilator dependency or low birthweight in the codeable factor). Specify the disease or organism.

VIII. Unexplained
Deaths with no obstetric explanation including unexplained antepartum stillbirth, deaths resulting from unexplained preterm delivery (including hyaline membrane disease, intraventricular haemorrhage etc.), and cases of intrapartum anoxia or trauma if the baby weighed < 1.0kg or delivery was not associated with any obvious mechanical problem. Specify if there was documented cervical incompetence, premature rupture of membranes before labour, unexplained preterm labour, biochemical evidence of 'placental insufficiency' or documented growth retardation (weight at birth below the fifth centile for confirmed gestation). Growth retardation should not be diagnosed merely on the basis of weight at birth if the baby died more than a few days before delivery.

IX. Unclassifiable
Cases where nothing is known about delivery or mother's health before delivery

Form completion guidelines

Forms should be completed for all deaths of babies from 20 weeks gestation to 1 year of age to mothers resident in Wales or elsewhere. The reporting of cases normally resident outside Wales is included to assist other Regions.

Fetal losses of 20 completed weeks of gestation or more,
or weighing >300g if gestation not known (incl. therapeutic abortions),
stillbirths,
neonatal deaths (early and late),
post-neonatal infant deaths (28 days to 1 year).

The form should be completed by members of the nominated local team under the guidance of the unit coordinator. The form will normally be completed by the team in the district of death. In the case of babies transferred to another unit before death, the reporting team will need to liaise with staff who previously cared for mother and baby. Multiple reporting is not a problem.

All answers should be based on the date of birth in the case of babies dying within 28 days of birth, and the date of death in the case of babies dying between 28 days and 1 year.

Dates and times: Use the convention dd/mm/yy
(e.g. 09-11-08 (9th November 2008) and a 24 hour clock (09:14 hrs).

Section 1: Women's Details

NHS number: State the number from hospital notes.
Hospital number: State the number on hospital notes.
Address and Postcode at time of birth/delivery: State mother's usual residential address and postcode.
Date of birth: State date of birth where possible; state Age only if date of birth is not available.
Country of birth: of mother
Ethnic group: The mother's ethnic group is that to which the mother considers she belongs.
Marital status: Current legal marital status.
Stable relationship: Defined as the mother living with or directly supported by her partner.
Woman's occupation and Partner's occupation: if currently employed at booking give full details, e.g. manager food shop. If not employed give full details of the last known employment including the last place of work. If she/he has never been employed please write ***never employed***.
Height and Weight: Take from first booking record made by the community midwife or GP.
Maternal smoking: Give the best estimate of maternal smoking throughout the pregnancy.

Section 2: Previous Pregnancies

Previous infertility: Where a medical opinion has been sought concerning primary or secondary infertility.
Total number of previous pregnancies of 24 weeks or more: Multiple pregnancy counts as ***one*** pregnancy.
Number and Outcome of previous pregnancies: Give details of all livebirths, stillbirths, miscarriages, ectopic pregnancies, hydatidiform moles, therapeutic abortions, neonatal deaths and post neonatal deaths stating the number in each category, gestation, and where applicable birthweight and cause of death. If further space is needed please use section 12.
Were there any previous pregnancy problems? If Yes, tick all that apply.

Section 3: Previous Medical History

Were there any pre-existing medical problems? If Yes, tick all that apply.

Section 4: This Pregnancy

LMP: The original date of the Last Menstrual Period given at booking.
USS information: Please complete all questions in this section.
Final Estimated Date of Delivery (EDD) (previously Working EDD just before delivery): State the date being used for the purposes of obstetric management at the time labour began based on LMP, ultrasound and clinical assessments.
Was this a multiple pregnancy at the onset of pregnancy?: Yes or No
Date of first booking appointment (previously Date of antenatal assessment): This item aims to record when detailed care is first given including a booking record made by the community midwife or GP. When there is no antenatal care arranged tick ***not booked***.
Intended place of delivery at booking?: Name the hospital at which the woman intended to deliver at booking ticking Obstetric or Midwifery led unit.. Tick *home* if the woman originally planned to have a home delivery.

Section 5: Delivery

Intended place of delivery at onset of labour?: Name the hospital at which the woman intended to deliver at onset of labour, ticking Obstetric or Midwifery led unit. Tick *home* if the mother originally planned to have a home delivery.
Antenatal steroid treatment: This refers to steroid treatment given within 10 days of delivery.
Date and time of membrane rupture: Give the best estimate.
Labour:
1. Spontaneous onset of labour with no induction.
2. Induced. This is the artificial induction of labour **prior** to the onset of labour.
3. No labour and No induction with baby born by Caesarean Section.

Induction: This is the artificial induction of labour **prior** to the onset of labour. Indicate the method(s) of induction (may be more than one).
Augmentation: This is the augmentation or acceleration of labour **after** the onset of labour. Indicate the method(s) of augmentation used (may be more than one).
Actual place of delivery: State the name of the hospital/unit/other where the delivery took place.
What was the Final Mode of Delivery?: This is the final method of delivery - ring the most appropriate category. If several methods are attempted, the final method of delivery should be given. For instance, a failed Ventouse going on to Caesarean Section should be reported as delivery by Caesarean Section.
What was the presentation at Delivery?: Please tick one item.
Caesarean Sections: Please complete all questions.

Section 6: All Baby Outcomes

Surname: State the registered surname of the baby. If not registered then state mother's surname.
NHS number: State the number from infant's hospital notes.
Hospital number: State the number on infant's hospital notes.
Usual address of baby at date of death: (if different to address in section 1.4)
Sex: Ring as appropriate. If chromosomes available then answer according to karyotype.
Number of babies/fetuses this pregnancy: Give the highest number of confirmed fetuses during the pregnancy.
Birthweight: Record birthweight in grams. If the baby was never weighed give the best available estimate indicating that the weight is an estimate.
Gestation at delivery (previously Clinical assessment of gestation): State best assessment of gestation at time of delivery in weeks and days.

Section 7: Stillbirths

Stillbirths: Respond to all questions. If the baby was stillborn, death should be stated to have occurred before the labour unless there is clear evidence to the contrary.

Section 8: Neonatal and Post Neonatal Deaths

Was the baby admitted to a neonatal unit? (previously Transfers for neonatal care): Answer 'Yes' for neonatal transfers.
Apgar score: Give the Apgar score at 1 minute and at 5 minutes as recorded in infant's maternity notes.
Neonatal resuscitation: Respond to all questions with Yes, No.
Place of death: Specify according to the place where death was confirmed.
Date of death and Time of death: The time and date of death stated should be that at which this diagnosis was confirmed.
Was the baby transferred to another unit after birth?: Answer Yes or No.
8.7 Contributing factors (previously Clinical management): Include relevant and major items of neonatal management including ventilation, TPN, exchange transfusion, pneumothoraces and surgical operations etc.

Guidance and Definitions for Completion of Section 9:
CAUSE OF DEATH - STILLBIRTHS & NEONATES

The following definitions and associated subcategories will help you choose the relevant maternal or fetal conditions causing and associated with the death.

DEFINITION OF TERMS	Subcategory
1. MAJOR CONGENITAL ANOMALY. Any genetic or structural defect arising at conception or during embryogenesis incompatible with life or potentially treatable but causing death.	Central nervous system Cardiovascular system Respiratory system Gastro-intestinal system Musculo-skeletal anomalies Multiple anomalies Chromosomal disorders Metabolic diseases Urinary tract Other
2. HYPERTENSIVE DISORDERS OF PREGNANCY.	Pregnancy induced hypertension Pre-eclampsia toxaemia (PET) HELLP syndrome Eclampsia
3. ANTEPARTUM or INTRAPARTUM HAEMORRHAGE. After 20 w gestation whether revealed or not. If associated with PET, APH will be a secondary diagnosis. Ignore minor degrees of haemorrhage (e.g. 'shows', cervical polyps etc). Recurrent bleeding of uncertain origin followed by preterm labour should not be ignored.	Praevia Abruption Uncertain
4. MECHANICAL. Any death attributed to uterine rupture, deaths from birth trauma or intrapartum asphyxia associated with problems in labour such as cord compression, malpresentation etc. Intrapartum 'asphyxia' deaths with no underlying cause should be recorded under 'Associated factor – IP asphyxia'. Antepartum deaths associated with cord entanglement in the absence of strong circumstantial evidence that cord compression caused death should be classified as having no associated factor.	**Cord Compression:** Prolapse cord Cord around neck Other cord entanglement or knot **Uterine Rupture:** Before labour During labour **Mal-presentation:** Breech Face Compound Other
5. MATERNAL DISORDER. Specify hypertensive disease present before pregnancy or any other maternal disease sufficient to jeopardise the baby such as trauma, diabetes, cardiac disease etc. Infection is classified separately.	Pre-existing hypertensive disease Diabetes Endocrine diseases Thrombophilias Cholestasis Drug misuse Uterine anomalies Other
6. INFECTION. Specify maternal infections sufficient to have compromised the baby which may be associated with congenital infection of the baby. Trans-placental transmission may have occurred such as CMV, toxoplasmosis etc. Specify only those ascending infections that are a significant factor in death. Chorioamnionitis sufficient to cause preterm birth may be specified for some neonates but evidence of fetal infection may be required as an explanation of stillbirth.	**Maternal infection:** Bacterial Syphilis Viral diseases Protozoal Other **Ascending infection:** Chorioamnionitis Other
7. SPECIFIC FETAL CONDITIONS. Document only those specific conditions arising in the fetal period.	Twin-twin transfusion Feto-maternal haemorrhage Non-Immune hydrops Iso-immunisation Other
8. SPECIFIC PLACENTAL CONDITIONS. Specific placental conditions sufficient to cause death or be associated with fetal compromise such as IUGR. These will often be secondary to other maternal conditions e.g. PET. Cord problems associated with compression will normally be classified under 'Mechanical'.	Placental infarction Massive perivillous fibrin deposition Vasa praevia Velamentous insertion Other
9. INTRA-UTERINE GROWTH RESTRICTION.	
10. ASSOCIATED OBSTETRIC FACTORS. Birth Trauma and/or Intrapartum asphyxia should normally be classified primarily by the underlying cause (e.g. Mechanical). Birth \trauma and/or Intrapartum asphyxia can be recorded here either as a secondary factor or when there is no underlying explanation. Factors recorded as Other Associated Obstetric Factors will be important clinical or pathological features of the pregnancy or baby but will not be an explanation of the death; they will often be secondary to other maternal or fetal conditions.	**Birth Trauma:** Intracranial haemorrhage Birth injury to scalp Other **Intrapartum Asphyxia Other:** Polyhydramnios Oligohydramnios Premature rupture of membranes Spontaneous premature labour Other
11. NO ANTECEDENT OR ASSOCIATED OBSTETRIC FACTORS. Deaths with no explanation or significant associated factor.	
12. UNCLASSIFIED. Cases where little or nothing is known about pregnancy or delivery and cannot be fitted into any of the above categories. Use as sparingly as possible.	

Guidance and Definitions for Completion of Section 10:
CAUSE OF DEATH – NEONATES ONLY

The following definitions and associated subcategories will help you choose the relevant neonatal conditions causing and associated with the death.

DEFINITION OF TERMS	Subcategory
MAJOR CONGENITAL ANOMALY. Any genetic or structural defect arising at conception or during embryogenesis incompatible with life or potentially treatable but causing death.	Central nervous system Cardiovascular system Respiratory system Gastro-intestinal system Musculo-skeletal system Multiple anomalies Chromosomal disorders Metabolic disorders Urinary tract Other
EXTREME PREMATURITY. Babies (21w + 6d or less) who are non-viable at birth because of gestation but who show signs of life.	
RESPIRATORY DISORDERS. Severe pulmonary immaturity will encompass those babies where structural lung immaturity is so gross as to mean ventilatory support is unsustainable at the outset, usually babies between 22 – 24w gestation. Surfactant Deficient Lung Disease may include babies with clinical or pathological evidence of hyaline membrane disease.	Severe pulmonary immaturity Surfactant deficiency lung disease Pulmonary hypoplasia Meconium aspiration syndrome Primary persistent pulmonary hypertension Chronic lung disease/BPD Other (includes pulmonary haemorrhage)
GASTRO-INTESTINAL DISEASE. Many babies with NEC will have associated sepsis which may be given as a secondary cause.	Necrotising enterocolitis (NEC) Other
NEUROLOGICAL DISORDER. HIE includes those babies with severe hypoxic-ischaemic brain injury before birth. If possible, please specify if HIE was primarily of intrapartum or antepartum origin. Specify periventricular leukomalacia only if this is a significant factor in the infant death. Birth Trauma will usually be classified here.	Hypoxic-ischaemic encephalopathy (HIE) Intraventricular/Periventricular haemorrhage Other
INFECTION. Where possible specify the location of infection and whether due to bacteria, virus, fungus or other specific organism. Also specify whether infection is congenital (i.e. acquired ante or intrapartum acquired) or neonatal in origin.	Generalised (sepsis) Pneumonia Meningitis Other
INJURY / TRAUMA. Post natal trauma only including iatrogenic injury. 'Birth Trauma' will usually be classified under neurological disorder e.g. HIE; the obstetric classification identifying the timing of the injury.	
OTHER SPECIFIC CAUSES. Death due to specific fetal and neonatal conditions such as isoimmunisation or unexplained hydrops. Neonatal conditions will include aspiration, unexplained pulmonary haemorrhage.	Malignancies / Tumours Specific conditions
SUDDEN UNEXPECTED DEATHS. SIDS should conform to the accepted definition. Unascertained are those unexpected deaths that are not explained despite a full investigation including autopsy, but do not conform to the accepted definition of SIDS.	SIDS Infant deaths – cause unascertained
UNCLASSIFIED. Cases where little or nothing is known about pregnancy or delivery and that cannot be fitted into any of the above categories. Use this category as sparingly as possible.	

Appendix F

For Office Use Only: AWPS Survey Number W/10/ ☐☐☐☐☐ / ☐

Mother's name:.....

Unit of birth:.....

All Wales Perinatal Survey and Centre for Maternal and Child Enquiries

Improving the health of mothers, babies and children

Perinatal Death Notification Form

2010

CMACE

CHOOSE Type of Case (tick)

☐ **SPONTANEOUS MISCARRIAGE:** *Spontaneous late fetal death before 24 weeks of gestation.*

OR

☐ **THERAPEUTIC ABORTION:** *Therapeutic late fetal death before 24 weeks of gestation.*

OR

☐ **STILLBIRTH:** *A baby delivered without life **after** 23^{+6} weeks of pregnancy i.e. no signs of life at birth and where no heartbeat was ever detected.*

If the birth occurred unattended and there was no lung aeration seen at Post Mortem (PM) and no other circumstantial evidence of life at birth, it should be assumed that the baby was stillborn.

In all cases where there is evidence that the fetus has died prior to the 24th week of pregnancy, the death **should not** be notified as a stillbirth. Where there is any doubt about the gestational age at which the fetus died, the default position would be to notify as a stillbirth.

OR

☐ **EARLY NEONATAL DEATH:** *Death, following live birth at ANY GESTATION, of a baby before the age of 7 completed days.*

OR

☐ **LATE NEONATAL DEATH:** *Death of a baby occurring from the 7th day of life and before the age of 28 completed days.*

OR

☐ **POST NEONATAL DEATH:** *Death of a baby at age 28 days and over but under one year of age.*

Brief Instructions and Guidance

1. **Fill in the form using the information available in the maternity case notes and discharge summary.**
2. **Guidance for completing Sections 9 and 10 on Cause of Death is found on the folder enclosing this form.**
3. There are no "not known" codes as all the information should be contained in the notes. *If you do not know the answer to a question please indicate this in Section 12.*
4. Please complete all dates in the format DD/MM/YY, & all times using the 24hr clock e.g. 17:45.
5. Do NOT wait for the Post Mortem to complete and return this form – it should be completed within 8 weeks of death.
6. Please keep a copy of this form for your own records.

Section 1. WOMAN'S DETAILS – Please use addressograph if possible

1.1 NHS number: ☐☐☐ ☐☐☐ ☐☐☐☐

1.2 Surname:..... First name: .....

1.3 Hospital number: ☐☐☐☐☐☐☐☐☐☐

1.4 Usual residential address at time of delivery/birth: .....

.....

1.5 Postcode: ☐☐☐☐☐☐☐

1.6 Woman's date of birth: ☐☐ / ☐☐ / ☐☐ ☐☐ or estimated age

Country of birth: .....

1.7 Ethnic group:

White: ☐ *British* ☐ *Irish* ☐ *Any other White background, specify*

Mixed: ☐ *White & Black Caribbean* ☐ *White & Black African* ☐ *White & Asian* ☐ *Any other mixed*

Asian or Asian British: ☐ *Indian* ☐ *Pakistani* ☐ *Bangladeshi* ☐ *Any other Asian*

Black or Black British: ☐ *Caribbean* ☐ *African* ☐ *Any other Black background*

Other ethnic groups: ☐ *Chinese* ☐ *Any other, specify*

Not stated: ☐

Marital status: ☐ Married ☐ Single ☐ Separated ☐ Divorced ☐ Co-habiting ☐ Widowed

Stable relationship? ☐ Yes ☐ No

1.8 Was the woman in paid employment at booking? ☐ Yes ☐ No

If Yes, what is her occupation? *(Transcribe exactly what is in the notes)* .....

If No, what was her occupation when she last worked or state if never employed .....

1.9 Was the woman's partner in paid employment at booking? ☐ Yes ☐ No ☐ Not known

If Yes, what is the partner's occupation? *(Transcribe exactly what is in the notes)*.....

If No, what was their occupation when they last worked or state if never employed .....

Does the partner's employment fit into the following: ☐ H.M. Forces ☐ Student ☐ Prison

1.10 Height at booking (cm): round up to nearest cm ☐☐☐

1.11 Weight at booking (kg): round up to nearest kg ☐☐☐

If weight is unavailable, was there evidence that the woman was too heavy for hospital scales? ☐ Yes ☐ No

1.12 Body mass index at booking (BMI): ☐☐

1.13 Smoking status: ☐ Never smoked ☐ Gave up prior to pregnancy ☐ Gave up in pregnancy

☐ Non-smoker, history not known ☐ Current: less than 10 per day ☐ Current: 10 or more per day

1.14 Was this woman known to abuse alcohol? ☐ Yes ☐ No

1.15 Was this woman known to be a substance user? ☐ Yes ☐ No

2

Section 2. PREVIOUS PREGNANCIES

Previous infertility? ☐ Yes ☐ No

2.1 Did the woman have any previous pregnancies? *(if yes, complete questions 2.2-2.4)* ☐ Yes ☐ No

2.2 No. of completed pregnancies ≥ 24 weeks (all live and stillbirths) ☐☐ *(please provide details below)*

2.3 No. of pregnancies < 24 weeks ☐☐ *(please provide details below)*

	Number	Give details of gestation, birthweight and cause of death (if applicable)
Livebirths		
Stillbirths		
Miscarriages, ectopics and moles		
Therapeutic abortions		
Neonatal deaths *(0-27 days)*		
Post-neonatal deaths *(28 days-1 year)*		

2.4 Were there any previous pregnancy problems? ☐ Yes ☐ No *(If yes, tick all that apply below)*

☐ Three or more miscarriages
☐ Neonatal death
☐ Previous caesarean section
☐ Pre-eclampsia (hypertension & proteinuria)
☐ Pre-term birth or mid trimester loss
☐ Baby with congenital anomaly
☐ Placenta praevia
☐ Stillbirth
☐ Infant requiring intensive care
☐ Placental abruption
☐ Post-partum haemorrhage requiring transfusion

☐ Other, please specify .....

Section 3. PREVIOUS MEDICAL HISTORY

3.1 Were there any pre-existing medical problems? ☐ Yes ☐ No *(If yes, tick all that apply below)*

☐ Cardiac disease (congenital or acquired)
☐ Endocrine disorders e.g. hypo or hyperthyroidism
☐ Haematological disorders e.g. sickle cell disease
☐ Inflammatory disorders e.g. inflammatory bowel disease
☐ Diabetes
☐ Epilepsy
☐ Renal disease
☐ Psychiatric disorders
☐ Drug or substance abuse
☐ Other, specify .....

Section 4. THIS PREGNANCY

4.1 Date of first booking appointment: ☐☐ / ☐☐ / ☐☐ ☐ Not booked

L.M.P. as originally given ☐☐ / ☐☐ / ☐☐

Was USS done? ☐ Yes ☐ No Date of first ultrasound scan ☐☐ / ☐☐ / ☐☐

Gestation at first USS ☐☐ weeks ☐☐ days EDD by first USS ☐☐ / ☐☐ / ☐☐

4.2 Final Estimated date of delivery (EDD) *Use best estimate (ultrasound scan or date of last menstrual period) based on a 40 week gestation. Or the final date agreed in the notes.* ☐☐ / ☐☐ / ☐☐

4.3 Was this a multiple pregnancy at the onset of pregnancy? ☐ Yes ☐ No

4.4 Intended place of delivery at booking: Name of unit / place: ..... Undecided

Type of unit: ☐ Obstetric unit ☐ Alongside midwifery unit ☐ Freestanding midwifery unit ☐ Home ☐ Other

4.5 What was the intended type of delivery at booking?: ☐ Obstetric led care ☐ Midwifery led care

Section 5. DELIVERY

5.1 Onset of labour: ☐ 1. Spontaneous ☐ 2. Induced ☐ 3. Never in labour

5.2 Intended place of delivery at onset of labour: Name of unit / place: .....
Type of unit: ☐ Obstetric unit ☐ Alongside midwifery unit ☐ Freestanding midwifery unit ☐ Home ☐ Other

5.3 What was the intended delivery type at onset of labour? ☐ Obstetric led care ☐ Midwifery led care ☐ Free birthing ☐ Other
Free birthing is where the woman chose to have no midwifery/obstetric involvement during labour and delivery

3

Antenatal steroid treatment within 10 days of delivery ☐ None ☐ For less than 24 hours ☐ For 24 hours or more

Date of membrane rupture ☐☐ / ☐☐ / ☐☐ Time of membrane rupture ☐☐ : ☐☐

Induction before onset of labour:			**Augmentation** after onset of labour:		
Oxytocin	☐YES	☐NO	Oxytocin	☐YES	☐NO
Surgical	☐YES	☐NO	Surgical	☐YES	☐NO
Prostaglandin	☐YES	☐NO	Prostaglandin	☐YES	☐NO

5.4 **Was the intended mode of delivery a planned caesarian section?** ☐ Yes ☐ No

5.5 **Actual place of delivery:** Name of unit / place:.....

Type of unit: ☐ Obstetric unit ☐ Alongside midwifery unit ☐ Freestanding midwifery unit ☐ Home ☐ Other

Place of delivery ☐ 1. Hospital ☐ 2. Home ☐ 3. In transit ☐ 4. Elsewhere

5.6 **What was the type of care at delivery?**
Free birthing is where the woman chose to have no midwifery/obstetric involvement during labour and delivery

☐ Obstetric led care ☐ Midwifery led care
☐ Free birthing ☐ Unattended
☐ Other

Reason for change in place of delivery

☐ No change ☐ Change of address during pregnancy ☐ Clinical reasons during labour
☐ Clinical reasons during pregnancy ☐ Other reasons during pregnancy
☐ Other reasons during labour ☐ Unintentionally during labour

5.7 **Date and time of delivery/birth:** ☐☐ / ☐☐ / ☐☐ ☐☐ : ☐☐

5.8 **What was the presentation *at delivery*?**

☐ Vertex ☐ Breech ☐ Compound (includes transverse & shoulder presentations) ☐ Brow ☐ Face

5.9 **What was the FINAL mode of delivery?**

☐ Spontaneous cephalic/vaginal ☐ Forceps – low (Lift-out) ☐ Forceps – mid-cavity ☐ Rotational forceps
☐ Ventouse ☐ Breech (Assisted) ☐ Breech extraction ☐ Destructive operation
☐ Elective Caesarean section (Pre-labour) ☐ Emergency Caesarean section (after onset of labour)

CAESAREAN SECTIONS ONLY (non-Caesarean Sections go to Section 6)

5.10 **What was the type of caesarean section?**

☐ Elective – *A time to suit the woman or maternity team* ☐ Scheduled – *Needing early delivery but no maternal or fetal compromise*
☐ Urgent – *Maternal or fetal compromise not immediately life-threatening* ☐ Emergency – *Immediate threat to life of woman or fetus*

Section 6. ALL BABY OUTCOMES

6.1 **Baby's surname:** ..... **First name:** .....

6.2 **Baby's NHS number:** ☐☐☐ ☐☐☐ ☐☐☐☐ (including stillbirths)

Baby's Hospital number: ☐☐☐☐☐☐☐☐☐☐

Usual address of baby at date of death (if different to address in section 1.4):.....

Postcode: ☐☐☐☐☐☐☐

6.3 **Sex of fetus/baby:** ☐ Male ☐ Female ☐ Indeterminate

6.4 **Number of fetuses/babies this delivery:** *(all identifiable, including papyraceous)* ☐

6.5 **Birth order of this fetus/baby:** *(1=singleton)* ☐

6.6 **If from a multiple delivery, what was the chorionicity?**

☐ Dichorionic diamniotic ☐ Monochorionic diamniotic ☐ Monochorionic monoamniotic ☐ Trichorionic ☐ Not known

6.7 **Birth weight (kg):** ☐ . ☐☐☐

6.8 **Gestation at delivery:** ☐☐ weeks + ☐ days

6.9 **Was this a termination of pregnancy?** ☐ Yes ☐ No
NB: a case can be both a registrable stillbirth or neonatal death AND a legal abortion

Outcome (please select)
☐ 1. Liveborn ☐ 2. Spontaneous miscarriage ☐ 3. Therapeutic abortion
☐ 4. Stillbirth-antenatal macerated ☐ 5. Stillbirth-antenatal fresh ☐ 6. Stillbirth-in labour

6.10 **Was the death due to an intrapartum event?** ☐ Yes ☐ No

INTRAPARTUM RELATED EVENTS ONLY (non-intrapartum go to section 7)

6.11 **Was a local Hospital/Trust review of this case undertaken?** ☐ Yes ☐ No

6.12 **If no, please state why not:**

6.13 **If yes, what method was used?**
☐ Root cause analysis ☐ Hospital/Trust review ☐ Clinical governance review
☐ Other, please specify .....

Section 7. STILLBIRTHS (if not stillbirth go to section 8)

7.1 **At what gestation was death confirmed to have occurred?** ☐☐ weeks + ☐ days
(confirmed by ultrasound, pathological report or when baby born dead)

If known, what date was death confirmed? ☐☐ / ☐☐ / ☐☐

7.2 **Was the baby alive at *onset of care* in labour?**
☐ Yes ☐ No ☐ Never in labour ☐ Unattended ☐ Not known

Section 8. NEONATAL & POST NEONATAL DEATHS (if not neonatal go to section 9)

8.1 **Was spontaneous respiratory activity *absent or ineffective* at 5 minutes?** ☐ Yes ☐ No
If a baby is receiving any artificial ventilation at 5 minutes assumption is absent/ineffective activity; a 0 Apgar score indicates absent activity.

8.2 **Was the heart rate persistently <100? (i.e. heart rate NEVER rose above 100 before death)**
☐ Persistently <100 ☐ Rose above 100

8.3 **Was the baby admitted to a neonatal unit?** (includes SCBU and ICU) ☐ Yes ☐ No

Apgar score: ☐ 1 min ☐ 5 mins **Was surfactant used?** ☐ Yes ☐ No

Neonatal resuscitation:

Oxygen:	☐ Yes	☐ No	**Mask ventilation:**	☐ Yes	☐ No
Intubation:	☐ Yes	☐ No	**Cardiac massage:**	☐ Yes	☐ No
Drugs:	☐ Yes	☐ No	**Specify drugs used:**		

8.4 **Place of death:** .....

This is where the baby actually died, e.g. 'name of unit', 'at home', 'in transit'. This includes babies who are brought to hospital, but are either declared dead on arrival or show no subsequent signs of life, despite attempted resuscitation.

☐ Labour ward ☐ Neonatal unit ☐ Hospital (other) ☐ Home ☐ In transit ☐ Elsewhere

8.5 **Date and time of death:** ☐☐ / ☐☐ / ☐☐ ☐☐ : ☐☐

8.6 **Was the baby transferred to another unit after birth?** ☐ Yes ☐ No

Was baby discharged home after birth or neonatal care? ☐ Yes ☐ No

If YES, date and time of (last) readmission to hospital: ☐☐ / ☐☐ / ☐☐ ☐☐ : ☐☐

8.7 **Please briefly describe the obstetric and neonatal factors contributing to and associated with the death:**

5

Section 9. ASSOCIATED FACTORS & CAUSE OF DEATH – ALL DEATHS AND STILLBIRTHS

9.1. Which condition, indicated in 9.2 as being present, was the **MAIN** condition causing or associated with the death? *(NB 'non-MAIN' conditions are best described as the 'Other clinically relevant maternal or fetal conditions/ factors that were associated with but not necessarily causing the death').* Please give the MAIN condition:

9.2. Please TICK ALL the maternal or fetal conditions that were present during pregnancy or were associated with the death – ***PLEASE REFER TO SEPARATE CAUSE OF DEATH GUIDANCE ON THE ENCLOSING FOLDER***

9.2.1. MAJOR CONGENITAL ANOMALY:

☐Central nervous system ☐Cardiovascular system ☐Respiratory system ☐Gastro-intestinal system

☐Musculo-skeletal anomalies ☐Multiple anomalies ☐Chromosomal disorders ☐Metabolic diseases

☐Urinary tract ☐Other, specify .....

9.2.2. HYPERTENSIVE DISORDERS OF PREGNANCY:

☐Pregnancy induced hypertension ☐Pre-eclampsia ☐HELLP syndrome ☐Eclampsia

9.2.3. ANTEPARTUM or INTRAPARTUM HAEMORRHAGE:

☐Praevia ☐Abruption ☐Cause uncertain

9.2.4. MECHANICAL:

Cord Compression: ☐Prolapse cord ☐Cord around neck ☐Other cord entanglement or knot

Uterine Rupture: ☐Before labour ☐During labour

Mal-presentation: ☐Breech ☐Face ☐Compound ☐Transverse ☐Other, please specify.....

Shoulder dystocia: ☐

9.2.5. MATERNAL DISORDER:

☐Pre-existing hypertensive disease ☐Diabetes ☐Other endocrine conditions (excluding diabetes) ☐Primary thrombophilias

☐Obstetric cholestasis ☐Drug misuse ☐Uterine anomalies ☐Other thrombophilias

☐Other, please specify .....

9.2.6. INFECTION:

Maternal infection: ☐Bacterial ☐Syphilis ☐Viral diseases ☐Protozoal

☐Other, specify..... ☐Specify organism if known .....

Ascending infection: ☐Chorioamnionitis ☐Other, specify .....

9.2.7. SPECIFIC FETAL CONDITIONS:

☐Twin-twin transfusion ☐Feto-maternal haemorrhage ☐Non-immune hydrops ☐Iso-immunisation

☐Other, specify.....

9.2.8. SPECIFIC PLACENTAL CONDITIONS:

☐Placental infarction ☐Massive perivillous fibrin deposition ☐Vasa praevia ☐Velamentous insertion

☐Other, specify .....

9.2.9. INTRA-UTERINE GROWTH RESTRICTION DIAGNOSIS MADE: ☐

What was this based on? *(tick all that apply)*

☐Suspected antenatally ☐Observed at delivery ☐Observed at post mortem

9.2.10. ASSOCIATED OBSTETRIC FACTORS:

Birth Trauma: ☐Intracranial haemorrhage ☐Birth injury to scalp ☐Fracture, specify..... ☐Other, specify.....

Intrapartum Asphyxia: ☐

Other: ☐Polyhydramnios ☐Oligohydramnios ☐Premature rupture of membranes ☐Spontaneous premature labour

☐Amniocentesis ☐Cordiocentesis ☐Chorionic villus sampling ☐Other, specify.....

9.2.11. NO ANTECEDENT OR ASSOCIATED OBSTETRIC FACTORS: ☐

9.2.12. UNCLASSIFIED (Use this category as sparingly as possible): ☐

Section 10. CAUSE OF DEATH – NEONATES & POST NEONATES ONLY (Stillbirths go to Section 11)

10.1. Which condition, indicated in 10.2. as being present, was the **MAIN** condition causing or associated with the death?
(NB 'non-MAIN' conditions are best described as the 'Other clinically relevant maternal or fetal conditions/ factors that were associated with but not necessarily causing the death'). Please give the MAIN condition:

10.2. Please TICK ALL the neonatal conditions causing and associated with the death – ***PLEASE REFER TO SEPARATE CAUSE OF DEATH GUIDANCE ON THE ENCLOSING FOLDER***

10.2.1. MAJOR CONGENITAL ANOMALY:

☐ Central nervous system ☐ Cardiovascular system ☐ Respiratory system ☐ Gastro-intestinal system
☐ Musculo-skeletal anomalies ☐ Multiple anomalies ☐ Chromosomal disorders ☐ Metabolic disease
☐ Urinary tract ☐ Other, specify .....

10.2.2. PRE-VIABLE (less than 22 weeks): ☐

10.2.3. RESPIRATORY DISORDERS:

☐ Severe pulmonary immaturity ☐ Surfactant deficiency lung disease ☐ Pulmonary hypoplasia
☐ Meconium aspiration syndrome ☐ Primary persistent pulmonary hypertension
☐ Chronic lung disease/Bronchopulmonary dysplasia (BPD)
☐ Other (includes pulmonary haemorrhage), specify .....

10.2.4. GASTRO-INTESTINAL DISEASE:

☐ Necrotising enterocolitis (NEC) ☐ Other, specify .....

10.2.5. NEUROLOGICAL DISORDER:

☐ Hypoxic-ischaemic encephalopathy (HIE) ☐ Intraventricular/Periventricular haemorrhage
☐ Other, specify .....

10.2.6. INFECTION:

☐ Generalised (sepsis) ☐ Pneumonia ☐ Meningitis ☐ Other, specify .....

10.2.7. INJURY / TRAUMA (postnatal): ☐

Specify: .....

10.2.8. OTHER SPECIFIC CAUSES:

☐ Malignancies / Tumours ☐ Specific conditions, specify .....

10.2.9. SUDDEN UNEXPECTED DEATHS:

☐ SIDS/SUDI ☐ Infant deaths – cause unascertained

10.2.10. ☐ UNCLASSIFIED (Use this category as sparingly as possible):

Section 11. POST MORTEM *(Please do not wait for post mortem results before sending in this form)*

11.1 **Was a Post Mortem offered?** ☐ Yes ☐ No

11.2 **Was consent given for a Post Mortem?** ☐ Yes, full ☐ Yes, limited ☐ NO consent

11.2.1 If PM was limited, what was consent given for?

☐ MRI ☐ X-Ray ☐ Other, specify .....

11.3 **Was the placenta sent for histology?** ☐ Yes ☐ No

11.4 **Was this a Coroners' Case?** ☐ Yes ☐ No

Section 12. ANY OTHER RELEVANT DETAILS

Section 13. DETAILS OF PERSON WHO COMPLETED THE FORM *(information not given to central office)*

Name: .....

Positions: .....

Addresses: .....

.....

Tel no./email address: .....

Date of notification: ☐☐ / ☐☐ / ☐☐

Section 14. AWPS OFFICE USE ONLY

Please code the causes of death that were given and the clinically derived *single* main cause of death. *(Refer to coding sheet.)*

14.1 Cause of death: Associated maternal and fetal factors and cause of death – stillbirths and neonates (***section 9***).

14.1.1 *Single* main cause _____

14.1.2 Other cause(s) (no more than 3): _____

_____

_____

14.2 Cause of death: Associated neonatal factors and cause of death – neonates ONLY (***section 10***).

14.2.1 *Single* main cause _____

14.2.2 Other cause(s) (no more than 3): _____

_____

_____

14.3 Maternal death: ☐ Yes ☐ No

14.4 Was a copy of the Post Mortem report received? ☐ Yes ☐ No

If yes, was it a limited Post Mortem? ☐ MRI scan ☐ X-ray ☐ Other limited ☐ No

If yes, was it a Coroners' Post Mortem? ☐ Yes ☐ No

14.5 Was a copy of the placental histology report received? ☐ Yes ☐ No

14.6 Was cause of death coding completed using a placental histology or Post Mortem?

☐ Placental histology ☐ Post Mortem ☐ No

8

Appendix G

«ADD1»

Please use ONE form for every type of unit in each hospital/trust

Unit birth statistics for «ADD1»

1st January 2010 – 31st December 2010

Name:	«Name»	**Trust Name:**	«Trust»
Job Title:	«Job_Title»	**Tel:**	«WorktelephoneNumber»
Date:		**Email address:**	«EmailAddress»

Please indicate which of the following applies to the data you are supplying us with:

Data from an obstetric unit	
Data from an alongside midwifery unit	
Data from a freestanding midwifery unit	
Other (please specify)	

TOTAL:- SUM OF HOSPITAL, HOME AND ELSEWHERE

TOTAL REGISTRABLE births (NOT deliveries – twins count as two births), including stillbirths. Sum of hospital, home and elsewhere	
TOTAL LIVEBIRTHS - (NOT deliveries – twins count as two births). Sum of hospital, home and elsewhere	

Of which:

IN UNIT ONLY

TOTAL REGISTRABLE births IN UNIT (NOT deliveries – twins count as two births), including stillbirths.	
TOTAL LIVEBIRTHS IN UNIT- (NOT deliveries – twins count as two births).	

Of total births IN UNIT

Total number of Caesarean Sections	
Of which Emergency Caesarean Sections	
Of which Elective Caesarean Sections	

Total number of vaginal breech deliveries	
Total number of induction of labour	
Total number of augmentation of labour	
Total number of forceps only delivery	
Total number of ventouse only delivery	
Total number of BOTH forceps AND ventouse delivery	
Total number of planned homebirths that became hospital births	

Births OUTSIDE Unit

	Total Livebirths	Of which	
Total Planned homebirths		Attended	
		Unattended	
Total Unplanned homebirths		Attended	
		Unattended	
Total number of births elsewhere (eg in transit)		Attended	
		Unattended	

Total number of livebirths OUTSIDE Unit	
Total number stillbirths OUTSIDE Unit	

Wednesday, 09 November 2011
PLEASE COMPLETE PAGES 1 - 3

«ADD1»

Total number of live births by gestational age (completed weeks $^{+0}$ to $^{+6}$)
Should include births in hospital, home and elsewhere

<22^{+0} weeks	
22^{+0} to 22^{+6} weeks	
23 weeks	
24 weeks	
25 weeks	
26 weeks	
27 weeks	
28 weeks	
29 weeks	
30 weeks	
31 weeks	
32 weeks	
33 weeks	
34 weeks	
35 weeks	
36 weeks	
37 weeks	
38 weeks	
39 weeks	
40 weeks	
41 weeks	
42+ weeks	
Not known	

«ADD1»

Total number of live births by birth weight

Should include births in hospital, home and elsewhere

<500 g	
500-999 g	
1000-1499 g	
1500-1999 g	
2000-2499 g	
2500-2999 g	
3000-3499 g	
3500-3999 g	
4000+ g	
Not known	

Total number of live births by multiplicity

Should include births in hospital, home and elsewhere

Singletons	
Twins*	
Triplets and higher order multiples*	
Not known	

* Please count each live born baby within the multiple pregnancy

Thank you for your continued help and support of AWPS, CMACE and NNAP

Children and Young People Committee Inquiry into Neonatal Care

Additional information from Cardiff and Vale University Health Board

During the meeting on 17 May, Cardiff and Vale University Health Board were asked to comment on the claim that some neonatal nurses have funded their own training and also undertaken training in their own time. Their response is below:

Further to the enquiry made at the Children and Young People Committee and the evidence provided by the RCN, I can confirm that all the nurses from NICU here in Cardiff and Vale UHB who undertake the neonatal modules do not self-fund or attend lectures in their own time; they are fully funded and given study leave. I hope this clarifies our position but if you require further information please do not hesitate to contact me.

Paul Hollard

Interim Chief Executive/Interim Chief Operating Officer

Cardiff and Vale UHB

30 May 2012

GIG CYMRU NHS WALES
Bwrdd Iechyd Cwm Taf Health Board

Your ref/eich cyf:
Our ref/ein cyf: AJW/KAD
Date/Dyddiad: 28th May 2012
Tel/ffôn: 01443 744803
Fax/ffacs: 01443 744800
Email/ebost: Allison.Williams4@wales.nhs.uk
Dept/adran: Chair & Chief Executive

Claire Griffiths
Deputy Clerk
Legislation Office
National Assembly for Wales
Cardiff Bay
Cardiff
CF99 1NA

Dear Claire

Re: Children and Young People Committee - 17th May 2012

Thank you for your e-mail sent on the 25th May 2012, regarding the additional information requested by the above Committee. The information required related to the claim that neonatal nurses have funded their own training and also undertaken training in their own time.

I can confirm following advice from the service that no nurses within Cwm Taf Health Board have paid for essential training. The Health Board funds modules via a contract agreement with the University of Glamorgan and staff are appropriately allocated modules dependant on their personal development plans. Essential courses required by nurses for the maintenance and development of key skills are fully funded and granted full study leave.

Other development opportunities that are non essential to an individuals role are also often supported and funded via the Health Board and a percentage of study leave will be agreed dependant on service needs. Cwm Taf Health Board endeavours to support all training opportunities for staff equitably across professions and the range of services provided.

I hope the above offers reassurance that all essential training identified at personal development reviews is fully supported financially and with adequate study leave.

Yours sincerely

Mrs Allison Williams
Chief Executive/Prif Weithredydd

Return Address:

Ynysmeurig House, Abercynon, CF45 4SN

Hywel Dda Neonatal Services Action Plan June 2012

KEY:

- Fully compliant with standard
- Some areas of standard not yet achieved
- Compliance with standard not achieved
- Not applicable

					Compliance Dec_2010	Compliance March_2011	Compliance June_2011	Compliance Dec_2011	Compliance June 2012	Planned Compliance Oct 2012	Compliance Statement at each unit at December 2011	Action Planned	Position at June 2012	Timescale for Action		
Standard Number	**Standard Text**										**Comment**	**Actions**	**Current**	**Short term**	**Medium Term**	**Long Term**
OBJECTIVE 1: ACCESS TO NEONATAL CARE **Rationale: All newborn babies who require over and above the normal birth pathway have equitable access to the appropriate level of care in a timely manner.**																
	Neonatal care is commissioned to meet the local and national population need.										Interim actions in place to meet the local and national population need. ▲	Plans for reconfiguration to improve this position accepted the Health Board. Curently shared with the public inListening and Engagement exercise.	Public consultation planned to commence July 2012 ▲	Protocols and poloicies in place to ensure risk avoidance of complex obstetric cases by transfer within Hywel Dda. Staffing levels addressed by coverting variable pay	Focus Level II care on one site with support from the second site providing Level III care	Sinlge level two neonatal unit for Hywel Dda, with Stabalise and transfer for emergencies from Bronglais and second site
2.5	All neonatal units have a designated neonatal nurse with protected time dedicated to providing teaching and education of the neonatal team.										Additional staff recruitment underway which will facilitate this Target end of August 2012 ▲	Convert variable spend pay to established posts	Job description being finalised to be advertised in June 2012 ▲	Staffing and role review undertaken to release protected time	Consolidate training program for delivery by designate neonatal nurse., to maintain transferrable skills across both sites	Centralise staffing on single level two unit
LEVEL II Care in Level II Unit Neonatal High Dependency Care																
2.16	A nursing ratio of 1:2 is provided for babies requiring High Dependency care. The named nurse has training in neonatal care.										Staff recruitment will allow appropriate ratios ▲	Convert variable spend pay to established posts	Posts to bring establishment to recommended standard are out to advert, interviews in June 2012 ▲	Staffing contract changes to allow Neonatal nurses to work across both sites in response to demand	Focus Level II care on one site with support from the second site providing Level III care allowing flexible staffing	Centralise staffing on single level two unit
2.17	The unit can provide evidence that the establishment is correct for the number of High Dependency cots commissioned.										As above. ▲	Convert variable spend pay to established posts	Job description being finalised to be advertised in June 2012 ▲	Staffing based on BAPM recommendations	Focus Level II care on one site with support from the second site providing Level III care staffed to BAPM reccommendations	Centralise staffing on single level two unit

2.21	A Level II unit has SHOs/ANNPs dedicated to the neonatal service.										During the hours of 9 -4, there is a dedicated rota in operation, after 4 pm the rotas is across Paediatric services. We are unable to effect any change in the short or medium term, but plan to develop ANNP roles to address this care level, which could take up to 3 years and so is a long term plan ▶	Review opportunities to develop ANNP roles	Participating in the Together for Health: South Wales Program to fully understand Walws Deanery plans for Training rotas to inform ANNP planning ▶	Review opportunities to develop ANNP roles by recruitment or development of current staff.	Implement recruitment/development plans	Centralise staffing on single level two unit
LEVEL III Care in Level I Unit Neonatal Special Care																
2.23	The unit can provide evidence that the establishment is correct for the number of Special Care cots commissioned.										Interim actions in place to meet the local and national population need. ▲	Plans for reconfiguration to improve this position accepted the Health Board. Curently shared with the public inListening and Engagement exercise.	Job description being finalised to be advertised in June 2012 ▲	Protocols and poloicies in place to ensure risk avoidance of complex obstetric cases by transfer within Hywel Dda. Staffing levels addressed by coverting variable pay	Focus Level II care on one site with support from the second site providing Level III care	Sinlge level two neonatal unit for Hywel Dda, with Stabalise and transfer for emergencies from Bronglais and second site
OBJECTIVE 3: FACILITIES FOR NEONATAL SERVICES, INCLUDING EQUIPMENT **Rationale: Appropriate, up to date and safe equipment and facilities are available to care for babies with neonatal care needs and their families**																
3.1	Neonatal facilities are commissioned based on population need, taking into account local differences.										Interim actions in place to meet the local and national population need. ▲	Plans for reconfiguration to improve this position accepted the Health Board. Curently shared with the public inListening and Engagement exercise.	Public consultation planned to commence July 2012 ▲	Protocols and poloicies in place to ensure risk avoidance of complex obstetric cases by transfer within Hywel Dda. Staffing levels addressed by coverting variable pay	Focus Level II care on one site with support from the second site providing Level III care	Sinlge level two neonatal unit for Hywel Dda, with Stabalise and transfer for emergencies from Bronglais and second site
3.5	Support services are readily available. These include: Pharmacy Dietetics Therapy Screening Genetics Physiotherapy Social Work Speech and Language Therapy These include staff with expertise in the care of neonates.										These services are accessible, and though these services do not currently have dedicated resource referrals are prioritised based on assessed need and advice is sought from specialist therapists in a level III unit in relation to specific complex cases as required (this may be Swansea or Cardiff). ▲	Therapy services will be an integral part of the Health Board's neonatal service development and alongside medical and nursing staffing will be considered as part of the current work to implement the recommendations of the Hywel Dda neonatal action plan. The work will inform therapy service development plans	Work ongoing with Pharmacy and Dietetics services to support introduction of TPN (intavenous feeding). Therapy services will have detailed action plans and identified related resource implications by the end of June working alongside the wider neonatal team. ▲	Detailed discussions with the therapy services to identify their contribution to the delivery of interim arrangements.	Full consultation ans business plan	Centralise staffing on single level two unit, allowing these services to have critical mass on a single site

3.9	Each cot on a Neonatal Intensive Care Unit or High Dependency Unit has the following equipment: a. Incubator or unit with radiant heating b. Ventilator* and NCPAP driver with humidifier c. Syringe/infusion Pumps d. Facilities for monitoring the following variables: i. Respiration ii. Heart rate iii. Intra-vascular blood pressure iv. Transcutaneous or intra-arterial oxygen tension v. Oxygen saturation vi. Ambient Oxygen. * Intensive Care Cot only										All cots within the HB have this equipment apart from d points iii & iv which will be addressed by replacemat of the monitors. Currently on order via this years Capital replacement program. ▲	Equipment ordered via Capital Replacement Progran.	Delivery date for equipment July 2012 ▲	Replacing monitoring equipment.	Focus Level II care on one site with support from the second site providing Level III care	Sinlge level two neonatal unit for Hywel Dda, with fully appropriate equipment provision
OBJECTIVE 4: CARE OF THE BABY AND FAMILY/PATIENT EXPERIENCE **Rationale: The baby and the family receive holistic child and family centred care as close to home as possible, with ease of access to specialist centres when this care is required.**																
5.1	Transport services are planned and commissioned on an all Wales basis with working arrangements in place for each network and across the border with England. All units accepting and/or referring neonates have, or have access to, an appropriately staffed and equipped transport										Although CHANTS (the network transport system is in operation, this is only on a 12 hour access window, which requires an extended period of stabilised care for infants delivering in BGH. The operation/provision of the CHANTS service is without the control of Hywel Dda. ▲	Protocols and poloicies in place to ensure risk avoidance of complex obstetric cases by transfer in utero within Hywel Dda	Public consultation planned to commence July 2012 ▲	Plans for reconfiguration to improve this position accepted the Health Board. Curently shared with the public in Listening and Engagement exercise.	Full consultation ans business plan	Sinlge level two neonatal unit for Hywel Dda, with stabalise and transfer for emergencies from Bronglais and second site
5.4	Staff responsible for transfers are in addition to those of the clinical inpatient team.										Unlike the Boards where the CHANTS services are based Hywel Dda is unable to access CHANTS for within county transfers so additional staff are brought in to facillitate these transfers. ▲	Protocols and poloicies in place to ensure risk avoidance of complex obstetric cases by transfer in utero within Hywel Dda Use of additional hours to bring staff in for transfers.	Public consultation planned to commence July 2012 ▲	Plans for reconfiguration to improve this position accepted the Health Board. Curently shared with the public in Listening and Engagement exercise.	Full consultation ans business plan	Sinlge level two neonatal unit for Hywel Dda, with Stabalise and transfer for emergencies from Bronglais and second site

Lesley Griffiths AC / AM
Y Gweinidog Iechyd a Gwasanaethau Cymdeithasol
Minister for Health and Social Services

Llywodraeth Cymru
Welsh Government

Eich cyf/Your ref
Ein cyf/Our ref: SF/LG/2129/12

Christine Chapman AM
Chair, Children and Young People Committee
National Assembly for Wales

26 June 2012

Dear Christine

I am writing in response to the action point raised at the Children and Young People Committee inquiry into neonatal care held on 31 May 2012 relating to the claim some transfers of neonatal patients had been delayed due to decisions made by ambulance service controllers.

I have asked officials to look into this issue and I understand the Welsh Ambulance Services Trust has confirmed there have been no delays to the neonatal transfer service it provides as a direct result of ambulance controllers not sending an appropriate response. The Trust did refer to a recent request to support the transfer of twins and due to the fact not all of its ambulances have the required equipment and cots for this very specialist group of patients, the transfers were undertaken one after another and not able to be accommodated at the same time.

I trust this reassures the Committee.

Kind Regards

Lesley

Lesley Griffiths AC/AM
Y Gweinidog Iechyd a Gwasanaethau Cymdeithasol
Minister for Health and Social Services

Bae Caerdydd • Cardiff Bay
Caerdydd • Cardiff
CF99 1NA

English Enquiry Line 0845 010 3300
Llinell Ymholiadau Cymraeg 0845 010 4400
Correspondence.lesley.Griffiths@wales.gsi.gov.uk

Royal College of Nursing
Ty Maeth
King George V Drive East
Cardiff
CF14 4XZ

Tina Donnelly TD, DL, CCMI, MSc (ECON), BSc (Hons), RGN, RM, RNT, RCNT, Dip N, PGCE
Director, RCN Wales

Telephone 0345 456 7875
Fax 029 20680750
Email tina.donnelly@rcn.org.uk

18 June 2012

Christine Chapman AM
Chair of the Children and Young People Committee
National Assembly for Wales
CF99 1NA

Dear Christine

Thank-you for your request for further information and clarification (via the Deputy Clerk of the Committee) about nurses self-funding their own education and training in the field of neonatal care.

There are three educational issues here which should not be confused; the formal university offered courses in neonatal care in Wales, continuous professional development (CPD) generally for nurses which in neonatal services might be in such areas as involving the family, counselling and community liaison and 'mandatory training' a term which usually refers to continuous professional development required by the employer such as health & safety, equipment etc.

Formal university courses in neonatal care are offered in Wales by the University of Glamorgan and the University of Bangor. It is also important to note that the University of Bangor also has the ability to teach students within a bilingual Welsh medium framework. The information provided to the Committee about the funding of nurses on these courses on was provided by questioning those of our members working in higher education in this field who estimated that around 10% of nurses on these courses were either funding the course themselves or required to take annual leave for study or the placement.

Continued.....

The clear majority of students *were* funded and supported. We have returned to our members to confirm this information and certainly 3 of the 32 students at the University of Glamorgan (or 9.4%) are undertaking the course in their own time.

However whilst this is an important issue I would like to take this opportunity to reiterate the central message of both our written and oral evidence, that capacity in level 2 and 3 neonatal care must be increased and in order to do this the number of nurses being trained in neonatal care should rise. In addition the likely workforce demands of neonatal services should be taken into account when the Welsh Government commissions pre-registration children's nursing education.

The issues around general access to CPD and mandatory training for nurses are similar in theme but of course here the training and education is more likely to be a day or two or even half a day in duration.

Registered Nurses are required by the regulatory body (the Nursing and Midwifery Council) to undertake continuous professional development and by the Code of Practice to be competent for the role they are undertaking.

Unlike medical colleagues however, nurses employed by the NHS do not have guaranteed time for CPD built into their contract. It is also important to note that from the perspective of the employer such as the LHB the cost of releasing a nurse to undertake CPD is not merely the cost of the course in question but also the cost and availability of the nurse required to backfill the vacancy on the ward.

The Royal College of Nursing in Wales offers CPD courses in varied topics of usually a day's duration. From April 2011 to April 2012 339 attendees (over 15 courses) were surveyed, of these 169 nurses (50%) had come to the course in their own personal time. A separate survey was also undertaken of 731 attendees (over 29 courses), this found 254 nurses (35%) to be paying personally.

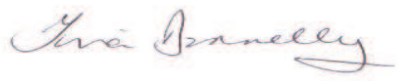
The RCN 2011 Employment Survey is an independently commissioned survey of membership across the UK which takes places every 2 years. It is the only major source of reliable data about the nursing workforce aside from official government statistics. The full report for Wales is supplied with this letter and the most relevant tables demonstrating access to CPD and mandatory training for Welsh nurses are extracted below. The evidence this provides about mandatory training and CPD can be summarised as follows:

- access to mandatory training for nurses in Wales is lower than elsewhere in the UK
- access to CPD for welsh nurses has sharply fallen between 2009 and 2011
- the issue of employers paying (or not) for CPD is UK wide

I do hope this additional information and evidence regarding CPD and mandatory training is helpful to the Committee. I would also like to take this opportunity to thank the Committee for inviting us to provide evidence and I am happy to assist with any further queries members may have.

Kind regards

Yours sincerely



TINA DONNELLY
DIRECTOR, RCN WALES

Appendix 1 – Charts extracted from the RCN Wales Employment Survey 2011 (also attached in full)

Chart 8a Mandatory training received in the last year, Wales compared to the UK

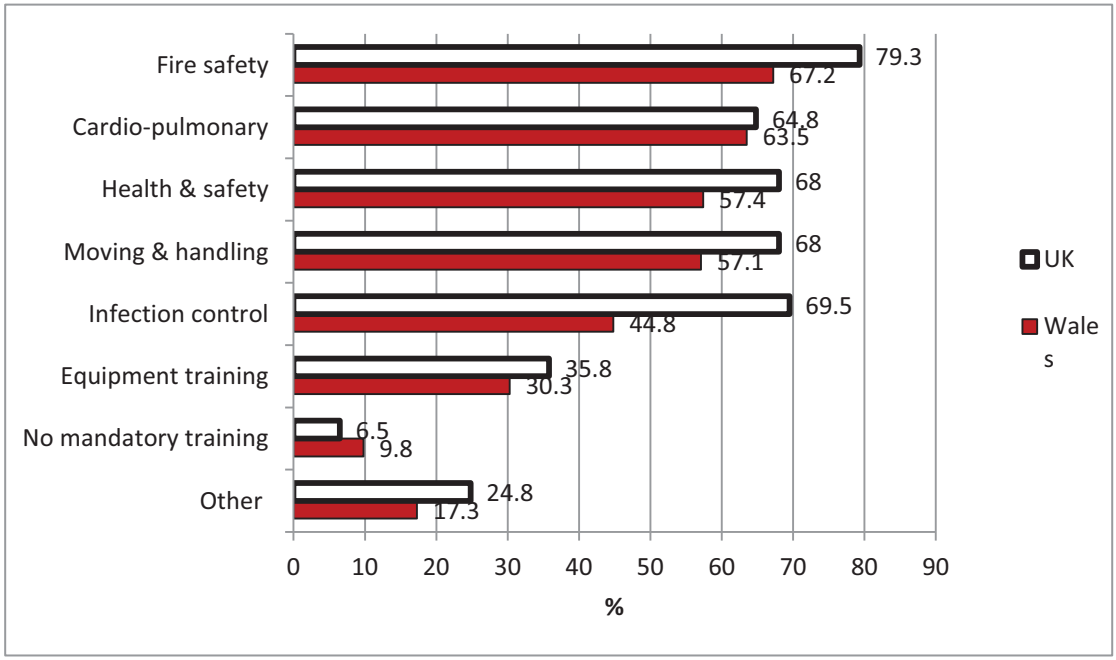


Chart 8b Other than mandatory training, how much training has your employer provided or paid for over the last year, Wales compared to the UK

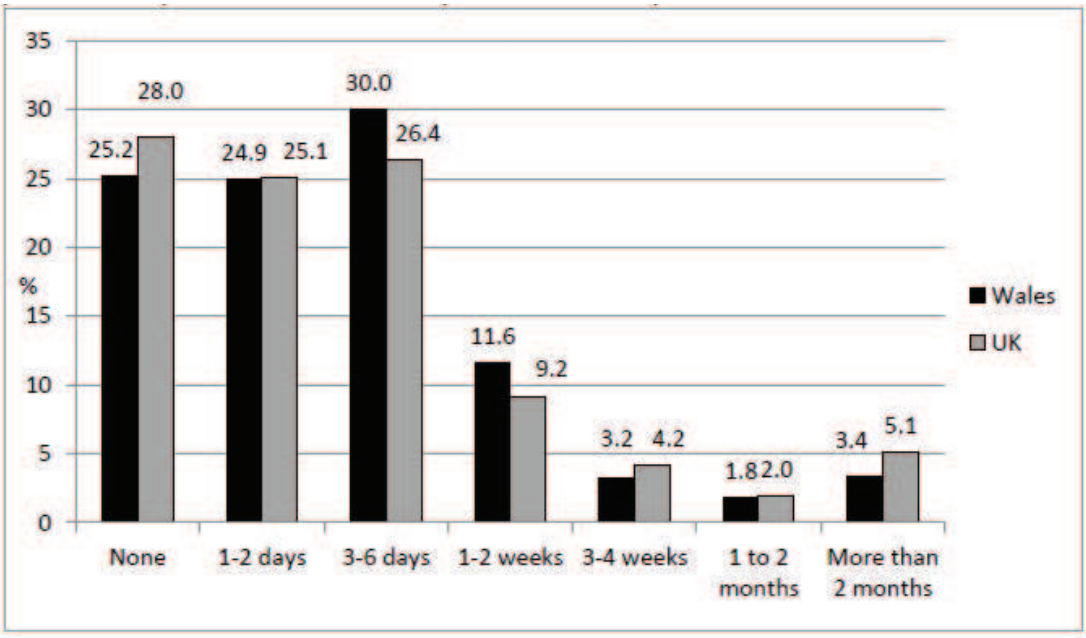
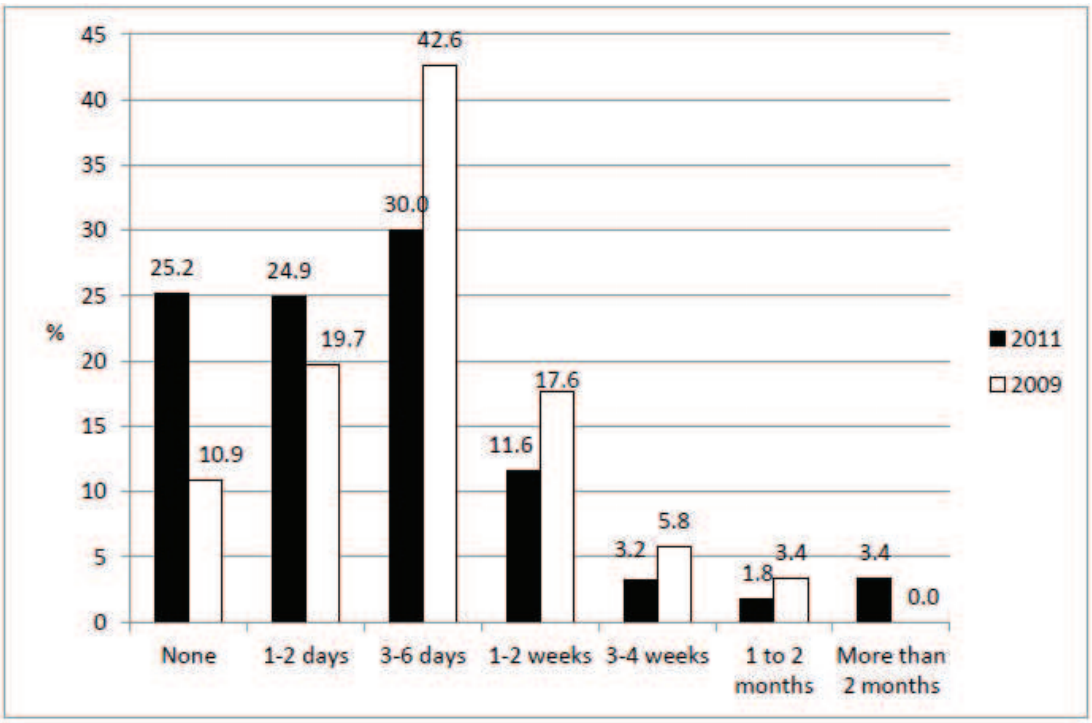


Chart 8c: Other than mandatory training, how much training has your employer provided or paid for over the last year, 2011 compared to 2009 (Wales)



Royal College of Nursing

The Fragile Frontline

RCN Employment survey 2011 for Wales

1. Introduction

The report is based on the results from the RCN Welsh membership of an on-line survey sent out to a stratified random sample of the whole RCN membership. The survey achieved a total of 514 usable responses[1], which represents a response rate of 8 per cent.

The proportion of participants from Wales represents 9 per cent of the total survey sample, which includes usable responses from 7,904 RCN members.

IDS was commissioned by the RCN to administer the survey in March 2011, and the research was conducted during May and June.

The RCN membership survey has been ongoing since the 1980s and this is the 23rd survey in the series. It has been a key feature of the survey approach that some of the same questions have been included over time, in order to measure changes and key trends. This year's survey also incorporates some new lines of questioning, however, and we discuss the questionnaire more fully in our methodology section in Appendix 1.

Broadly, the 2011 survey includes questions around members' current employment status, other personal information (eg gender, ethnicity, qualifications) and the following six key areas:

- Pay and grading
- Pension arrangements
- Working hours
- Training
- Workload and staffing
- Views about nursing as a career

[1] The survey link was originally sent out to approximately 5,504 RCN members in Wales.

Key Findings

On average each respondent to this survey was providing 4 extra hours a week and a third were not being paid. This means that the NHS receives over ***132,000*** extra hours of nursing services from its loyal staff in Wales.

This illustrates very clearly the level of commitment that nursing staff put into their very personal public service.

Respondents to this survey reveal a picture of a fragile frontline under a great deal of pressure. Half have seen the numbers of registered nurses decline and over a quarter have seen the number of Health Care Assistants and support workers decline over the last year. This is clearly impacting on the ability to deliver care, with 53% stating they are just too busy to provide the level of care to patients they would like.

The Welsh Government needs to pay particular attention to the very low levels of Continuing Professional Development in Wales compared with the rest of the UK (e.g. 45% reported to have received training in infection control in Wales compared with 70% in the UK). There is no doubt that this is an indicator of the investment (or lack of investment) being made in ensuring the quality of patient care. Numerous reports and investigations into the patient experience have identified the need for improved training and education in areas such as continence management, awareness of learning disabilities and public health interventions. A sustained improvement in the quality of care cannot be made without investing and valuing staff. It is therefore particularly disappointing to find that just 45% of nursing staff had received an appraisal in the last year.

These pressures have led to a sharp drop in morale and motivation. Just 37% now believe nursing is a secure career compared to 72% in 2009 and fewer see nursing as rewarding career.

2. Political, Social and Economic Context

2.1 Introduction

Responsibility for health policy, the operation of the NHS and powers over health legislation are devolved to the National Assembly for Wales. A referendum held in March 2011 was passed which altered the legislative process of the National Assembly, meaning that the Welsh Government can now legislate in 20 specified areas, including health and social services, without recourse to the UK Parliament.

The Welsh economy appears one of the weakest of the UK regions. Looking at Gross Value Added (a measure of the output of goods and services), between 2008 and 2009 Welsh GVA dropped by 2.2 per cent and Wales currently has the lowest GVA per head of all the UK regions[2]. Wales is also highly reliant on public sector employment. In the fourth quarter of 2010, the public sector employed 342,000 people, accounting for 26.4 per cent of the total workforce in Wales, compared to 21.4 per cent for the UK as a whole. This is the second-highest of all the UK regions[3].

Public health is generally poor with a high incidence of chronic disease. Rurality combined with a poor road and transport infrastructure adds to the cost of delivering health care. Wales has the lowest life expectancy at birth of all four UK countries and the largest proportion of older people in the UK[4].

Over the next four years the Welsh block grant is forecast to reduce by £2 billion, or 12 per cent in real terms. Capital allocations are set to fall by over 40 per cent, while revenue will reduce by 8 per cent in real terms. Of all the devolved countries Wales has faced the most severe cut to its block grant.

The Office for Budget Responsibility estimated that public sector employment across the whole of the UK will fall by around 400,000 between 2010/11 and 2015/16[5]. Prior to the May 2011 election, the Welsh Government estimated that around 30,000 public sector jobs would be lost in Wales as a result of reductions to public spending[6].

The baseline for allocations for 'devolved services' to the devolved countries (used in the Barnett Formula) is determined by the level of allocations for these services in England. The global allocations for 'devolved services' in the devolved countries are then determined by the Barnett Formula and bilateral negotiations with the Treasury.

---

[2] www.statistics.gov.uk/pdfdir/gvanr1210.pdf
[3] www.statistics.gov.uk/pdfdir/pse0611.pdf
[4] http://new.wales.gov.uk/topics/health/ocmo/publications/annual/report09/?lang=en
[5] http://budgetresponsibility.independent.gov.uk/wordpress/docs/economic_and_fiscal_outlook_23032011.pdf
[6] www.bipsolutions.com/docstore/pdf/29497.pdf

In 2010, the independent Holtham Commission was set up to look at the present formula-based approach to the distribution of public expenditure resources to the Welsh Government. The Commission produced its final report in July 2011, which demonstrated the impact of the Barnett Formula's drive to convergence (given higher public spending) with the average level of funding in England despite relatively higher Welsh needs. The report stated that if Wales was funded as an English region it would receive an extra £300 million a year. This cumulative underfunding of Wales over the next decade would total £5.3 billion under a low-spending growth scenario or £8.5 billion under an historic average spending growth scenario.

The Commission recommended that in the future funding arrangements for Wales should be based on relative needs. As an interim measure, it recommended a modification to the existing formula that would place a 'floor' under the block grant, preventing any further convergence towards the average English level of funding per capita[7].

The UK Government has announced a Commission into fiscal responsibility for Wales although the precise remit of this has yet to be announced at the time of writing. Further discussions on funding reform between the two Governments will apparently continue, although they will undoubtedly be dominated by the context of the Scottish fiscal and constitutional debate.

2.2 The NHS in Wales: structure, finance and policy

Health services in Wales are delivered in a very different way to England. Restructuring in 2009 has established seven geographical Local Health Boards responsible for the operation of primary, community and secondary NHS care. The Welsh Government is committed to state provision of NHS health services and emphasises planning and cooperation of public services over market competition as a driver of improvement. Universal benefits such as free prescriptions were a priority for the last Welsh Government although it is too early to tell whether this emphasis will continue in the new Government (elected May 2011).

NHS Wales employs around 90,000 staff, making it Wales's biggest employer. It employed around 33,000 nursing staff as at September 2010, a figure largely unchanged since 2009. Health Spending accounts for around 44 per cent of the overall budget. This high share of the budget demonstrates the difficulty the Welsh Government would have in committing to ringfence this spending.

The Annual Operating Framework (AOF) for 2009/10 and 2010/2011 sets out priorities for the NHS in Wales:

- shifting patient care into community settings
- reducing waste, harm and variation
- efficiency and productivity
- operating within available financial resources

[7] http://wales.gov.uk/icffw/home/?lang=en

- delivering through an effective workforce
- improving patient care and safety through the use of ICT
- improving the quality of core services and delivering the national targets
- upstream prevention and well-being

The AOF requires that Health Boards include plans in their Local Delivery Plans to achieve the following:

- shifts from acute services to community care, for example establishment of consistent chronic disease services
- repatriation of some services
- workforce development and staffing increases and reductions as appropriate by discipline
- week by week saving plans ranging between £1 and 1.5million
- managing down of non-core pay costs
- increasing focus on shared services
- strengthened Local Authority and Health Board partnership working

In addition the *1000 Lives Plus Programme* run by the National Leadership and Innovation Agency is a significant agent of change and improvement in the overall system.

2.3 The health policy direction of the new Welsh Government

The Welsh Labour Manifesto of the 2011 election emphasised increasing access to GPs and health visitors. However, this is expected to be done without an increase in health visitor numbers or any substantial change to the General Medical Services (GMS) contract which covers medical services provided by General Practitioners.

Shortly after the May elections, the Welsh Government began a study of current health visiting provision across Wales, with plans to further develop this into a review of service potential for the future. The RCN has made it clear that any expansion of provision must be supported by an increase in capacity and skills investment.

2.4 Health and Social Care Bill

While the Health and Social Bill substantively covers the NHS in England, it also includes provisions to abolish certain NHS bodies, some of which will have an impact on Wales where these bodies operate in the NHS outside England. For example, the Health Protection Agency (HPA) is to be abolished in its current form and become part of the new Public Health Service (PHS) for England.

3. How to use this report

3.1 Presentation of results

This report details the results for Wales from the 2011 RCN membership survey across the following chapters:

Chapter 4: Key respondent characteristics
Chapter 5: Pay and grading
Chapter 6: Pension arrangements
Chapter 7: Working hours
Chapter 8: Training
Chapter 9: Workload and staffing
Chapter 10: Views about nursing as a career

For each chapter, we present the findings through a combination of tables and charts. We have *italicised* our commentary where comparisons are drawn with results from the 2009 report for Wales. We have also *italicised* our commentary where comparisons are drawn with results from the 2011 report for the UK.

All tables and charts presented in the report include both the percentage and number of RCN members from Wales responding to the question. In the case of 'tick all that apply' questions the size stipulated refers to the number of *total respondents* answering the question, rather than the *total number of responses* given.

The use of routing questions in the survey also means that sample sizes vary across the results shown.[8]

When analysing the tables it is important to focus not only on the *percentage* of respondents that have answered a question in a particular way, but also the *number* of respondents. Some of the sample sizes are quite small, and where necessary we have highlighted this in our analysis. It should also be noted that where numbers from the tables are featured in the text they have been rounded up or down accordingly.

All data collected from district nurses have been weighted, although this does not affect the overall results to any extent. Further information is given in Appendix 2.

[8] Routing questions are those that direct respondents to different questions throughout the survey, depending on responses given. Further information is given in Appendix 1.

4. Key respondent characteristics

This section summarises the main characteristics of respondents to the 2011 survey from the Welsh RCN membership. Information requested by this year's survey includes:

- current employment situation
- job title
- main area of practice
- length of service with current employer
- age range
- gender
- country of work
- qualifications
- ethnicity

The tables featured in this sector are for 'all respondents' in each case. Please note that all results are weighted to take into account the oversampling of district nurses. Further details are set out in Appendix 2.

4.1 Employment information

4.1.1 Current employment situation

The majority of respondents to the survey describe their current employment situation as 'employed and working' (table 4a). Some respondents describe themselves as employed but either currently on sick leave (2 per cent) or on maternity leave (1 per cent).

Table 4a: Current employment situation

	No.	%
Employed and working	**471**	**92.3**
Employed, but currently on sick leave	12	2.4
Retired, but still in paid employment	9	1.8
Self-employed	7	1.4
Employed, but currently on maternity	6	1.2
Unemployed	3	0.6
Fully retired	1	0.2
Student	1	0.2
Total	**510**	**100**

4.1.2 Main employer and location of work

In respect of main employer, the majority of members are employed by the NHS, at 80 per cent, a further 13 per cent are employed by an independent or private healthcare provider and 6 per cent by other non-NHS employers.

Within the NHS the majority of respondents (67%) work directly for the NHS, while 7 per cent work in a GP practice and 4 per cent for other NHS employers. A small number are employed by other non-NHS employers, with the largest proportion being employed by a university.

Table 4b: Employer for main job

	No.	%
All NHS	**414**	**80.3**
NHS (excluding GP practices)	341	66.6
GP practice	33	6.5
Other NHS employer (eg SHA/health board)	21	4.2
NHS Bank	6	1.8
NHS Direct/NHS 24/help-line	4	1.2
Independent and voluntary sector	**66**	**12.9**
Independent/private health care provider	51	10.0
Charity/voluntary group	12	2.3
Private contractor	3	0.6
Other	**35**	**6.8**
University	22	4.3
Nursing agency	4	0.8
Local authority/other public body	4	0.8
Private company	1	0.2
Self-employed	1	0.2
Education/research	1	0.2
Not currently working	1	0.2
Other	1	0.2
Total	**511**	**100**

In respect of the primary location of work, around half (54 per cent) of all respondents spend most of their time in a hospital setting, most commonly on a ward (22 per cent) or a hospital unit (22 per cent). A further 46 per cent spent most of their time in another setting, such as working in the community (12 per cent), a GP practice (7 per cent) or care home (6 per cent).

Table 4c: Where do you currently spend most of the time in your main job?

	No.	%
All hospital settings	**277**	**54.3**
Hospital ward	114	22.3
Hospital unit (e.g. A&E, ITU specialist units)	112	22.0
Hospital outpatients/day care	28	5.5
Other hospital setting	17	3.3
Across different hospital departments	6	1.2
Other settings	**233**	**45.7**
Community	63	12.4
GP practice	34	6.7
Care home	30	5.9
Various (across organisation/s)	28	5.5
University	20	3.9
Office/research/education setting	16	3.1
Hospice	12	2.4
Call centre	8	1.6
Prison service	8	1.6
Industry/workplace	5	1.0
Not currently working	3	0.6
Ambulance trust	3	0.6
Private clinic/hospital	2	0.4
School	1	0.2
Total	**510**	**100**

4.1.3 Main job title and area of practice

Overall 41 per cent of respondents from Wales are staff nurses, 11 per cent are sisters, charge nurses or ward managers and 10 per cent are clinical nurse specialists.

Health care assistants and nursing auxiliaries make up 2 per cent of the respondents from Wales. This compares with 3 per cent for UK respondents as a whole.

Table 4d: Main job title (all respondents)

	No.	%
Staff nurse	**207**	**40.5**
Sister/charge nurse/ward manager	54	10.6
Clinical nurse specialist	49	9.6
Nurse practitioner	29	5.7
Senior nurse/matron/nurse manager	27	5.3
Researcher/lecturer/tutor	27	5.3
Practice nurse	26	5.1
Manager/director	16	3.1
Community nurse	14	2.7
Health care assistant/nursing auxiliary	12	2.3
Health visitor/SCPHN	8	1.6
Occupational health nurse	8	1.6
District nurse	7	1.4
Non-nursing job/work	7	1.4
Community psychiatric nurse	6	1.2
Educator	5	1.0
School nurse	3	0.6
Consultant nurse	2	0.4
Public health practitioner	2	0.4
Midwife	1	0.2
Not currently working	1	0.2
Total	**511**	**100**

In terms of practice area, 27 per cent work in acute and urgent care, 15 per cent in primary and community care and 10 per cent with older people. Similar proportions report working in mental health (7 per cent) and with children and young people (7 per cent).

Table 4e: Main area of practice (all respondents)

	No.	%
Acute and urgent care	135	26.5
Primary and community care	78	15.3
Older people	52	10.2
Mental health	38	7.5
Children and young people	35	6.9
Long-term conditions	29	5.7
Education	23	4.5
Cancer care	15	2.9
Management/leadership	15	2.9
Palliative care	14	2.7
Adult general/medical/surgical	13	2.5
Learning disabilities	10	2.0
Workplace and environmental health	10	2.0
Other specialties	8	1.6
Quality improvement and research	7	1.4
Surgery/operating theatre	5	1.0
Public health	4	0.8
Women's health	4	0.8
School nursing	4	0.8
Outpatients	4	0.8
Neonatal	4	0.8
e-health/telecare	2	0.4
Not currently working	1	0.2
Total	**510**	**100.0**

4.1.4 Length of service with current employer and time in current post

Respondents were asked how long they have been employed both with their current employer and in their current post. Two-fifths (42 per cent) of members have worked for their employer for 10 years or more and nearly a quarter have between 5 and 10 years' service with their current employer.

In terms of time in post, similar proportions of members report being in their current post for between 5 and 10 years and for between 2 and 5 years, at 28 and 27 per cent respectively.

Table 4f: How long have you worked for your current employer? (all respondents)

	No.	%
Less than 1 year	53	10.3
Over 1 year, up to 2 years	28	5.5
Over 2 years, up to 5 years	96	18.7
Over 5 years, up to 10 years	120	23.4
Over 10 years	215	42.0
Total	**512**	**100**

Table 4g: How long have you worked in your current post? (all respondents)

	No.	%
Less than 1 year	68	13.8
Over 1 year, up to 2 years	60	12.1
Over 2 years, up to 5 years	133	26.8
Over 5 years, up to 10 years	138	27.9
Over 10 years	96	19.5
Total	**495**	**100**

4.2 Respondent profile

4.2.1 Gender, age, ethnicity and disability

Overall, 84 per cent of respondents are female, compared with 92 per cent in 2009. *However, since the gender balance in the overall RCN membership has not changed over this period, we are unsure why this ratio has changed.*

The majority of respondents are aged 45 and over, with 44 per cent in the age range 45-54 and 17 per cent aged over 55, reflecting a wider trend of an increasing age in the nursing workforce.

When asked about disability, 8 per cent responded that they consider themselves to have a disability. *This compares to 7 per cent of all UK respondents.*

Table 4h: Analysis of survey respondents by age (all respondents)

	No.	%
18-25	11	2.1
26-34	64	12.5
35-44	**122**	**23.7**
45-54	**227**	**44.1**
55-64	86	16.8
Over 65	4	0.8
Total	**514**	**100**

Half of all respondents from Wales describe their national identity as Welsh, a further 32 per cent British and 11 per cent English.

Table 4i: Analysis of survey respondents by national identity

	No.	%
Welsh	**259**	**50.3**
British	162	31.5
England	55	10.7
Scottish	9	1.8
Northern Irish	4	0.8
Prefer not to say	4	0.8
Other	21	4.2
Total	**514**	**100.0**

By ethnic group, 95 per cent of respondents identified their ethnic group as White. *This is a similar profile to 2009, when 92 per cent described their ethnic group as White.*

Table 4j: Analysis of survey respondents by ethnic group

	No.	%
White	**485**	**94.7**
Black/African/Caribbean	8	1.6
Asian/Asian British	8	1.6
Mixed/multiple ethnic groups	1	0.2
Prefer not to say	6	1.2
Other ethnic group	4	0.8
Total	**512**	**100**

4.2.2 Qualifications held

Survey respondents were asked about the types of registration and qualifications held and the findings illustrate both the different routes taken by nursing staff into the profession and the different descriptions used.

Almost two-thirds of respondents (63 per cent) have completed their first-level registration nursing qualifications and 13 per cent hold second level registration. In addition, 43.5 per cent hold a nursing diploma, 38.5 per cent also have a nursing degree and 15 per cent a higher degree (table 4j).

In 2009, 42 per cent of respondents held a degree. The 2009 figures similarly represented an increase from earlier surveys and confirmed the fact that the level of qualification held by nurses has been rising steadily in recent years.

Table 4k: Nursing qualifications held*

	No.	%
First level registration	326	63.4
Second level registration	66	12.9
Nursing degree	224	43.5
Nursing diploma	198	38.5
Masters/PhD	77	15.0
NVQ/SVQ level 2, 3 or 4	33	6.5
Other	56	11.0
Others include: Advanced diploma, Cert Ed., City and Guilds, management diploma, district nursing certificate, ENB, independent prescribing		

* Respondents were asked to tick all that apply

Respondents were also asked about their whether they spoke Welsh and 18 per cent (n=94), said they did. Of those who speak Welsh, 70 per cent said they would be able to speak it professionally and 33 per cent are required to speak Welsh in their current role.

5. Pay and grading

5.1 Overview

This section of the report sets out to establish pay arrangements for respondents in Wales, including current pay grade, and how RCN members feel about their current grading. We continue to find that nursing staff are more dissatisfied with their pay and remuneration than any other aspect of their working lives.

We also examine how RCN members are coping financially and find a growing sense of anxiety. Nursing staff are faced with decreased household incomes at the same time as rising household expenditure – on top of mounting concerns about redundancies and job security.

5.2 Current pay and grading arrangements

Overall, the majority of respondents are employed on the Agenda for Change (AfC) pay structure (77 per cent), with a further 7 per cent on clinical grades.

Among respondents working in the NHS, the majority (90 per cent) are employed on AfC scales, compared to just 22 per cent in the independent and voluntary sectors. The majority of respondents working outside the NHS are employed on local grades or organisational pay structures.

Table 5a: On which pay system/scale are you currently being paid? (by sector)

	All NHS		Independent & voluntary		Other employer		All respondents	
	No.	%	No.	%	No.	%	No.	%
AfC	369	90.0	14	22.2	3	9.7	387	76.6
Clinical grade	23	5.6	12	19.0	1	3.2	36	7.1
Other	18	4.4	37	58.7	27	87.1	82	16.2
Total	410	100	63	100	31	100	505	100

Table 5b shows that the distribution of AfC pay bands is similar among Wales and all UK respondents, with 39 per cent of respondents in Wales employed on pay band 5 and a quarter each employed on bands 6 and 7.

Table 5c shows the distribution of clinical grades and that among this year's respondents, a higher proportion are employed on relatively higher grades (grades F and G) in Wales than in England, with two-thirds (64 percent) employed on these grades in Wales compared to 34 per cent in England.

Table 5b

Current AfC pay band (all Wales respondents)

AfC pay band	No.	%
1	0	0.0
2	3	0.7
3	4	0.9
4	1	0.2
5	**166**	**38.9**
6	**105**	**24.6**
7	**111**	**26.0**
8	37	8.4
Total	**427**	**100.0**

Current AfC pay band (all UK respondents)

AfC pay band	No.	%
1	16	0.3
2	68	1.1
3	105	1.7
4	58	0.9
5	**2,293**	**36.2**
6	**1,670**	**26.4**
7	**1,463**	**23.1**
8	653	10.3
Total	**6,326**	**100.0**

Table 5c

Current clinical grade (all Wales respondents)

Clinical grade	No.	%
A	1	1.4
B	2	2.8
C	2	2.8
D	8	11.0
E	8	11.0
F	**15**	**20.7**
G	**31**	**43.4**
H	2	2.8
I	3	4.1
Total	**72**	**100.0**

Current clinical grade (all UK respondents)

Clinical grade	No.	%
A	24	2.2
B	16	1.5
C	19	1.8
D	205	19.0
E	215	20.0
F	**210**	**19.5**
G	**254**	**23.5**
H	90	8.3
I	45	4.2
Total	**1,078**	**100.0**

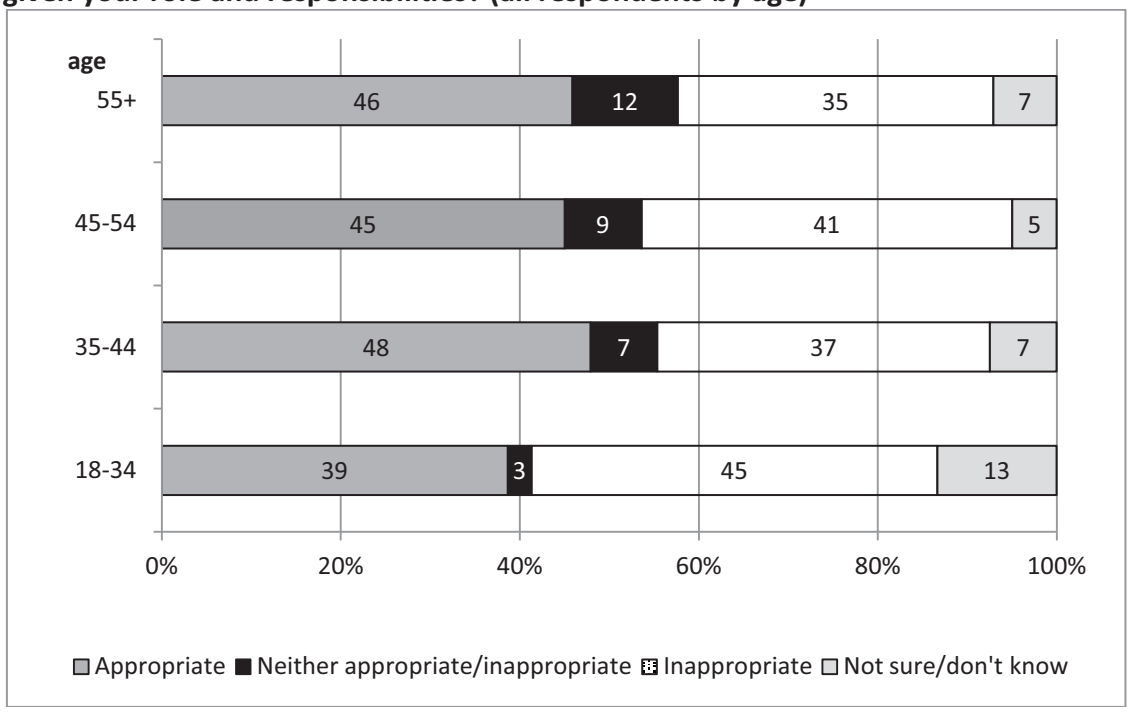
5.3 Views on current pay band or grade

We asked respondents on their views about the appropriateness of their current pay band or grade for their role and responsibilities. Almost half of respondents (45 per cent) said that it is appropriate compared with 40 per cent who said it is inappropriate. *These figures are broadly similar to 2009, with 45 per cent of respondents in Wales stating their pay band or grade was appropriate.*

These findings are also very similar to those for all UK respondents, among whom half (49 per cent) thought their pay band or grade is appropriate and just over a third (37 per cent) said it was inappropriate.

Analysis of responses by age in Chart 5a shows that older members are more likely to view their current pay and grading as appropriate compared to younger members, which possibly reflects their seniority relative to younger nursing staff.

Chart 5a: How appropriate do you consider your current pay band/grade to be, given your role and responsibilities? (all respondents by age)

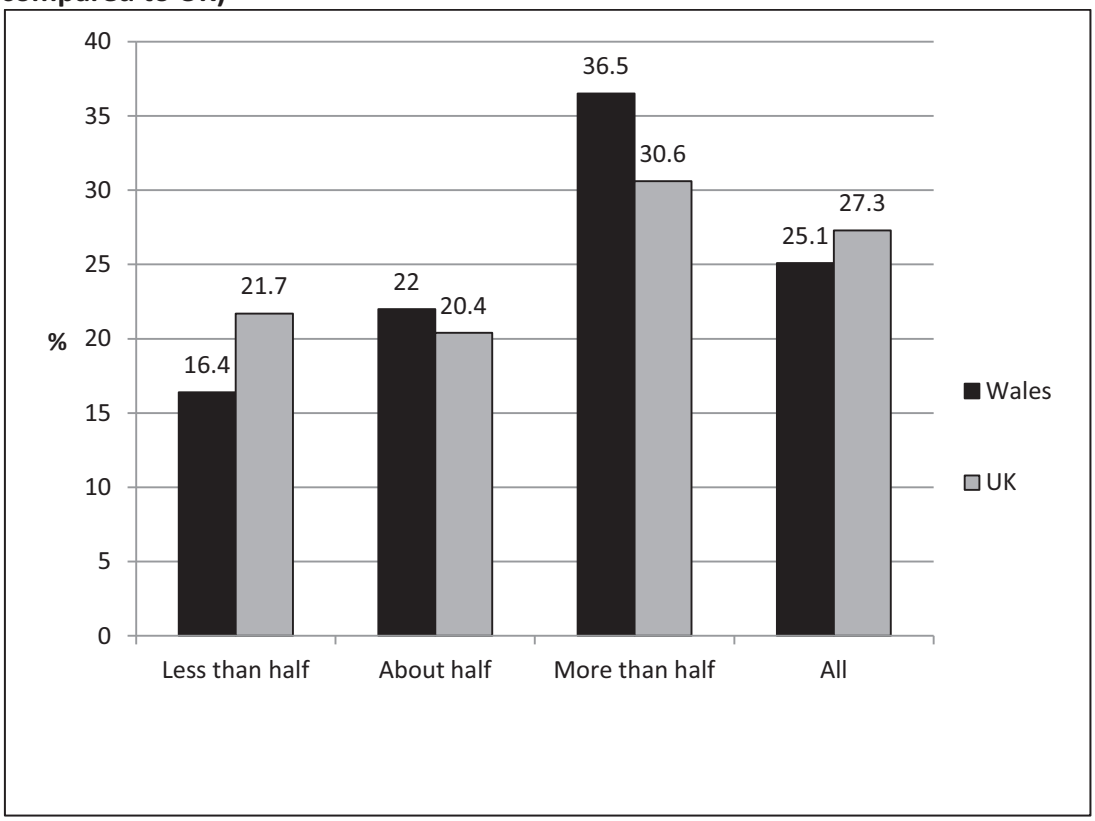


5.4 Pay and household income

Just under two thirds of all respondents (62 per cent) told us that they are the main or sole breadwinner in their households, with their income making up more than half of household income. *This is compared with 58 per cent of all UK respondents.*

One in ten (10 per cent) of all respondents in Wales stated they are in receipt of Working Tax Credits, compared to eight per cent of all UK respondents.

Chart 5c: Proportion of total household income that earnings represent (Wales compared to UK)



This year's survey asked for the first time about the impact of austerity measures and rising inflation on household incomes and financial concerns. Responses indicate that Wales respondents – in common with other UK colleagues – have felt the impact of rising costs and are increasingly concerned about their financial situation.

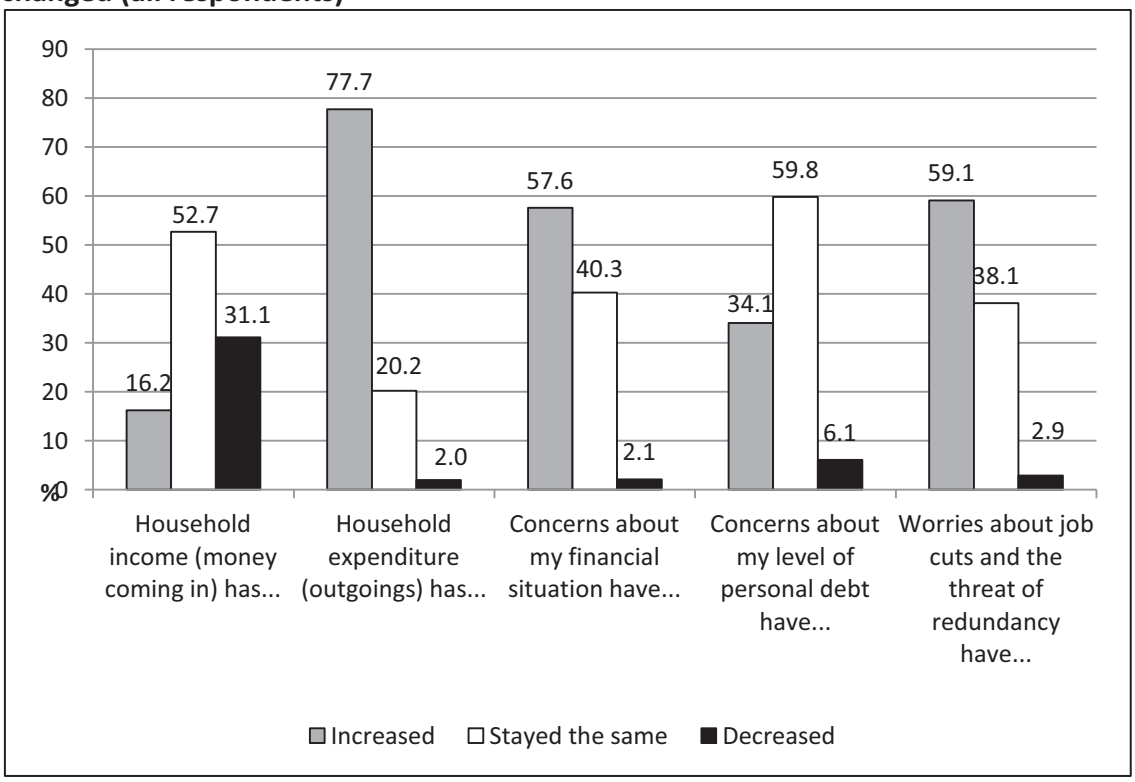
Chart 5b shows that three-quarters (78 per cent) report that household expenditure has increased over the last year, while a slightly higher number (84 per cent) said that household income was the same or lower.

Over half (58 per cent) told us that concerns about their financial situation had increased over the last 12 months and a third (34 per cent) reported heightened concerns about personal debt.

Six in ten (59 per cent) reported that worries about job cuts and redundancies have increased. *This is a similar number as all UK respondents – with 63 per cent reporting they were worried about job security.*

This paints a picture of increased stress and anxiety about household finances and job security. Furthermore, with two thirds of all Wales respondents reporting that they are the main or sole breadwinner in their household, and 10 per cent claiming Working Tax Credits, these concerns are likely to become ever more acute.

Chart 5b: Compared to this time last year, please describe how your situation has changed (all respondents)



5.5 Career progression

Respondents were asked whether they had applied for a job at a higher grade or band over the previous 12 months, in order to examine the extent of career progression.

Around one in six (16 per cent) reported that they had applied for a new job, with half (51 per cent) being successful. Among those taking up a job at a higher grade or band, 45 per cent did so with a new employer. *This compares with 13 per cent of all UK respondents who applied for a new job at a higher grade or band, with a 42 per cent success rate. Of these respondents, 35 per cent took up a new post with a new employer.*

Among the reasons cited by respondents in Wales for taking up a higher graded or paid position, the main ones included better pay or promotion, or to gain different experience or skills. Other reasons included better prospects and a change in working hours or better work-life balance.

5.6 Agenda for Change transition issues

This is the second RCN employment survey since almost all NHS nurses across the UK have been assimilated to the Agenda for Change pay structure. To continue the

review of this process, the survey asked members whether they had challenged their banding following assimilation. Just under a quarter (24 per cent) of Welsh respondents reported that they have had a review of their banding after assimilation to AfC, of which around a third subsequently had their banding uplifted.

In 2009, we found that 23 per cent of all Welsh respondents had requested a review of their AfC grading.

This year's Employment Survey shows that across all UK respondents, 28 per cent reported their banding had been reviewed, compared to 23 per cent in 2009.

This suggests that in Wales, applications for reviews are now starting to tail off – yet this is an ongoing issue which the RCN will continue to monitor.

Table 5: Did you have a review of your banding after assimilation to AfC?

	No.	%
Yes	106	24.5
No	326	75.5
Total	**431**	**100.0**

Table 5: If so was your banding uplifted?

	No.	%
Yes	37	35.5
No	68	64.5
Total	**106**	**100.0**

6. Pension arrangements

6.1 Overview

This chapter looks at current pension arrangements among RCN members and finds almost full membership of the NHS scheme among respondents working in the NHS. However, it also finds that a worryingly high number working for independent or voluntary sector providers belong to no pension at all.

This chapter goes on to look at the NHS pension scheme in more depth, in light of government proposals to reform public sector pension schemes and asks whether members would consider leaving the scheme.

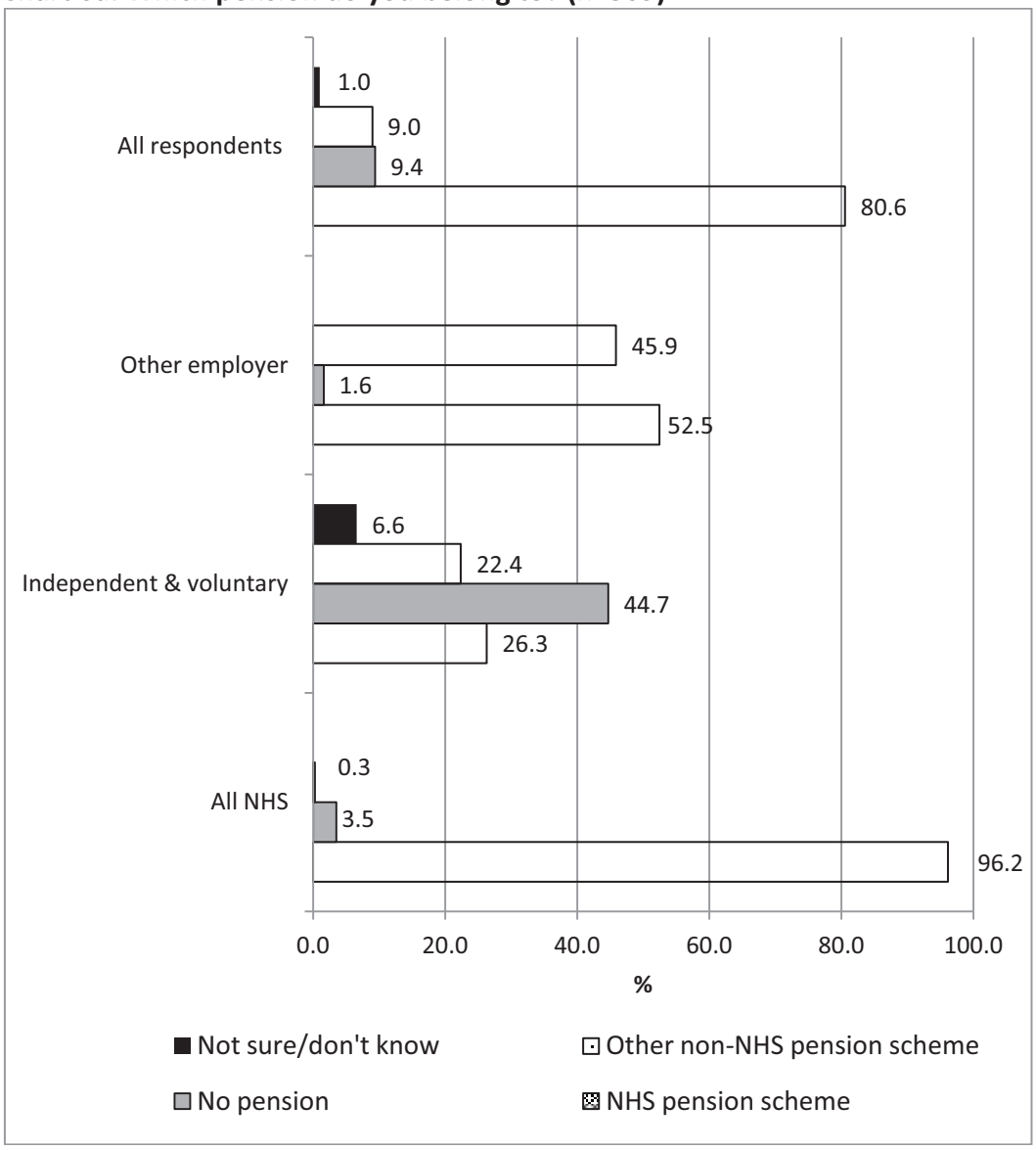
While a minority said that they would probably or definitely opt out of the NHS scheme if contributions were to rise or the final salary scheme were to be replaced by a career average, it is still too early to draw any firm conclusions about these kinds of decisions. However, these findings certainly suggest a growing sense of uncertainty and anxiety about pensions reforms which add to other concerns about job security, pay levels and workload.

6.2 Current pension arrangements

Overall, 81 per cent of all Welsh respondents are members of the NHS pension scheme and smaller numbers (around 9 per cent) either have no pension at all or are members of another occupational scheme.

Among respondents working in the NHS, the majority (96 percent) belong to the NHS scheme. In the independent and voluntary sectors, just less than half (45 per cent) belong to no scheme at all.

Chart 6a: Which pension do you belong to? (n=509)



6.3 Pensions reforms

The survey asked respondents who belong to the NHS pension scheme to indicate, from a number of proposed changes, which would make them consider opting out of the scheme.

The three scenarios they were asked to consider were:

- an increase in pension contributions of 1 to 3 per cent,
- an increase in pension contributions of 3 per cent or more
- shift from final salary to a career-average scheme

While the results show that many respondents are unsure whether these changes would make them consider opting out of the NHS pension scheme, it is clear that a shift from a final salary scheme to a career-average scheme is likely to be the issue most likely to affect decisions about membership.

Chart 6b: Would any of the following make you consider opting out of the NHS pension scheme (all NHS respondents)

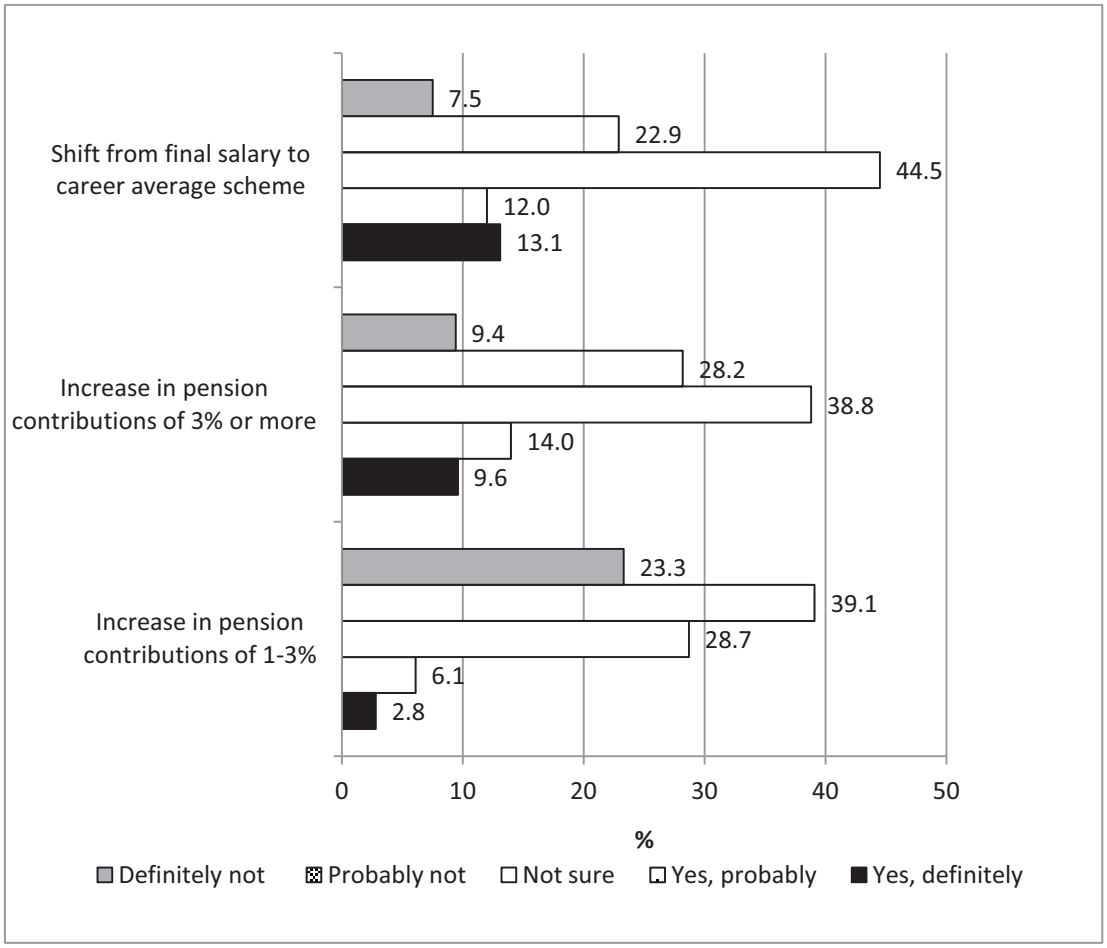


Chart 6b shows that 9 per cent of respondents said they would consider opting out of the NHS pension scheme if contributions rose by between 1 and 3 per cent. However, when faced with an increase of more than 3 per cent, almost a quarter (24 per cent) said they would either 'definitely' or 'probably' consider opting out of the NHS pension scheme if this change came into effect.

On the issue of a move from a final salary to career-average salary scheme, slightly more would consider opting out – at 25 per cent of respondents.

A closer look at the responses suggest that Wales respondents (in common with colleagues in Northern Ireland) are slightly less likely to indicate they would opt out of the NHS pension scheme than those in England or Scotland.

Table 6: Would any of the following make you consider opting out of the NHS pesion scheme (by country)

	England %	Scotland %	Cymru/ Wales %	Northern Ireland %	Total %
Increase in pension contributions of 1 to 3 per cent					
Yes	12.2	12.4	8.9	7.0	11.6
No	54.0	52.9	62.5	69.6	55.6
Unsure	33.8	34.7	28.7	23.5	32.8
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Increase in pension contributions of 3 per cent or more					
Yes	29.5	30.2	23.7	20.4	28.5
No	35.3	34.8	37.5	38.3	36.0
Unsure	35.1	35.0	38.8	41.3	35.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Shift from final salary to career average scheme					
Yes	31.1	35.8	25.1	11.8	29.9
No	28.6	27.4	30.4	35.3	29.0
Unsure	40.3	36.8	44.5	52.9	41.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

7. Working hours

7.1 Overview

This year's survey asked a series of questions around working hours including patterns of work, contracted hours, overtime working and additional paid work.

The findings show that a significant proportion of respondents in Wales regularly work more than their contracted hours and often unpaid.

Three-quarters of all respondents (72 per cent) report working additional hours on at least one shift each week and over a third (37 per cent) do so several times a week. Two-fifths (41 percent) regularly work four or more hours a week overtime.

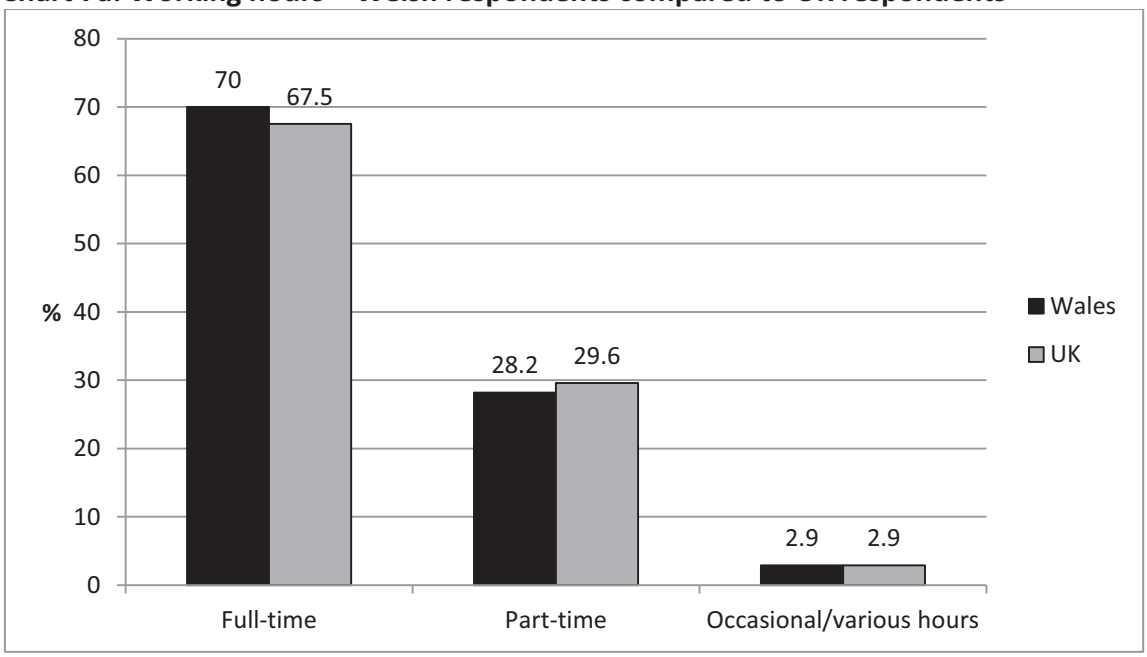
Given this tendency to work long hours, it is perhaps unsurprising that quarter told us that working hours frequently and always conflicted with their domestic arrangements and the same proportion said they are unable to balance their work and home lives.

7.2 Working patterns

Over two-thirds of respondents in Wales currently work full-time which is a slightly larger proportion than that for all respondents across the UK (70 per cent Wales; 67.5 per cent UK).

The proportion of respondents from Wales reporting they work full-time has been steadily increasing since 2003 when just 56% worked full-time. In 2009, we found that 67 per cent worked full-time.

Chart 7a: Working hours – Welsh respondents compared to UK respondents



Analysis of working patterns by age shows that respondents are more likely to work part-time later in their careers. Table 7a indicates that just 17 per cent of

respondents aged under 35 work part-time, rising to 40 per cent of those aged 45 and over.

Table 7a: Working patterns in main job (all respondents)

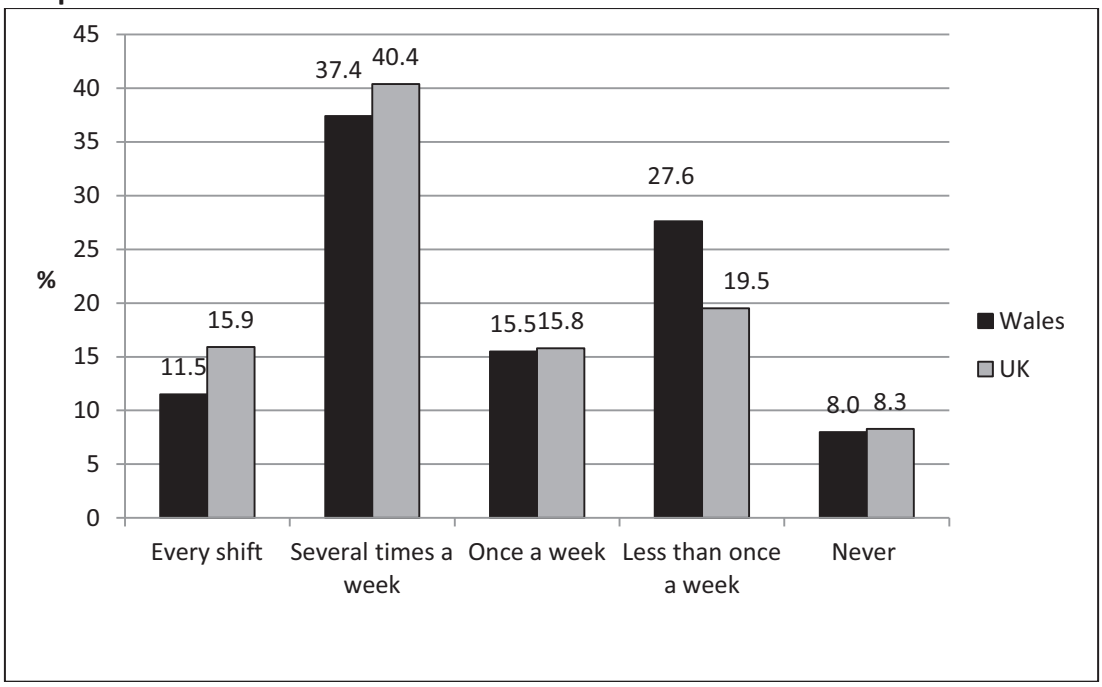
		18-34	35-44	45-54	55 and over	All respondents
Full-time	No.	60	83	164	48	355
	%	80.0	23.4	46.2	53.9	70.0
Part-time	No.	13	36	58	36	143
	%	17.3	25.2	40.6	40.4	28.2
Occasional hours	No	2	0	2	5	9
	%	2.7	0	22.2	5.6	1.8
Total	**No.**	**75**	**119**	**224**	**89**	**507**

7.3 Contractual and additional hours worked

In terms of normal hours worked, just over half (54 per cent) have a normal working week of between 30 and 37.5 hours a week, and a quarter (27 per cent) work more than 37.5 hours.

Chart 7b shows that in common with nurses across the rest of the UK, large proportion of respondents in Wales report that they work in excess of their weekly contracted hours several times a week (37 per cent), and every shift (11.5 per cent). Nine in ten (92 per cent, n=463) report regularly working in excess of contracted hours at least once a week.

Chart 7b: How often do you work in excess of your contracted hours? Wales compared to UK



Respondents also indicated that they typically between 2 and 6 additional hours a week (51 per cent in Wales compared to 47 per cent in the UK). A further 12 per cent (n= 38) indicated they worked on average over 8 hours a week as overtime.

Chart 7c: Number of additional hours worked on average each week (Wales compared to UK respondents)

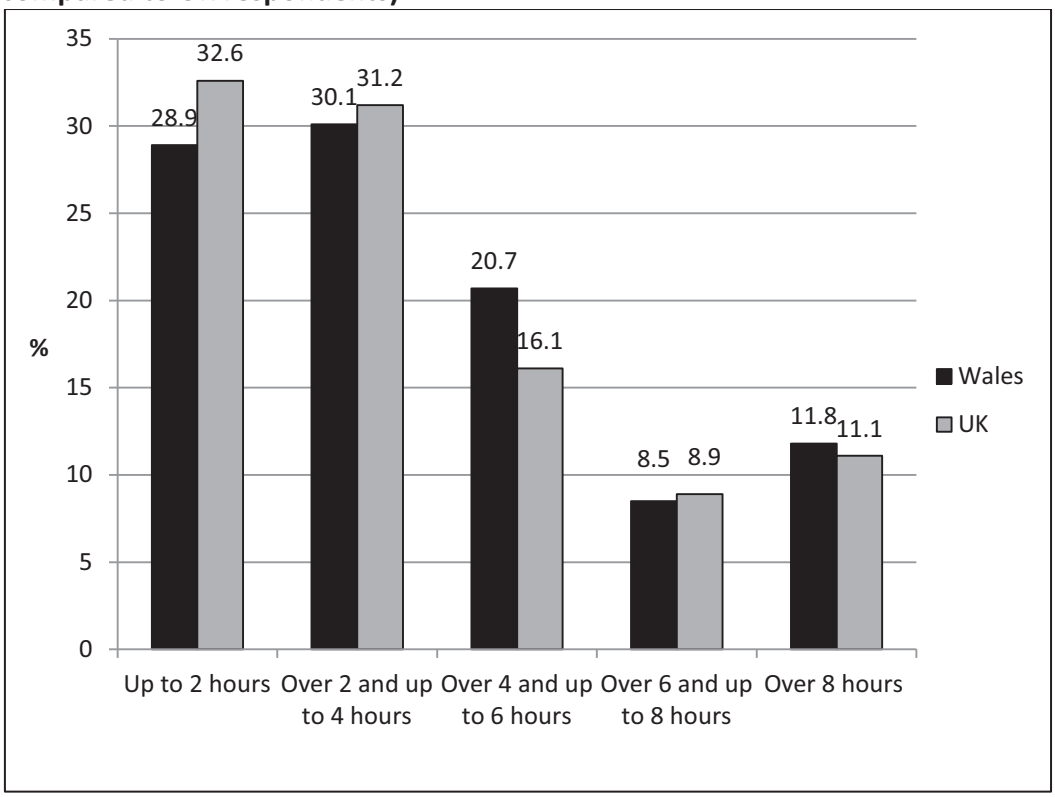
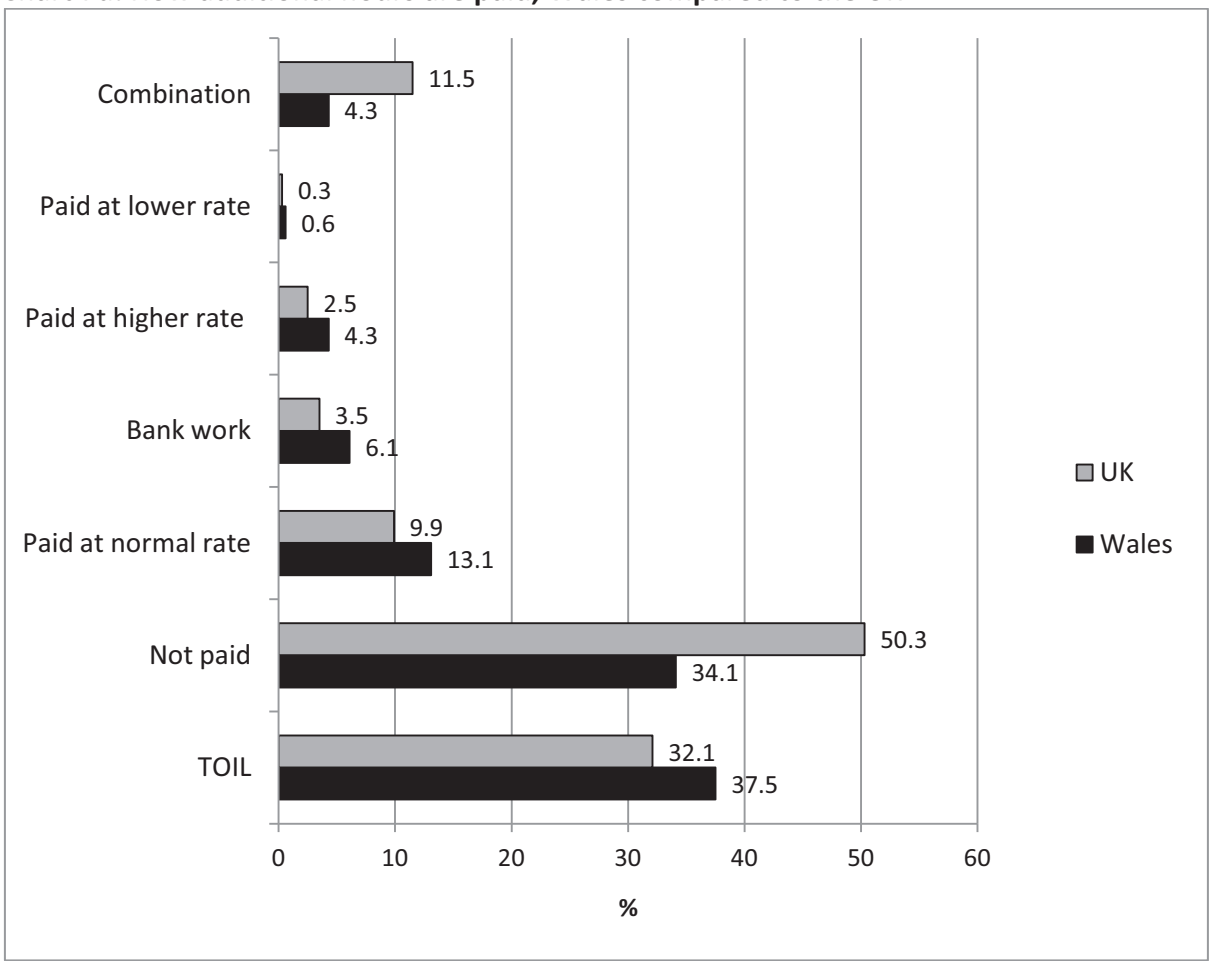


Table 7d indicates that around a third (37 per cent) of those working extra hours receive TOIL as compensation, however a similar proportion (34 per cent) are not paid at all. Respondents from Wales are about as likely to be offered TOIL as other colleagues across all the UK (32 per cent) but less likely to be unpaid (50 per cent).

A comparison with the 2009 survey shows a significant increase in the proportion of members saying they are not offered anything should they work extra hours. Just six per cent reported that they were usually unpaid for working additional hours. By contrast, 38 per cent said they were offered time-off-in-lieu.

The proportion stating that extra hours are paid at either the normal or a higher rate have fallen since 2009, with 13 per cent stating additional hours are paid at the normal rate, compared with 25 per cent in 2009. This year, just 4 per cent said additional hours are paid at a higher rate, compared to 15 per cent in 2009.

Chart 7d: How additional hours are paid, Wales compared to the UK



Some comments from individual respondents indicate that while they are offered TOIL or other flexible hours options as a means of compensation for working extra hours, in reality workloads mean that finding the time to do so is often difficult. For example, one respondent indicated that they are offered TOIL but stated, "*only if taken within 4 weeks, which we can never take, so I end up losing the hours"*, another told us they were offered flexible hours "*but I still lose a lot of this as we can only carry over 8 hours per month".*

7.4 Additional paid work

Just less than a fifth (18 per cent) of respondents in Wales report undertaking additional paid work, mainly through working as a bank or agency nurse. *This compares with 24 per cent of respondents from Wales in the 2009 survey reporting to have a second job.*

Table 7e: If you have a second job, what are the other jobs you undertake apart from your main job? Tick all that apply (all respondents doing additional paid work, n=90)

	No.	%
Bank nursing with same employer	36	39.7
Agency nursing	17	18.9
Bank nursing with different employer	12	13.3
Non-nursing work	9	10.5
Care/nursing home	6	6.7
Other non-NHS nursing work	5	5.6
Non-NHS hospital	2	2.2
Other	11	12.2

The key reason stated for undertaking extra paid work is to provide additional income (74 per cent). *This is the same proportion as in the 2009 Wales* survey.

Analysis by country shows that respondents from Wales are the most likely to report that supplementing their income is the main reason for having a second job (74 per cent Wales; 65 per cent England; 66 per cent Scotland; 72 per cent Northern Ireland).

Table 7f: What is the main reason for doing additional paid work? (all respondents doing additional paid work, n=89)

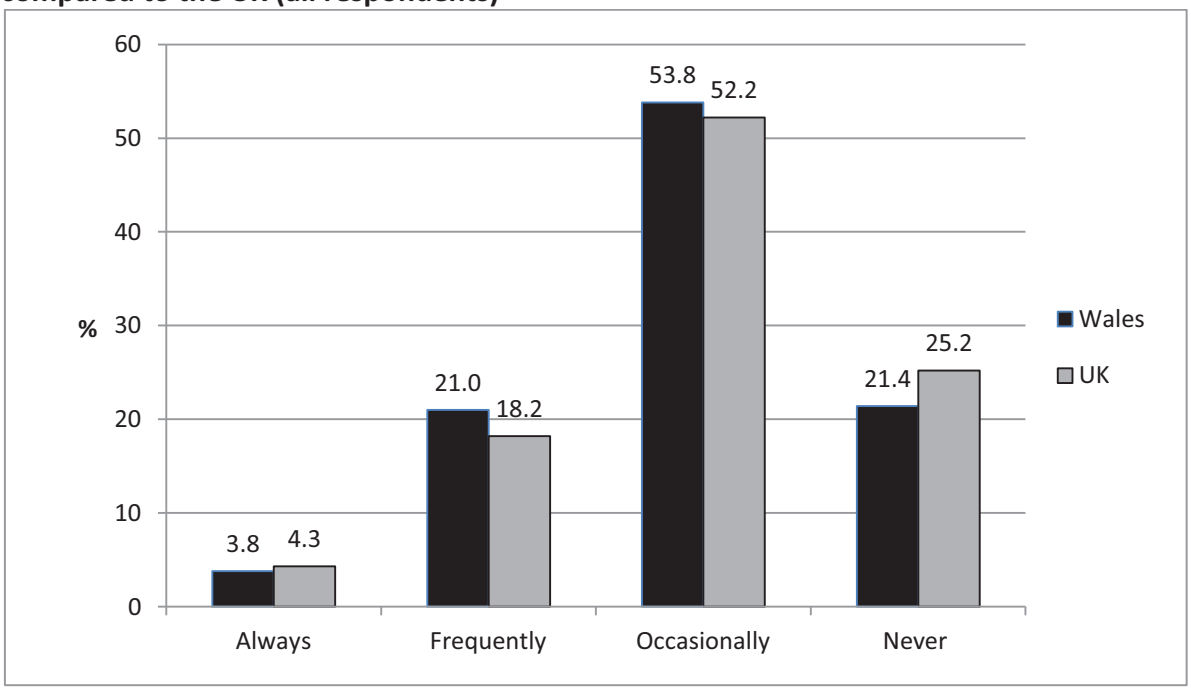
	No.	%
To provide additional income	66	73.7
To maintain particular nursing skills	6	6.7
To maintain staffing levels where I work	5	5.6
To gain experience of other specialties	1	1.1
Other	1	12.9
Total	**89**	**100.0**

7.5 Views on working hours and work-life balance

The survey also asked a series of questions about their views on certain issues relating to working hours and work-life balance. We asked respondents whether their hours of work, including shift patterns, conflict with their domestic commitments, for example childcare arrangements or looking after an older relative.

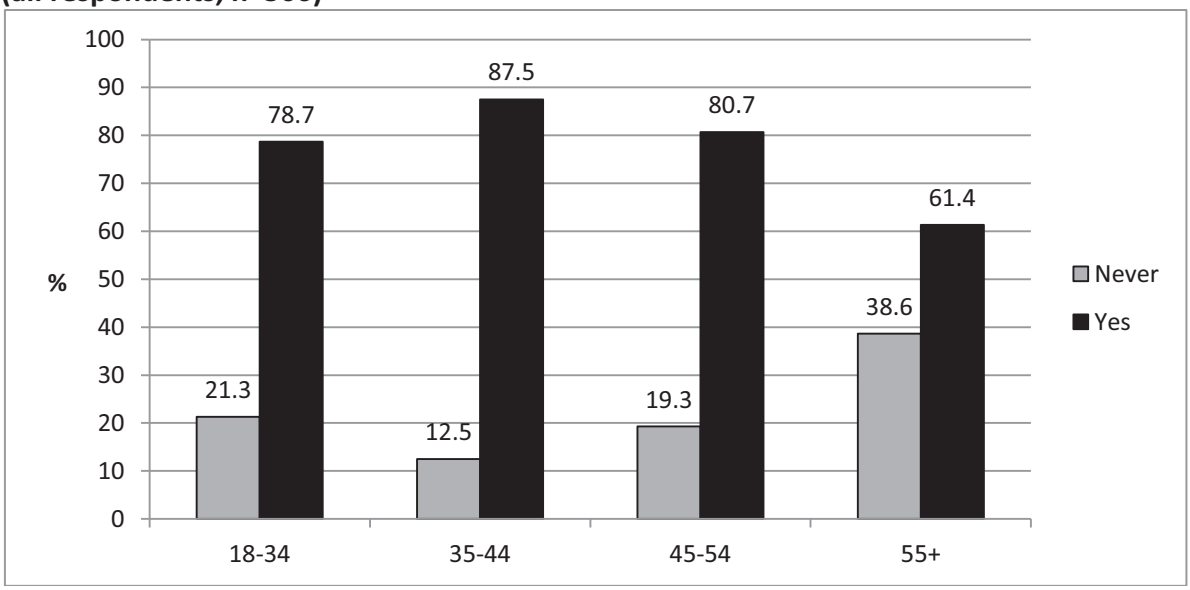
Chart 7e shows that findings for Welsh respondents roughly follow the pattern for those of all UK respondents, with half (54 per cent) of all respondents in Wales stating that domestic and work commitments conflict occasionally and a fifth (21 per cent) said they do so frequently. However, slightly fewer respondents in Wales stated that they never experienced a conflict than all UK respondents. (21 per cent compared to 25 per cent for the UK).

Chart 7e: Do additional hours of work conflict with domestic commitments, Wales compared to the UK (all respondents)



Perhaps unsurprisingly, given that younger nursing staff tend to work longer hours and have different domestic and caring responsibilities, we see from Chart 7f that respondents aged under 55 are more likely to report that their hours of work conflict with their domestic commitments compared to those aged 55 and over.

Chart 7f: Do your hours of work conflict with your domestic commitments - by age (all respondents, n=506)

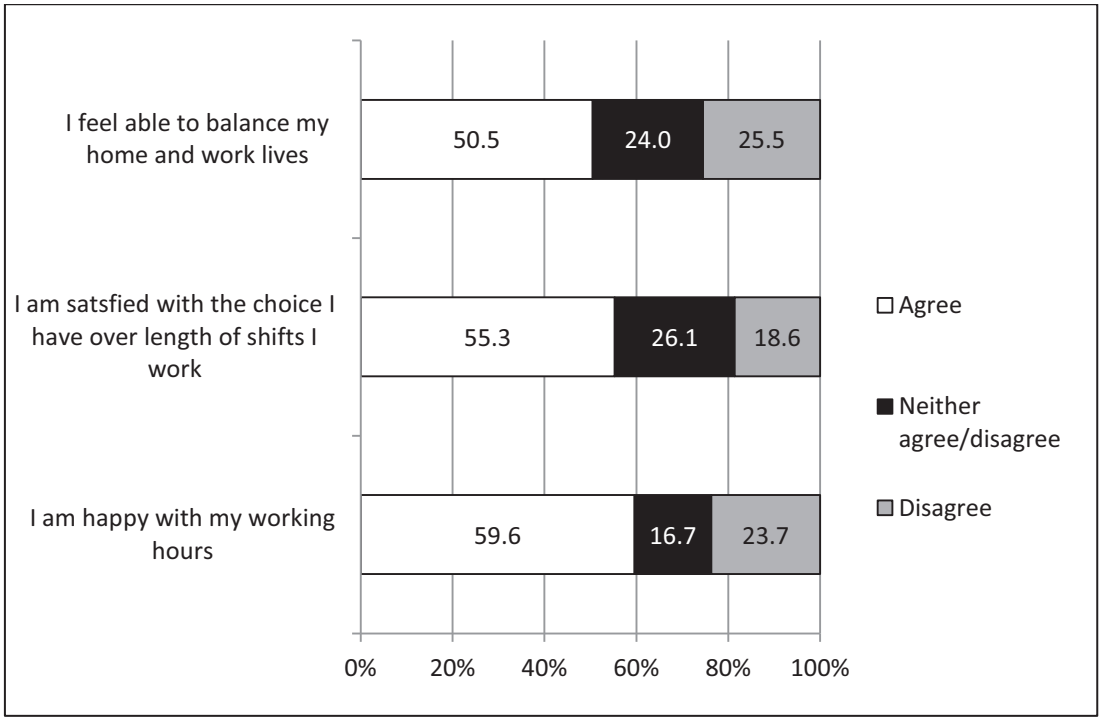


When asked whether respondents are happy with their working hours, the majority (60 per cent) said they were and a quarter (24 per cent) said they were not.

However, the proportion happy with their hours has fallen since the 2009 survey, when 70 per cent stated they were satisfied.

Just over half (55 per cent) stated they are satisfied with the choice over the length of shifts they work, while 19 per cent are not. *In 2009, 59 per cent stated they were satisfied with the choice over shift length.*

Finally, just half said they feel able to balance their work and home lives, while a quarter said they could not. *In 2009, a slightly higher proportion (57 per cent) stated they felt able to balance work and home lives.*



8. Training and continuing professional development

8.1 Overview

Recent Employment Surveys have found that mandatory training had increased across the board since 2007, with a marked increase in infection control training particularly in NHS hospitals and independent care homes. However, this year we find that this trend has reversed, with fewer respondents from Wales reporting having undertaken mandatory training than 2009 – including infection control. These nursing staff are also less likely to have received mandatory training than other staff in the rest of the UK.

The outlook is equally pessimistic when it comes to continuing professional development, with fewer respondents telling us they had received any training in previous 12 months than we found in the 2009 survey. Three-quarters reported they had undertaken CPD training – compared to 89 per cent in 2009 and the duration of training is shorter, with more nursing staff reporting they received development lasting just 1 or 2 days.

The use of appraisals/development reviews and personal training and development plans also remains low. In fact, the use of these developmental tools in Wales is the lowest of all UK countries and little or no progress has been made since 2009.

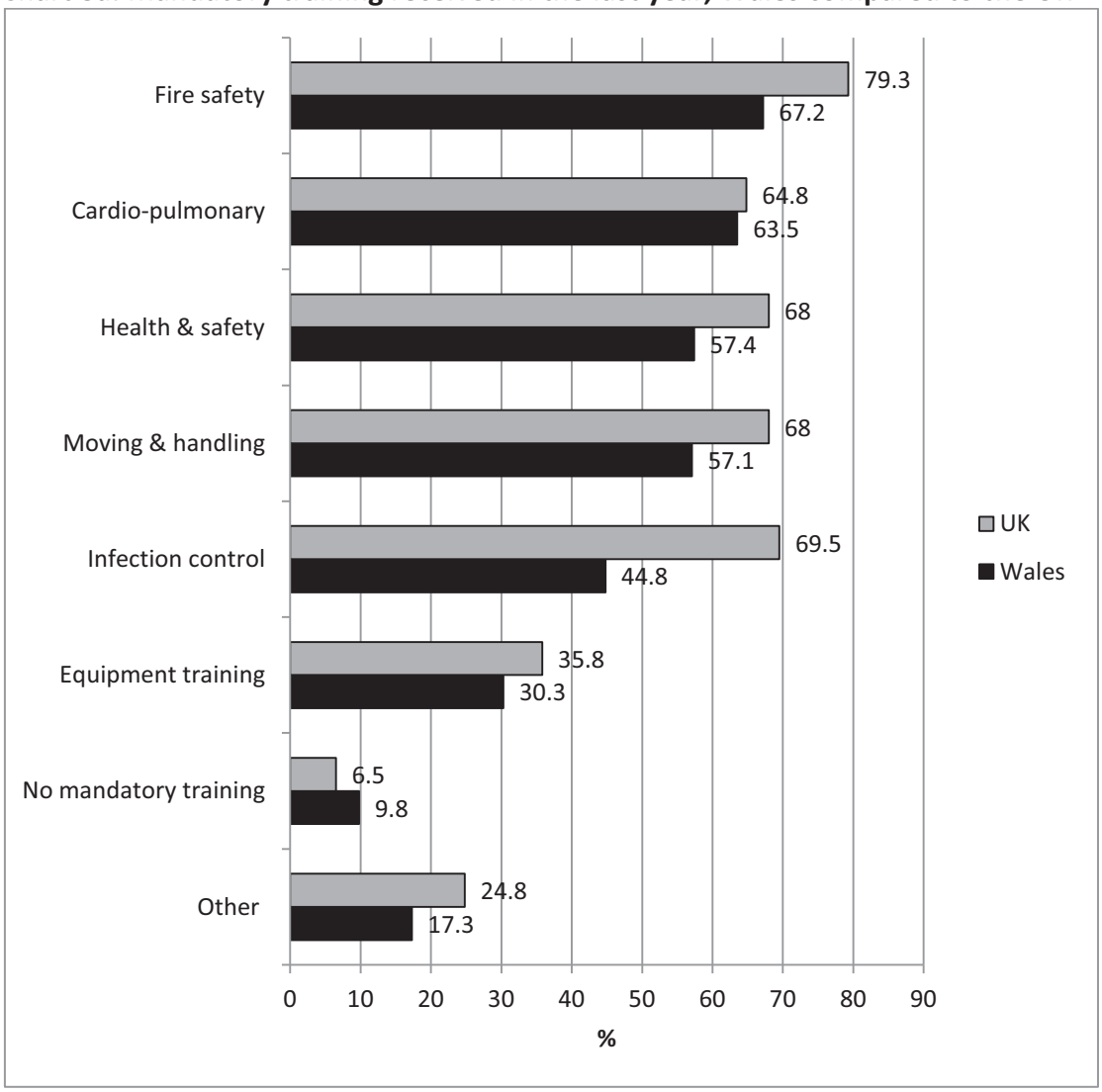
8.2 Mandatory training

Respondents were asked about any mandatory training they have received in the last year. Over half of all respondents in Wales have undertaken training in fire safety (n=309), cardio-pulmonary (n=292), health and safety (n=264), and moving and handling (n=263).

Just less than half have received infection control training (n=206) and around a third equipment training (139). One in ten (n=45) reported they had not received any training at all in the previous year.

Chart 8a shows that fewer respondents from Wales report having received training across all the categories than all UK respondents. The most striking finding is that just 45 per cent in Wales reported receiving infection training compared to 70 per cent across all the UK.

Chart 8a: Mandatory training received in the last year, Wales compared to the UK



Comparing 2011 findings with those for 2009, we see that across the NHS and the independent and voluntary sectors, fewer respondents reported they had received mandatory training across all categories than two years ago. We also find that not only did fewer respondents from Wales report having received infection control training than UK respondents, but the incidence of this training has dropped since 2009. This was also the case for the UK as a whole.

Tackling healthcare-associated infections has been a priority in recent years, yet these findings suggest that the provision of staff training has dropped since the last survey.

Table 8a: In the last year, what mandatory training have you received? 2011 compared to 2009

	2011	2009	2011	2009
	NHS excluding GP practices (n=341)	NHS excluding GP practices (n=424)	Independent & voluntary sector (n=63)	Independent & voluntary sector (n=47)
Fire safety	62.5	71.0	69.8	89.3
Health & Safety	48.8	52.9	69.8	66.1
Moving & handling	53.2	67.2	61.9	83.9
Infection control	43.5	51.9	47.6	71.4
Equipment training	28.3	45.8	28.6	51.8
CPR	60.5	78.1	39.7	51.8
None	7.1	n/a	14.3	n/a
Other	12.8	n/a	19.0	n/a

8.3 Continuing professional development

Respondents were asked about the amount of CPD or non-mandatory training received in the last 12 months. In total 75 per cent reported having received training provided or paid for by their employer. *This compares to 72 per cent for all UK respondents.*

A quarter reported having received between 1 and 2 days and a third (30 per cent) said they undertaken between 3 and 6 days' worth of training.

Chart 8b: Other than mandatory training, how much training has your employer provided or paid for over the last year, Wales compared to the UK

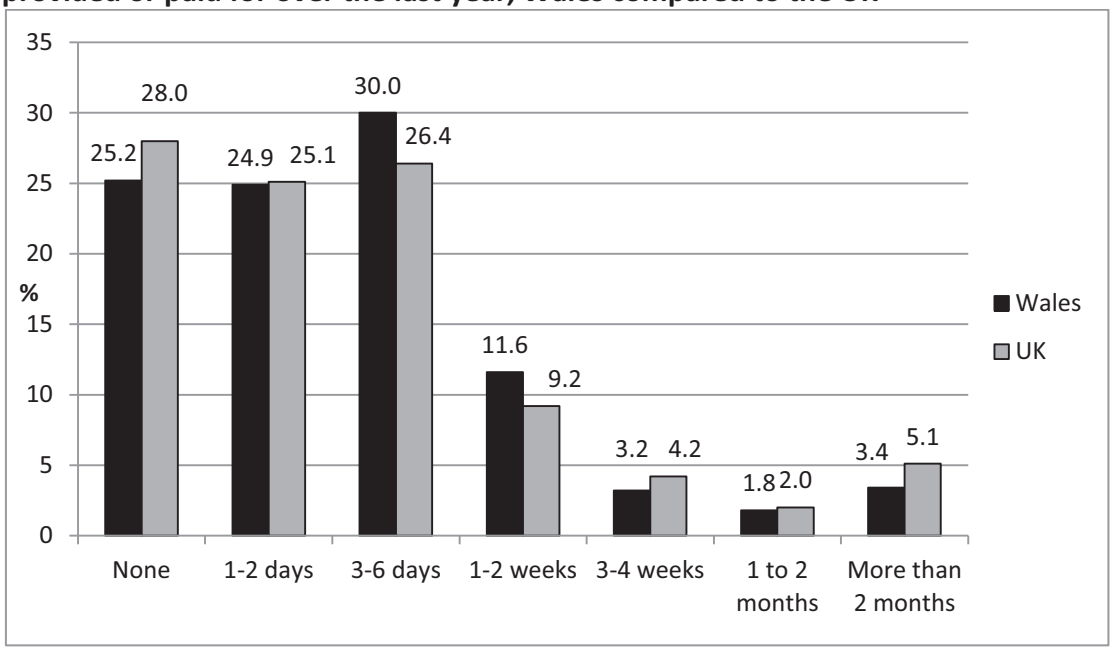
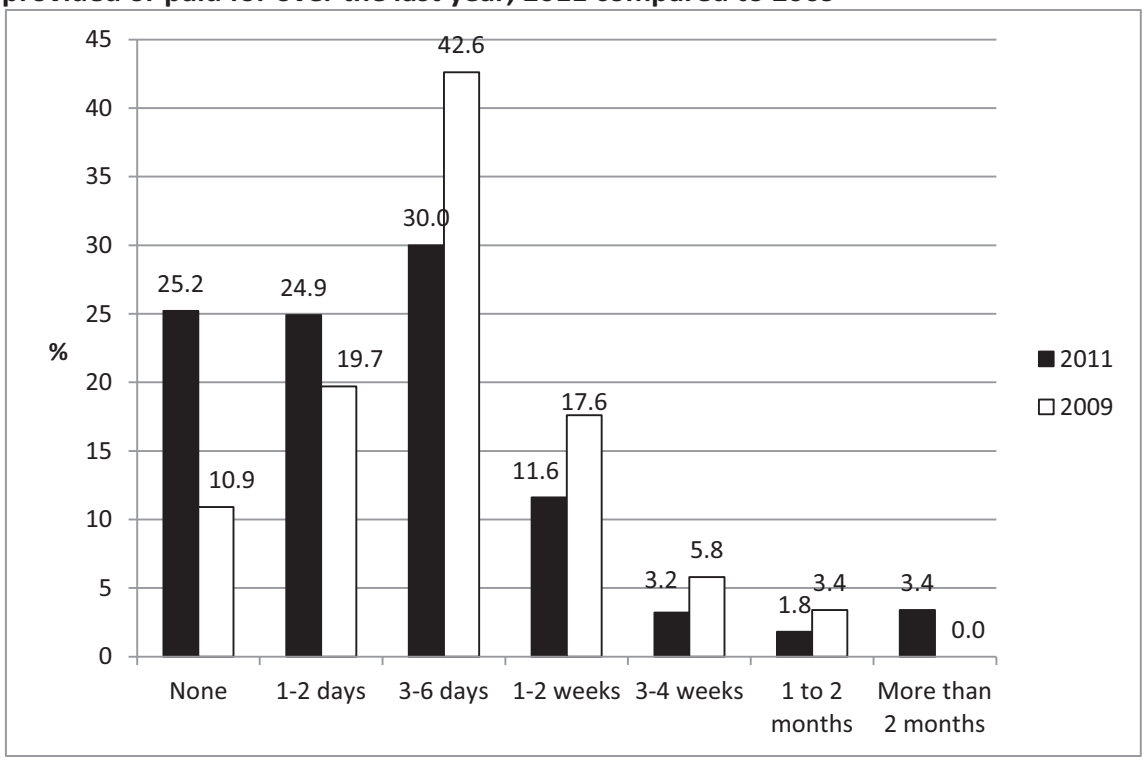


Chart 8c shows that 89 per cent of respondents in Wales reported having received CPD provided or paid for by their employer compared to 75 per cent in 2011. We can also see that the duration of training was longer with 69 per cent of respondents receiving training lasting longer than 2 days, compared to 50 per cent in 2011.

Chart 8c: Other than mandatory training, how much training has your employer provided or paid for over the last year, 2011 compared to 2009



Of those respondents who had received training provided or by their employer, three-quarters (78 per cent) said their employer had paid for their training in full, compared to 83 per cent of all UK respondents.

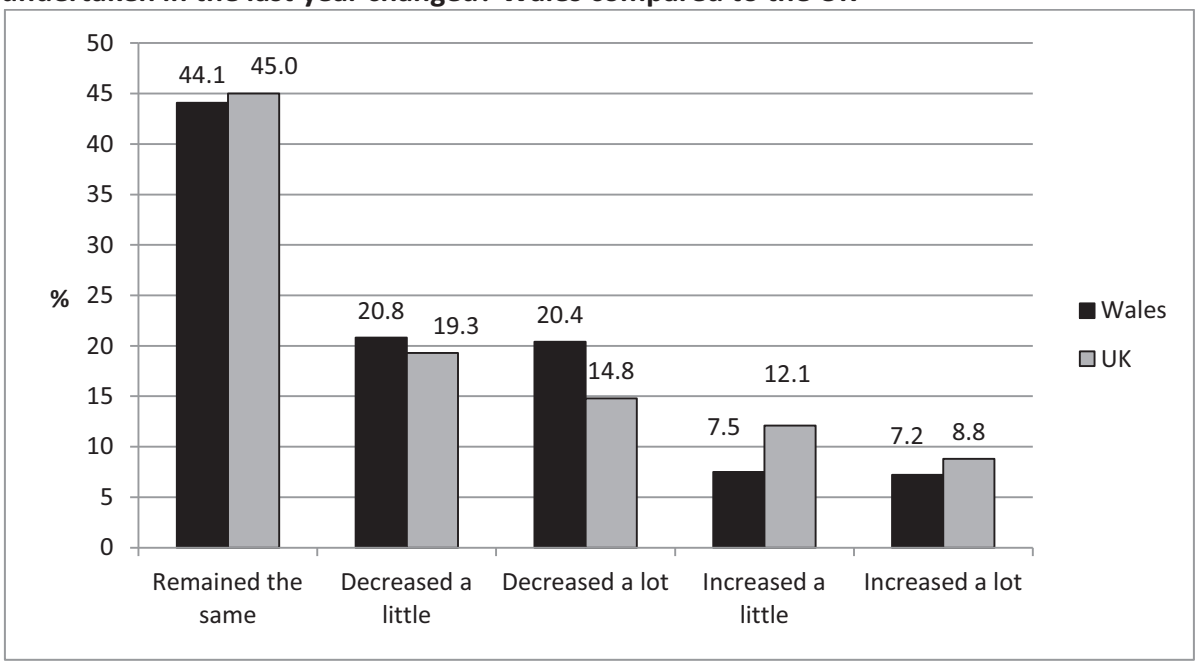
Table 8b: What proportion of your training was paid for by your employer? (by country)

		England	Scotland	Cymru/Wales	Northern Ireland	All UK
All of it	**No.**	2,890	422	299	310	3,921
	%	53.5	83.6	78.3	79.9	82.7
50% or more	**No.**	291	36	36	38	401
	%	8.4	7.1	9.4	9.8	8.5
Less than 50%	**No.**	148	19	20	19	206
	%	4.3	3.8	5.2	4.9	4.4
None of it	**No.**	131	28	27	21	207
	%	3.8	5.5	7.1	5.4	4.4
Total	**No.**	3,460	505	382	38	4,735
	%	100.0	100.0	100.0	100.0	100.0

Respondents were also asked to assess whether the amount of training or CPD received had changed over the last year. Chart 8d shows that around two-fifths (44 per cent) reported that it had stayed about the same and a similar number (41 per cent) said it had decreased either a little or a lot. Just 15 per cent reported that increased either a little or a lot.

Respondents from Wales were more likely to report that their amount of training or CPD received had fallen since last year than all UK respondents (41 per cent compared to 34 per cent). Looking more closely at results by country, 34 per cent of respondents in England, 35 per cent in Scotland and 32 per cent in Northern Ireland said that training undertaken had decreased.

Chart 8d: Compared with 12 months ago, has the amount of training/CPD undertaken in the last year changed? Wales compared to the UK



8.4 Appraisals and personal development plans

Just under half (47 per cent) of respondents in Wales reported having a personal training and development plan (PTDP) and only three-fifths of these have been drawn up in conjunction with their manager. In addition, less than half (45 per cent) said they have received an appraisal or development review with their line manager in the last 12 months.

Compared to 2009, a slightly lower proportion of respondents from Wales reported they had received an appraisal or development review in the last 12 months (45 per cent in 2011 compared to 49 per cent in 2009).

A lightly higher number this year reported that they had a PDTP (47 per cent in 2011 compared to 43 per cent in 2009). However, a smaller proportion indicated that their manager had played an active role in drawing up the plan (60 per cent in 2011, compared to 76 per cent) in 2009.

Analysis of this year's findings by country shows that respondents from Wales are the least likely to have had an appraisal/development review or a PDTP out of all UK countries. Over two-thirds of respondents from England and Scotland report having had an appraisal and similar numbers report having a PDTP.

Table 8c: Appraisals and personal development plans (by country)

		England	Scotland	Cymru/Wales	Northern Ireland	All UK
Appraisal or development review	**No.**	3,390	513	230	259	4,436
	%	70.0	71.6	**45.2**	54.5	67.1
Personal training and development plan	**No.**	3,084	554	243	250	4,179
	%	63.6	77.2	**47.4**	52.6	63.0

9. Workload and Staffing

9.1 Overview

This chapter looks at respondents' views on workload and staffing and finds that budgetary pressures are impacting on health care provision and staffing levels. Half of all respondents report a reduction in staffing levels of registered nurses and just over a quarter say levels have decreased for Health Care Assistants.

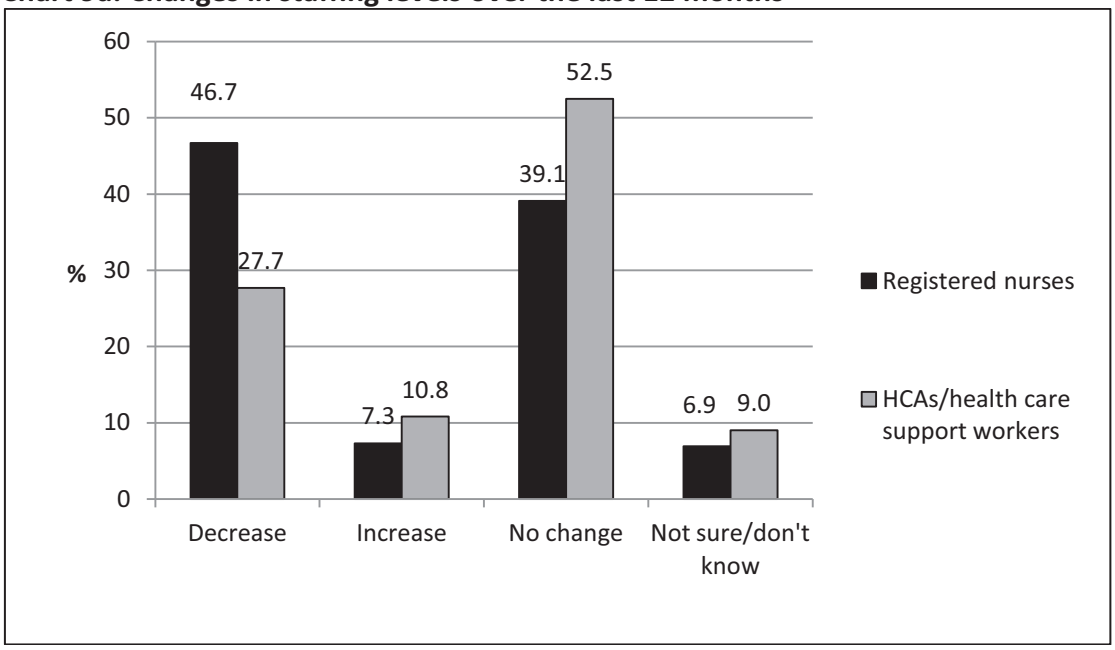
We also find that staffing levels are being managed down by the use of recruitment freezes, leading to posts being unfilled, as well cuts in posts, the redistribution or redevelopment of staff, bans on the use of bank or agency staff and skill-mix changes.

9.2 Staffing levels

Across all respondents in Wales, almost half (47 per cent) report that the number of registered nurses in their workplace has declined and just over a quarter (28 per cent) state that there has been a reduction in the number of Health Care Assistants/health care support workers in the last 12 months.

These figures match those for all UK respondents, with half (49 per cent) reporting a reduction in numbers of registered nurses and a third (31 per cent) a reduction in numbers of HCAs.

Chart 9a: Changes in staffing levels over the last 12 months



We asked how staffing levels were being managed and found that a slightly higher number of respondents in Wales than across the UK reported recruitment freezes over the last 12 months leading to vacancies left unfilled (41 per cent compared to 35 per cent in the UK). Similar numbers in Wales and the UK also reported that posts had been cut (17 per cent). In Wales, staffing levels are also being managed by skill-

mix changes (22 per cent), the redistribution or redeployment of staff (24 per cent) and agency/bank staff bans (22 per cent).

The impact of staffing levels is impacting on patient/client caseloads, with a quarter stating they have increased, and on service provision, with 15 per cent reporting that services or wards have been merged or restructuring and 12 per cent that wards or beds have been closed.

At this stage, it appears that the incidence of redundancies is fairly low across Wales and the other UK countries, with between 5 and 7 per cent reporting they have occurred in the last 12 months. However, Chart 9b uncovers more findings around redundancies.

Table 9d: Impact of staffing levels in the last 12 months, Wales compared to UK

	Wales			UK	
	No.	**%**		**No.**	**%**
Recruitment freezes with vacancies	**210**	**40.9**		**2,713**	**35.1**
Increase in patient/client caseload	**130**	**25.3**		**2,062**	**26.7**
Redistribution/redeployment of staff	129	23.9		1,523	19.7
Bank or agency ban	123	22.0		1,413	18.3
Skill-mix change within your	111	21.6		1,705	22.1
Role expansion (e.g. senior staff cover	98	19.1		1,331	17.2
Posts cut	79	16.5		1,285	16.6
Services/wards merged or	72	15.4		1,103	13.8
Fewer opportunities for access to	85	14.0		1,069	13.8
Ward/bed closures	61	11.9		825	10.7
Redundancies	27	5.3		550	7.1
Other	35	6.8		605	12.2

* Respondents were asked to tick all that apply

Chart 9 presents the same data, but for the NHS only and confirms the impact of reduced budgets and restructuring on the NHS workforce across the whole of the UK.

Two-fifths (43 per cent) of respondents working in the NHS in Wales report that recruitment freezes have left posts unfilled in their workplace, and 15 per cent state that posts have been cut. A quarter (26 percent) report that staffing levels have led to increased patient or client caseloads and that skill-mix changes have taken place (25 per cent).

Chart 9b: Impact of staffing levels in the past 12 months, Wales compared to the UK (all respondents)

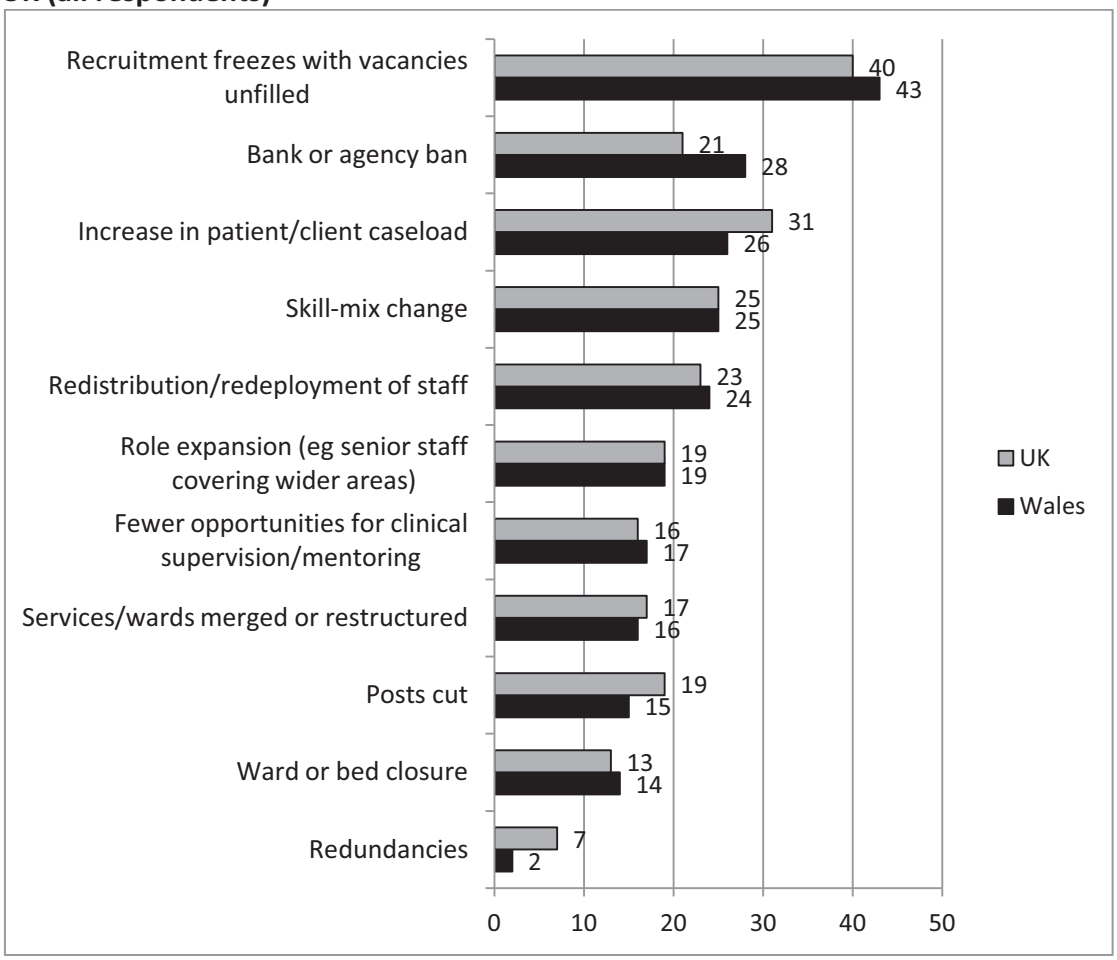
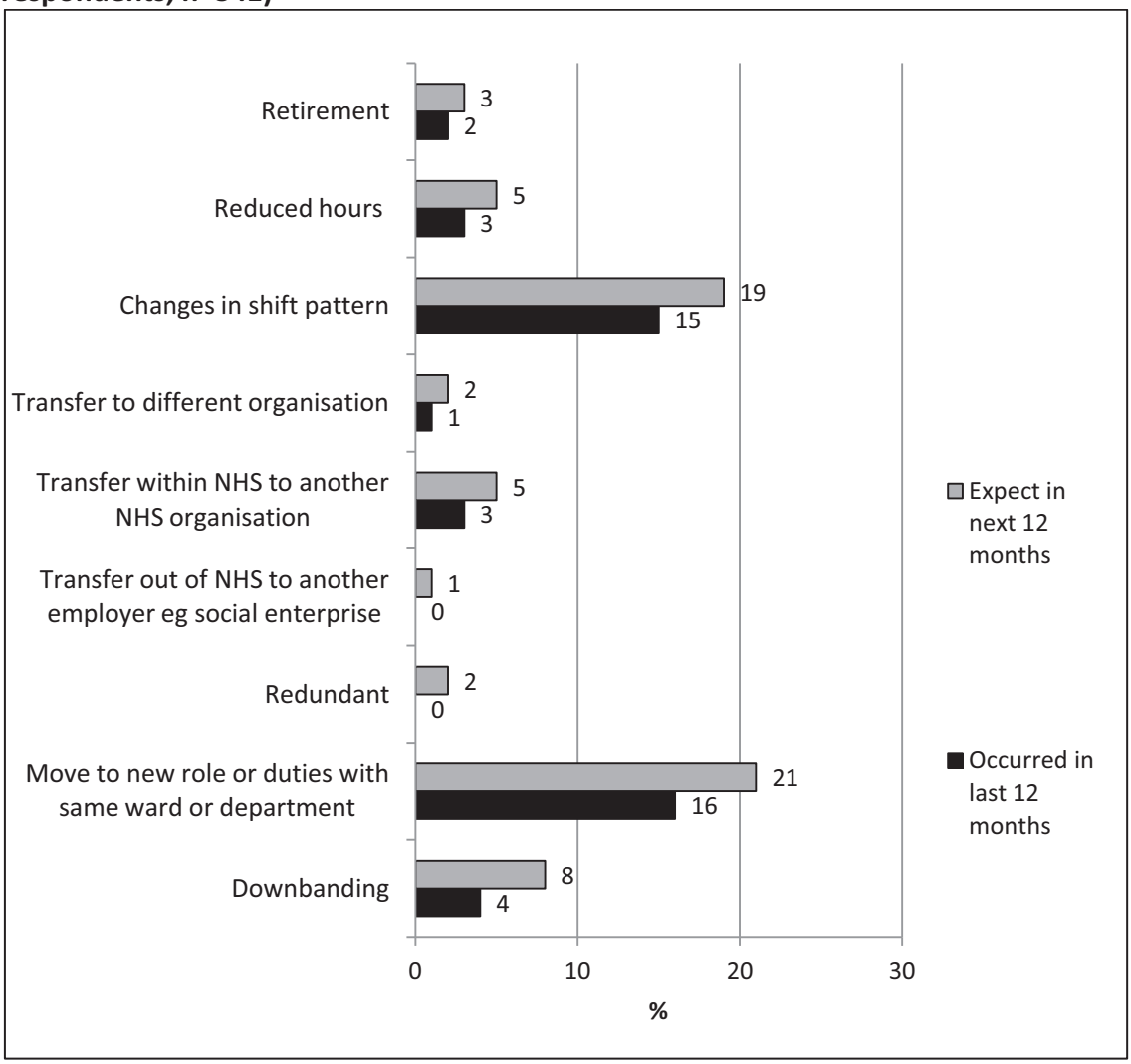


Chart 9c shows the extent or change reported by nursing staff working in the NHS and while some developments such as changes in shift pattern or a move to a new role could occur in any circumstances, others relate to new changes in working conditions. 4 per cent report to have been downbanded in the last 12 months (n=15) and a further 8 per cent (n=30) expecting to be downbanded in the next year. Just fewer than one in ten (n=32) expect to be transferred within or out of the NHS and a further two per cent (n=7) expect to be made redundant in the next 12 months.

Table 9c: Changes over the last 12 months and expected in next 12 months (NHS respondents, n=341)



10. Views about nursing

10.1 Overview

This final chapter reports on response to a series of statements about experiences of working in nursing. Many of the statements have featured in previous RCN Employment Surveys and results are compared to 2009 where possible.

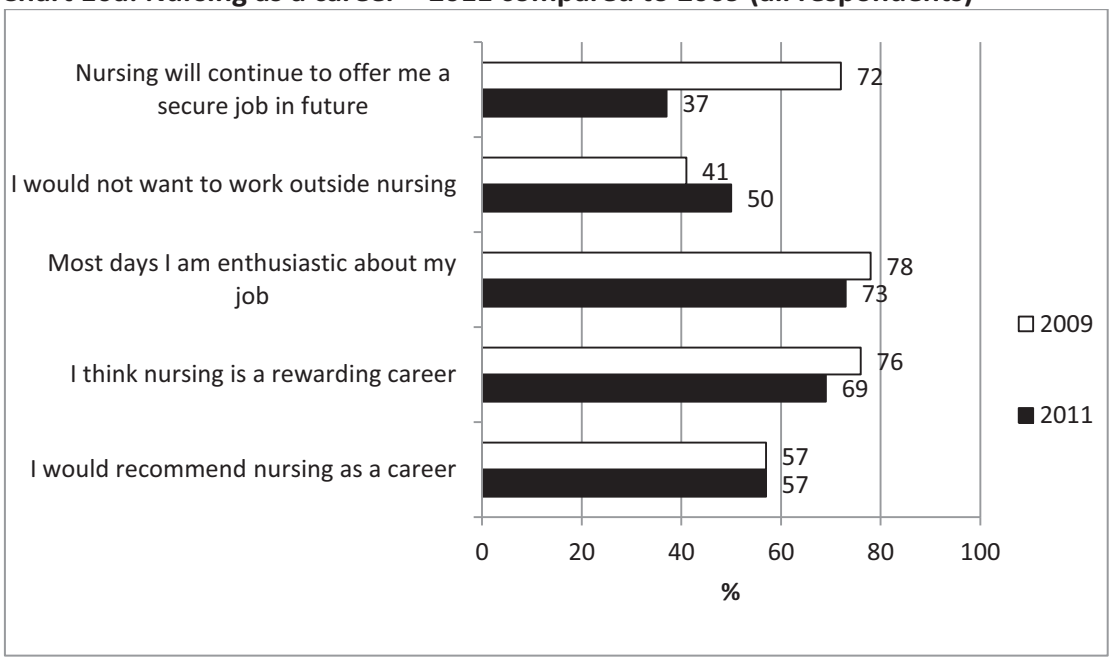
In general, these findings paint a picture of falling levels of morale and motivation. Less than four in ten believe that nursing will continue to offer a secure job in the future, compared to three-quarters in 2009. Nursing staff are evidently affected by the combination of pay freezes or low pay rises, pensions reforms, rising inflation and fears about job security.

10.2 Views about nursing as a career

Chart 10 compares key findings relating to respondents' attitudes to nursing as a career between 2011 and 2009 and finds that although respondents' commitment to nursing and their role remains high, fewer state they view nursing as a rewarding career than two years ago (69 per cent compared to 76 per cent in 2009). And although a slightly higher proportion of respondents agree with the statement 'I would not want to work outside nursing' (50 per cent compared to 41 per cent in 2009) an alarmingly lower number view nursing as being able to offer a secure job in the future (37 per cent compared to 72 per cent in 2009.

These findings generally follow the same pattern as those for all UK respondents, both in terms of the proportion of respondents agreeing with the statements and any changes since 2009, suggesting that morale across the whole nursing workforce is sliding.

Chart 10a: Nursing as a career – 2011 compared to 2009 (all respondents)

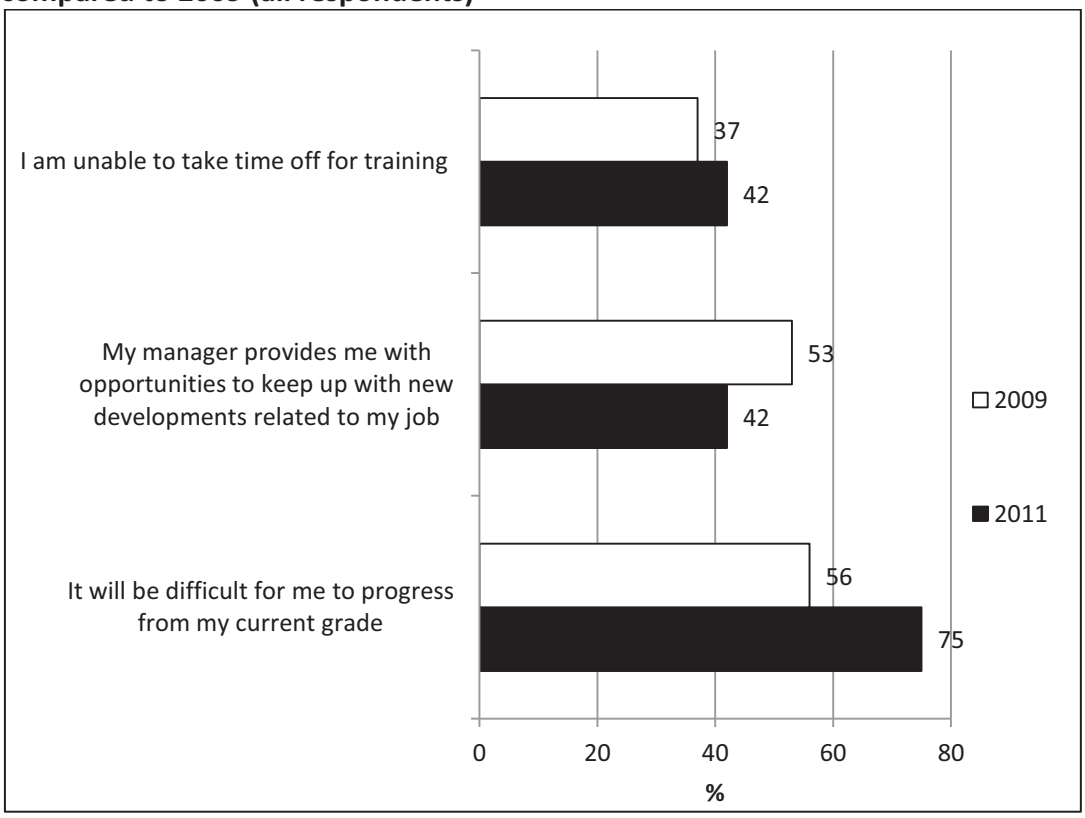


10.3 Career progression and professional development

Compared to 2009, respondents are less positive about opportunities for career progression and development within nursing. A higher proportion of respondents stated that that it would be difficult for them to progress from their current grade (75 per cent compared to 56 per cent in 2009) and that their managers supports them with opportunities to keep up with new developments (53 per cent compared to 42 per cent). Meanwhile, a slightly proportion told us that they were unable to take time off for training (42 per cent compared to 37 per cent).

Again, these findings tend to mirror those for the rest of the UK, with similar numbers reporting on reduced prospects for career progression and professional development.

Chart 10b: Views about career progression and professional development – 2011 compared to 2009 (all respondents)

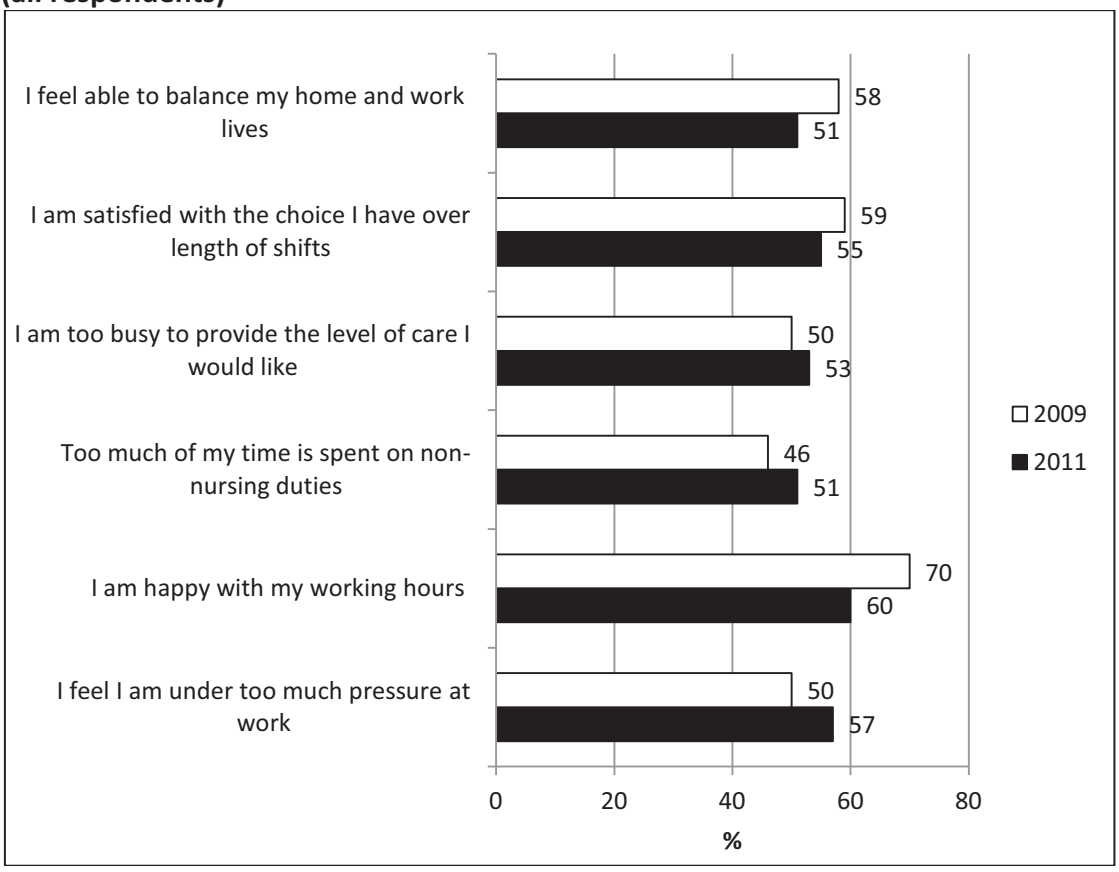


10.3 Working hours and work-life balance

This year, respondents appear to be under greater pressure than in 2009, with fewer happy with their working hours (60 per cent compared to 70 per cent) and in a new question asked this year, 78 per cent said that their individual workload had increased over the last 12 months.

High workloads are clearly impacting on the quality of care nursing staff feel they can give, with over half of all respondents in Wales reporting they are too busy to provide the level of care they would like and that too much of their time is spent on non-nursing duties. High workloads are also impacting on work-life balance with slightly fewer respondents stating they are able to balance their work and homes lives (51 per cent compared to 58 per cent in 2009).

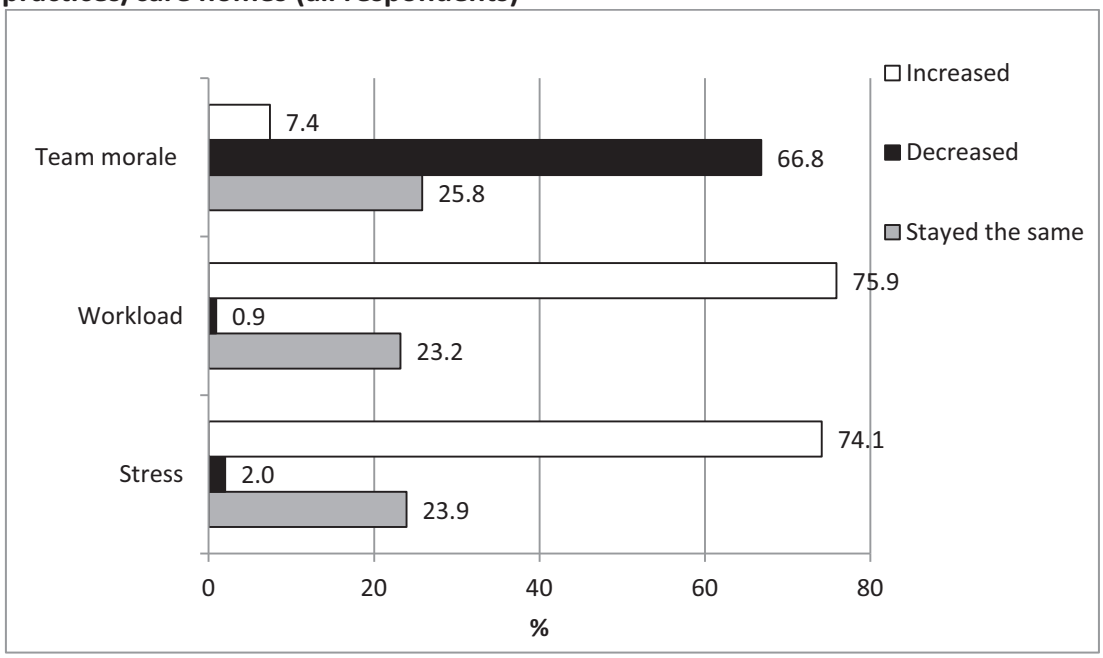
Chart 10c: Views on working hours and work-life balance, 2011 compared to 2009 (all respondents)



We also asked about relative changes in the level of workload, stress and morale in the workplace. Chart 10d shows that the majority of respondents (67 per cent) reported that team morale had fallen (while stress (74 per cent) and workload (76 per cent) had both increased.

Across all UK respondents, 76 per cent reported that stress had increased and 81 per cent that workload had increased 69 per cent said that team morale had decreased.

Chart 10d: Changes over the last 12 months in respondents' wards/units/services/ practices/care homes (all respondents)

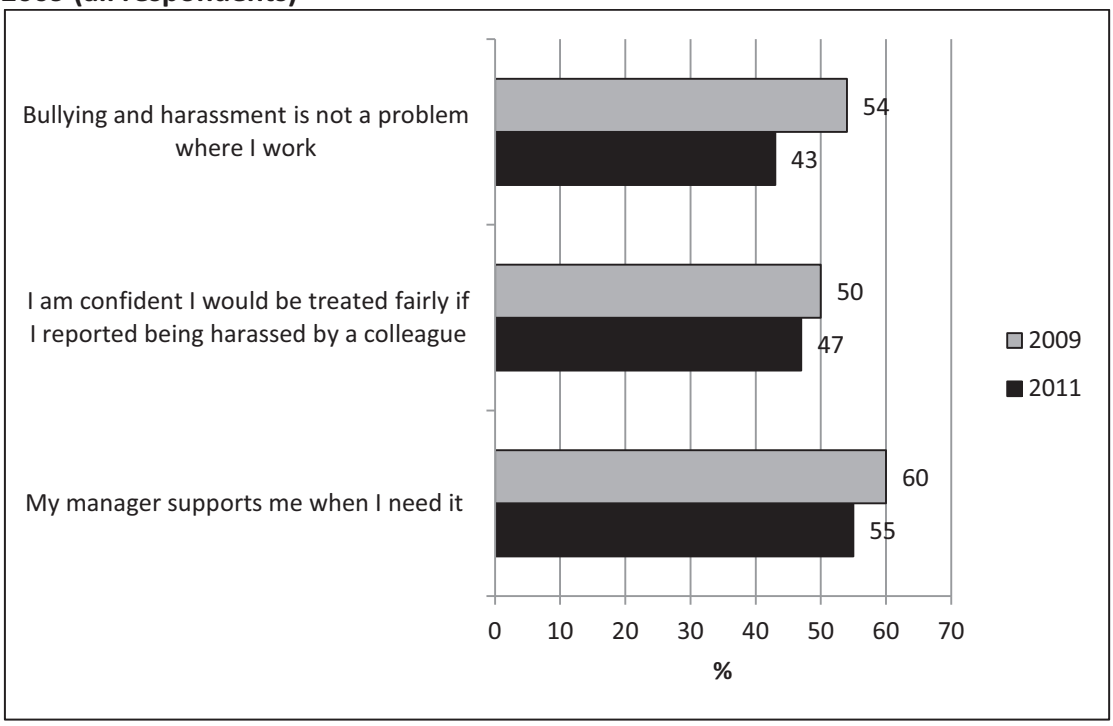


10.4 Employer support in the workplace

Across all respondents in Wales, similar numbers state that their manager supports them when they need it and that they are confident they would be treated fairly if reported being harassed by a colleague as in 2009. However, fewer stated that bullying and harassment is *not* a problem in their workplace (43 per cent compared to 54 per cent in 2011. Bullying and harassment is explored further in the next section.

A new question introduced this year asked respondents whether their employer provided good occupational health support, with 55 per cent stating they did. This is a similar number for all UK respondents. Given the demanding nature of nursing – both physically and mentally – we would expect a higher level of support to be given to the nursing profession.

Chart 10e: Views about employer support in the workplace, 2011 compared to 2009 (all respondents)

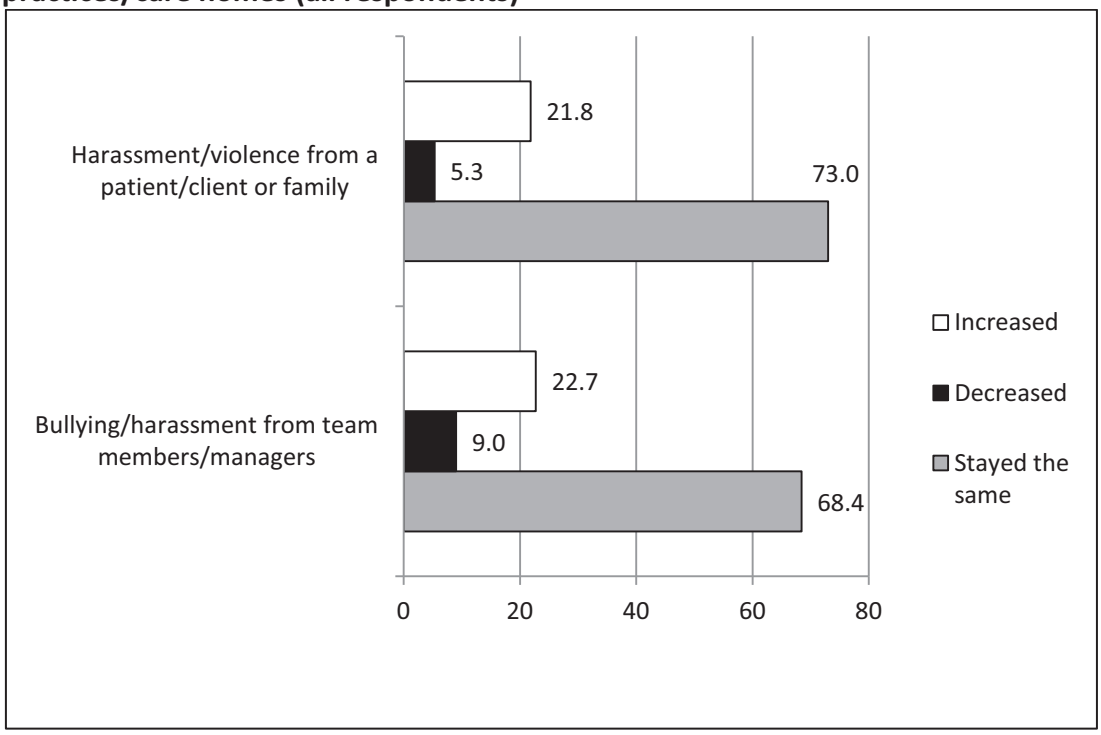


10.5 Bullying and harassment

An alarmingly high number of respondents reported having personally experienced bullying of harassment from a team member or manager (22 per cent) or from a patient/client or member of their family (28 per cent) in the last 12 months. *These are similar findings for all UK respondents with 27 per cent reporting bulling or harassment from team members or managers and 30 per cent reporting violence of harassment from a patient/client or family member.*

Chart 10f also shows that 23 per cent stated that bullying or harassment from a team member or manager has increased over the last 12 months and 22 per cent report violence or harassment from patients or clients or members of their family.

Chart 10f: Changes over the last 12 months in respondents' wards/units/services/ practices/care homes (all respondents)



Appendix 1

Methodology

Introduction

In previous years the RCN has taken the approach of combining both postal and web-based versions of a questionnaire sent out to respondents. This year, it was decided to focus solely on a web-based questionnaire.

A link to the online questionnaire was sent out to just over 68,800 RCN members with email addresses, and achieved 7,904 usable responses after data were cleaned and duplicates removed[9]. The approximate breakdown of questionnaires received from the UK countries is shown in table (i) below[10].

Table (i): Questionnaires sent out and received by country

Country	No. sent out	% sent out	No. received	% received as proportion of total sample*
England	49,536	72.0	4,899	9.9
Scotland	8,256	12.0	721	8.7
Wales	5,504	8.0	514	9.3
Northern Ireland	5,504	8.0	482	8.8

***** i.e. total sample of the UK countries.

The 2011 survey was designed in *SurveyMonkey*[11], a web-based and user-friendly survey tool, which provides easy access to the survey and allows for respondents' answers to be entered directly into a database. Once the survey closed the database could then be imported into SPSS (originally 'Statistical Package for the Social Sciences') and the data cleaned and analysed.

In terms of survey design, short questionnaires with pre-defined tick box responses are easier to complete and also offer greater possibilities for undertaking extensive quantitative analysis. Open-ended questions should, ideally, be kept to a minimum as responses take longer to analyse, code-up and allocate to distinct categories. In addition, an on-line questionnaire should take no longer than around 10-15 minutes to complete and the sequence of questions should flow logically.

[9] The total number of duplicate responses was 58.

[10] After cleaning the data and removing duplicates we were able to conclude that: 6,827 RCN members completed the last survey question; 6,836 completed the last five questions and 6,886 completed the last 10 questions.

[11] www.surveymonkey.com

This year, the survey included 81 questions across seven areas, which were agreed with the RCN as follows:

- pay and grading
- pension arrangements
- working hours
- training
- workload and staffing
- view about nursing as a career
- employment/respondent profile information.

A key feature of previous RCN membership surveys has been to include the same questions over time, to assist with continuity of analysis and reporting. While true longitudinal analysis refers to the study of the same population at different points in time to capture both stability and change, it can be difficult to achieve this with any dynamic workforce (i.e. leavers and joiners). Nevertheless, the approach of asking some of the same questions in successive surveys can be effective in capturing general trends across a range of issues affecting NHS staff over time.

A copy of this year's survey can be found in Appendix 2, while table (ii) highlights those questions featured in both 2009 and 2011. In some cases, where the same questions have been used on both occasions, some of the response options have been changed or amended for the latest survey.

In particular, 'open-ended' questions included in 2009 survey have been redesigned to enable respondents to choose from a list of survey options, enabling easier analysis.

Table (ii): Questions used in 2009 and 2011 RCN surveys (plus amendments)

2009 survey	2011 survey	
Employment information		
Which one of the following best	Q 1A	Unchanged from 2009
Who is the employer for your main	Q 1B	Following responses added:
Where do you currently spend most	Q 1C	Unchanged from 2009
Which one of the following job titles	Q1 D	Following response added:
Which one of the following best	Q1 E	Following responses added:
How long have you worked for your	Q1 F	Same question asked in 2011 but worded
How long have you been in your	Q1 G	As above
Pay and grading		
On which pay system/scale are you	Q 2A	Unchanged from 2009
On which AfC grade or pay band are	Q 2B	Unchanged from 2009
What was your clinical grade	Q 2C	Unchanged from 2009
What was your AfC pay band	Q 2D	Unchanged from 2009
How appropriate do you consider	Q 2I	Same question asked in 2011 but worded
Approximately what proportion of	Q 2K	Unchanged from 2009

Working hours		
In your main job do you work full-	Q 4A	Unchanged from 2009
How many hours are your	Q 4B	Same question asked in 2011 but worded
If your main job is bank or agency,	Q 4C	Unchanged from 2009
How often do you work in excess of	Q 4D	Unchanged from 2009
How many extra hours did you work	Q 4E	Same question asked in 2011 but worded
If your employer wants you to work	Q 4F	Unchanged from 2009
Do you currently have a second job	Q 4H	Unchanged from 2009
What are your other jobs?	Q 4I	Unchanged from 2009
What is your main reason for doing	Q 4J	Unchanged from 2009
Training		
In the last year what mandatory	Q 5A	Following response added:
Do you currently have a personal	Q 5C	Unchanged from 2009
If yes, has your manager/employer	Q 5D	Unchanged from 2009
Have you had an appraisal	Q 5E	Unchanged from 2009
Compared with 12 months ago,	Q 5F	Unchanged from 2009
Workload and staffing		
Including yourself, how many staff	Q 6G	Unchanged from 2009
How many students were there on	Q 6H	Unchanged from 2009
In total, how many patients/clients	Q 6I	Unchanged from 2009
Job change and career plans		
Have you applied for a post of a	Q 7A	Unchanged from 2009
If yes, were you successful in this	Q 7B	Unchanged from 2009
Have you changed jobs in the last 12	Q 7C	Unchanged from 2009
Have you changed employer in the	Q 7D	Unchanged from 2009
What are the main reasons you	Q 7E	Unchanged from 2009
If you had more than one reason for	Q 7F	Unchanged from 2009
Are you currently seeking a change	Q 7G	Same question asked in 2011 but worded
General views about nursing as a		
I would recommend nursing as a	Q 8A(i)	Unchanged from 2009
I think that nursing is a rewarding	Q 8A(ii)	Unchanged from 2009
Most days I am enthusiastic about	Q 8A(iii)	Unchanged from 2009
Nursing will continue to offer me a	Q 8A(iv)	Unchanged from 2009
I would not want to work outside of	Q 8A v)	Unchanged from 2009
It will be very difficult for me to	Q 8B(i)	Unchanged from 2009
My employer provides me with	Q 8B(ii)	Unchanged from 2009
I am unable to take time off for	Q 8B(iii)	Unchanged from 2009
I feel I am under too much pressure	Q 8C(i)	Unchanged from 2009
I am happy with my working hours	Q 8C(ii)	Unchanged from 2009
Too much of my time is spent on	Q 8C(iii)	Unchanged from 2009

I am too busy to provide the level of	Q 8C(iv)	Unchanged from 2009
I am satisfied with the choice I have	Q 8C(v)	Unchanged from 2009
I feel able to balance my home and	Q 8C(vi)	Unchanged from 2009
Bullying and harassment is not a	Q 8D(i)	Unchanged from 2009
I am confident I would be treated	Q 8D(ii)	Unchanged from 2009
My manager supports me when I	Q 8D(v)	Unchanged from 2009
Personal profile		
Are you male or female?	Q 9A	Unchanged from 2009
What is your age?	Q 9B	Same question asked in 2011 but worded
In which country do you work?	Q 9C	Following response added:
If you work in England, in which	Q 9G	Same question asked in 2011 but worded
What nursing qualifications do you	Q 9H	Unchanged from 2009
Where did you first register as a	Q 9I	Unchanged from 2009
Were you recruited from your	Q 9J	Unchanged from 2009
To which ethnic group do you	Q 9L	Unchanged from 2009
Which of the following best	Q 9M-Q	Unchanged from 2009

A link to the survey, contained within a letter of invitation (Appendix 2) was emailed to the RCN, to forward on to members. The letter was sent out mid-May and respondents were given around six weeks to complete the survey. An email reminder was circulated mid-June and the survey was closed at the end of June.

Weighted survey data

The 2011 survey focused on the 18 defined jobs in section 1, part D of the questionnaire *('which one of the following job titles best describes your main job?')* and for all but one role – 'district nurse' – questionnaires were sent only to a sample of each of the job categories listed. For district nurses, questionnaires were sent to all members with an e-mail address, which meant there was a possibility that this group would be over-represented once all of the responses had been collated. This was at the request of the RCN in order to undertake a more in-depth analysis of findings for this group.

In total, excluding district nurses, there were 7,667 responses from a total of 221,852 RCN members with email addresses (which equates to 3.46 per cent).

237 district nurses replied from the 1,625 that were sent the questionnaire[12], representing a response rate of 14.58 per cent. In order to compensate for the oversampling, the analysis of responses from district nurses were weighted by a factor of 0.2369 (3.46/14.58).

It should be noted, however, that the number of district nurses represents a small proportion of the whole sample and so the weighting has not affected the overall results to any extent.

[12] This is the total number of district nurses in the RCN membership with e-mail addresses.

Routing questions

The routing questions for this survey were:

2E Did you have a review of your banding after assimilation to Agenda for Change?

- Yes → routed to question 2F
- No → routed to question 2I

2F Was your banding uplifted?

- Yes → routed to question 2G
- No → routed to question 2H

2I How appropriate do you consider your current pay band/grade to be, given your role and responsibilities?

- Inappropriate → routed to question 2J
- Very inappropriate → routed to question 2J
- Very appropriate → routed to question 2K
- Appropriate → routed to question 2K
- Neither appropriate/inappropriate → routed to question 2K
- Not sure/do not know → routed to question 2K

3A Which pension scheme do you belong to?

- NHS pension scheme → routed to question 3B
- Other non-NHS pension → routed to question 4A
- No pension → routed to question 4A
- Not sure/do not know → routed to question 4A

4D How often do you work in excess of your contracted hours?

- Every shift → routed to question 4E
- Several times a week → routed to question 4E
- Once a week → routed to question 4E
- Less than once a week → routed to question 4G
- Never → routed to question 4G

4H Do you currently have a second job, or undertake any other PAID work in addition to your main job?

- Yes → routed to question 4I
- No → routed to question 5a

5B Other than mandatory training, how much training has your EMPLOYER provided/paid for over the past year?

- 1 to 2 days → routed to question 5C
- 3 to 6 days → routed to question 5C
- 1 to 2 weeks → routed to question 5C
- 3 to 4 weeks → routed to question 5C
- 1 to 2 months → routed to question 5C
- None → routed to question 5D

5D Do you currently have a personal training and development plan?

- Yes → routed to question 5E
- No → routed to question 5F
- Not sure/do not know → routed to question 5F

6G Do you work in a hospital or a care home?

- I work in a hospital → routed to question 6H
- I work in a care home → routed to question 6H
- I do not work in either a hospital or a care home → routed to question 6K

7A Have you applied for a post of a higher grade/band in the last 12 months?

- Yes → routed to question 7B
- No → routed to question 7G

7B If yes, were you successful in this application?

- Yes → routed to question 7C
- No → routed to question 7G

7C Have you changed jobs in the last 12 months?

- Yes → routed to question 7D
- No → routed to question 7G

9C In which country do you work?

- England → routed to question 9G
- Scotland → routed to question 9H
- Cymru/Wales → routed to question 9D
- Northern Ireland → routed to question 9H

9D Do you speak Welsh?

- Yes → routed to question 9G
- No → routed to question 9H

9E If you speak Welsh are you required to speak it professionally in your role?

- Yes → routed to question 9F
- No → routed to question 9H

9I Where did you first register as a qualified nurse?

- UK → routed to question 9K
- Other country → routed to question 9J

9L To which ethnic group do you belong?

- White → routed to question 9M
- Mixed/multiple ethnic groups → routed to question 9N
- Asian/Asian British → routed to question 9O
- Black/African/Caribbean – 9P
- Prefer not to say – 9R
- Other ethnic group – 9Q

Appendix 2

RCN membership survey 2011

Dear member,

I am writing to ask for your help with what is one of the most important pieces of research that the RCN commissions.

You have been selected at random from the RCN's membership records to take part in this survey. Your response is vital to help the RCN obtain a representative picture of nurses across the UK, covering every sector and field of practice.

Over the years, the employment surveys have played an important part in many campaigns and policies led by the RCN, helping the organisation to argue for better pay and working conditions for nursing staff.

Much has changed since the last survey was undertaken two years ago and the RCN urgently needs to have an up-to-date picture of members' working lives so that we are better able to represent you.

This year the survey is being conducted confidentially by Incomes Data Services, an independent research organisation specialising in pay and employment issues.

The survey should take around 15 minutes to complete and is completely anonymous. The more responses we receive the stronger our evidence will be, so we would be very grateful if you can take the time to complete this survey.

You can complete the survey by selecting the link: www.surveymonkey.com/s/7QJSW5L <http://www.surveymonkey.com/s/7QJSW5L>

The survey closes on 24 June.

Thank you very much for your contribution to this important research.

Yours sincerely

Dr Peter Carter
Chief Executive & General Secretary

RCN online survey

Welcome to the 2011 RCN membership survey. The survey will take around 15 minutes to complete and your answers will be used to support pay negotiations and future campaign work. Thank you for your assistance

1. Employment information

A Which one of the following best describes your current employment situation?

- ☐ Employed and working
- ☐ Employed but currently on maternity leave
- ☐ Employed but currently on sick leave
- ☐ Self-employed
- ☐ Unemployed
- ☐ Student
- ☐ Retired, but still in paid employment
- ☐ Fully retired
- ☐ Other (please specify) _____

B Who is the employer for your main job?

- ☐ NHS (excluding GP practices)
- ☐ GP practice
- ☐ NHS bank
- ☐ Nursing agency
- ☐ NHS Direct/NHS 24/help-line
- ☐ Other NHS employer (e.g. SHA/Health Board)
- ☐ Independent/private healthcare provider
- ☐ Charity/voluntary group
- ☐ University
- ☐ Social enterprise
- ☐ Private contractor
- ☐ Local authority/other public body
- ☐ Other (please specify) _____

C Where do you currently spend most of the time in your main job?

- ☐ Community
- ☐ GP practice
- ☐ Care home
- ☐ Hospice
- ☐ Hospital ward
- ☐ Hospital unit (e.g. A & E, ITU specialist units)
- ☐ Hospital outpatients/day care
- ☐ Other hospital setting
- ☐ University
- ☐ Prison service
- ☐ Various (across organisation/s)
- ☐ Other (please specify) _____

D Which one of the following job titles best describes your main job?

- ☐ Staff nurse
- ☐ Community nurse
- ☐ Health care assistant/nursing auxiliary
- ☐ Sister/charge nurse/ward manager
- ☐ Senior nurse/matron/nurse manager
- ☐ Clinical nurse specialist
- ☐ Consultant nurse
- ☐ Nurse practitioner
- ☐ District nurse
- ☐ Health visitor/SCPHN
- ☐ Community psychiatric nurse
- ☐ Midwife
- ☐ School nurse
- ☐ Practice nurse
- ☐ Occupational health nurse
- ☐ Manager/director
- ☐ Researcher/lecturer/tutor
- ☐ Non-nursing job/work
- ☐ Other (please specify) _____

E Which one of the following best describes the area of practice in your main job?

- ☐ Acute and urgent care
- ☐ Cancer care
- ☐ Palliative care
- ☐ Children and young people
- ☐ Long-term conditions
- ☐ Education
- ☐ Ethics
- ☐ Learning disabilities
- ☐ Mental health
- ☐ Midwifery
- ☐ Older people
- ☐ Public health
- ☐ Quality improvement and research
- ☐ Women's health
- ☐ Workplace and environmental health
- ☐ Aesthetics
- ☐ e-health/telecare
- ☐ School nursing
- ☐ Primary and community care
- ☐ Management/leadership
- ☐ Other (please specify) _____

F How long have you worked for your current employer?

- ☐ Less than 1 year
- ☐ Over 1 year, up to 2 years
- ☐ Over 2 years, up to 5 years
- ☐ Over 5 years, up to 10 years
- ☐ Over 10 years

G How long have you been in your current post?

- ☐ Less than 1 year
- ☐ Over 1 year, up to 2 years
- ☐ Over 2 years, up to 5 years
- ☐ Over 5 years, up to 10 years
- ☐ Over 10 years

2 Pay and grading

A On which pay system/scale are you currently being paid?

☐AfC pay band
☐Clinical grade
☐Other (please specify) _____

B On which AfC grade or pay band are you currently employed? If you are on a different pay scale please indicate the equivalent grade or pay band, if possible.

AfC pay band	**Clinical grade**
☐ 1	☐ A
☐ 2	☐ B
☐ 3	☐ C
☐ 4	☐ D
☐ 5	☐ E
☐ 6	☐ F
☐ 7	☐ G
☐ 8a	☐ H
☐ 8b	☐ I
☐ 8c	
☐ 8d	

C What was your clinical grade IMMEDIATELY PRIOR to the transition to Agenda for Change?

Clinical grade

☐ A
☐ B
☐ C
☐ D
☐ E
☐ F
☐ G
☐ H
☐ I

D What was your AfC pay band IMMEDIATELY AFTER the transition?

AfC pay band

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8a
- ☐ 8b
- ☐ 8c
- ☐ 8d

E Did you have a review of your banding after assimilation to Agenda for Change?

- ☐ Yes
- ☐ No

F Was your banding uplifted?

- ☐ Yes
- ☐ No

G What was your banding uplifted to?

AfC pay band

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8a

☐ 8b

☐ 8c

☐ 8d

H Did you change jobs between assimilation and review?

☐ Yes
☐ No

I How appropriate do you consider your current pay band/grade to be given your role and responsibilities?

☐ Very appropriate
☐ Appropriate
☐ Neither appropriate/inappropriate
☐ Inappropriate
☐ Very inappropriate
☐ Not sure/do not know

J If you think your current pay band/grade is inappropriate, please state why.

_____

K Approximately what proportion of your TOTAL household income do your earnings represent?

☐ Less than half
☐ About half
☐ More than half
☐ All if it

L Are you, or your household, in receipt of Working Tax Credits?

☐ Yes
☐ No

M Compared to this time last year, please describe how your situation has changed in relation to each of the following?

	Increased	Stayed the same	Decreased
(i) Household income level (e.g. money coming in) has	☐	☐	☐
(ii) Household expenditure (e.g. outgoings) has	☐	☐	☐
(iii) Concerns about my financial situation have	☐	☐	☐

(iv) Concerns about my level of personal debt have	☐	☐	☐
(v) Worries about job cuts and the threat of redundancy have	☐	☐	☐

3 Pension arrangements

A Please indicate which pension scheme you belong to:

- ☐ NHS pension scheme
- ☐ No pension
- ☐ Other non-NHS pension
- ☐ Not sure/do not know

B Would any of the following make you consider opting out of the NHS pension scheme?

	Yes definitely	Yes probably	Not sure	Probably not	Definitely not
(i) Increase in pension contributions of 1-3%	☐	☐	☐	☐	☐
(ii) Increase in pension contributions of 3% or more	☐	☐	☐	☐	☐
(iv) Shift from a final salary scheme to a career-average scheme	☐	☐	☐	☐	☐

C If you have a non-NHS pension please give details.

_____

4 Working hours

A In your main job do your work:

- ☐ Full-time
- ☐ Part-time
- ☐ Occasional/various hours

B In your main job what are your normal weekly contracted hours of work?

- ☐ Up to 15 hours
- ☐ 16 to 29 hours
- ☐ 30 to 37.5 hours
- ☐ Over 37.5 hours

C If your main job is bank or agency, please state your typical working hours in a week.

_____

D How often do you work in excess of your contracted hours?

- ☐ Every shift
- ☐ Several times a week
- ☐ Once a week
- ☐ Less than once a week
- ☐ Never

E Please state the number of additional hours that you work, on average, each week:Up to 2 hours

- ☐ Over 2 and up to 4 hours
- ☐ Over 4 and up to 6 hours
- ☐ Over 6 and up to 8 hours
- ☐ Over 8 hours

F Are your additional hours normally:

- ☐ Paid at a higher rate
- ☐ Paid at a normal rate
- ☐ Paid at a lower rate
- ☐ Bank work
- ☐ Time-off-in-lieu
- ☐ Not paid
- ☐ Other (please specify) _____

G To what extent do your hours of work (including shift patterns) conflict with your domestic commitments, for example, child care arrangements or looking after an older relative?

- ☐ Never
- ☐ Occasionally
- ☐ Frequently
- ☐ Always

H Do you currently have a second job, or undertake any other PAID work in addition to your main job?

- ☐ Yes
- ☐ No

I What are your other jobs? Please tick all that apply.

- ☐ Bank nursing with same employer

- ☐ Bank nursing with different employer
- ☐ Agency nursing
- ☐ NHS nursing/management
- ☐ Care/nursing home
- ☐ Non-NHS hospital
- ☐ Other non-NHS nursing work
- ☐ Non-nursing work
- ☐ Other (please specify) _____

J What is your MAIN reason for doing additional paid work?

- ☐ To provide additional income
- ☐ To maintain particular nursing skills
- ☐ To gain experience of other specialities
- ☐ To maintain staffing levels where I work
- ☐ Other (please specify) _____

5 Training

A In the last year, what mandatory training have you received? Please tick all that apply.

- ☐ Health and safety
- ☐ Fire safety
- ☐ Moving and handling
- ☐ Infection control
- ☐ Equipment training
- ☐ Cardio-pulmonary
- ☐ I have not received any mandatory training in the last year
- ☐ Other (please specify) _____

B Other than mandatory training, how much training has your EMPLOYER provided/paid for over the past year?

- ☐ None
- ☐ 1–2 days
- ☐ 3–6 days
- ☐ 1–2 weeks
- ☐ 3–4 weeks
- ☐ 1–2 months
- ☐ More than 2 months

C What proportion of your training was paid for by your employer?

- ☐ All of it
- ☐ 50 per cent or more
- ☐ Less than 50 per cent
- ☐ None of it

D Do you currently have a personal training and development plan?

- ☐ Yes
- ☐ No
- ☐ Not sure/do not know

E If YES, has your manager/employer been actively involved in drawing up this plan?

- ☐ Yes
- ☐ No

F Have you had an appraisal/development review with your line manager in the last 12 months?

- ☐ Yes
- ☐ No
- ☐ Not sure/do not know

G Compared with 12 months ago, would you say the amount of training/CPD you have undertaken in the last year has:

- ☐ Increased a lot
- ☐ Increased a little
- ☐ Remained about the same
- ☐ Decreased a little
- ☐ Decreased a lot

H Have you used any RCN training or learning resources in the last 12 months? Please tick all that apply.

- ☐ RCN Learning Zone
- ☐ RCN library
- ☐ RCN e-library/online learning
- ☐ RCN virtual enquiry service
- ☐ RCN event
- ☐ RCN publications
- ☐ Online learning resources on key nursing practice issues
- ☐ Enrolled on an Open University course
- ☐ RCN activist training
- ☐ Used an RCN research resource
- ☐ None of the above
- ☐Other (please specify) _____

6 Workload and staffing

A Has there been any change to staffing levels where you work in the last 12 months? Please answer for the ward/unit/service/practice/home you currently work in.

	Yes, staffing levels have	Yes, staffing levels have	There has been no change in	Not sure/do not know

	increased	decreased	staffing levels	
(i) Registered nurses	☐	☐	☐	☐
(ii) Health care assistants/ health support workers	☐	☐	☐	☐

B If there has been a change in staffing levels, what changes have occurred in the last 12 months? Please tick all that apply.

- ☐ Recruitment freezes with vacancies left unfilled
- ☐ Posts cut
- ☐ Redundancies
- ☐ Redistribution/redeployment of staff
- ☐ Skill-mix change within your ward/department
- ☐ Ward/bed closures
- ☐ Services/wards merged or restructured
- ☐ Increase in patient/client caseload
- ☐ Reduced staffing levels
- ☐ Bank or Agency ban
- ☐ Role expansion (e.g. senior staff cover wider areas)
- ☐ Fewer opportunities for access to clinical supervision/mentoring
- ☐ Other (please specify) _____

C Compared with this time last year, has your own individual workload:

- ☐ Increased a lot
- ☐ Increased a little
- ☐ Stayed the same
- ☐ Decreased a little
- ☐ Decreased a lot

D Have you experienced any of the following in the past 12 months? Please tick all that apply.

- ☐ Downbanding
- ☐ Move to a new role or other duties within the same ward/department/service
- ☐ Redundancy
- ☐ Transfer out of the NHS to another employer e.g. social enterprise/independent sector
- ☐ Transfer within the NHS to another NHS organisation
- ☐ Other transfer to a different organisation
- ☐ Changes in shift patterns
- ☐ Reduced hours

☐ Retirement

E Do you expect to experience any of the following in the next 12 months? Please tick all that apply.

☐ Downbanding
☐ Move to a new role or other duties within the same ward/department/ service
☐ Redundancy
☐ Transfer out of the NHS to another employer e.g. social enterprise/independent sector
☐ Transfer within the NHS to another NHS organisation
☐ Other transfer to a different organisation
☐ Changes in shift patterns
☐ Reduced hours
☐ Retirement

F Compared with 12 months ago ....

	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree
(i) I am under increased stress	☐	☐	☐	☐	☐
(ii) I have fewer opportunities to work flexibly	☐	☐	☐	☐	☐
(iii) I have considered leaving my job	☐	☐	☐	☐	☐
(iv) My job is now more interesting/ stimulating	☐	☐	☐	☐	☐
(iii)I have personally experienced bullying/ harassment from	☐	☐	☐	☐	☐

a team member or manager					
(iv) I have personally experienced harassment or violence from a patient/client or their family	☐	☐	☐	☐	☐

G Please indicate if you work in a hospital or care home.

- ☐ I work in a hospital
- ☐ I work in a care home
- ☐ I do not work in either a hospital or a care home

H Including yourself, how many staff were on duty for all or most of your last shift?

Total registered nurses _____

Total HCAs/auxiliaries _____

I How many students were there on your last shift?

Students _____

J In total, how many patients/clients were on your ward/unit/home on your last shift?

Total patients/clients _____

K Have each of the following increased/decreased/stayed the same over the last 12 months? Please answer for the ward/unit/service/practice/home you currently work in.

	Increased	Stayed the same	Decreased
(i) Workload	☐	☐	☐
(ii) Team morale	☐	☐	☐
(iii) Stress	☐	☐	☐
(iv) Caseload			

(v)	Quality of care	☐	☐	☐
(vi)	Use of temporary staff	☐	☐	☐
(vii)	Bullying or harassment from team members or managers	☐	☐	☐
(viii)	Harassment or violence from a patient/client or their family	☐	☐	☐

7 Job change and career plans

A Have you applied for a post of a higher grade/band in the last 12 months?

☐ Yes
☐ No

B If yes, were you successful in this application?

☐ Yes
☐ No

C Have you changed jobs in the last 12 months?

☐ Yes
☐ No

D Have you changed employer in the last 12 months?

☐ Yes
☐ No

E What are your main reasons for changing jobs and/or employer? Please tick all that apply.

☐ Better prospects
☐ Better pay
☐ Promotion
☐ To gain different experience/skills
☐ Working hours/work-life balance
☐ Terms and conditions/pension issues
☐ Distance to work
☐ Personal/family reasons/moving area/care of dependent
☐ Health problems
☐ Dissatisfied with previous job
☐ Stress/workload in previous job

- ☐ Redundancy/place of work closed
- ☐ Redundancy/service reconfiguration
- ☐ Unfairly dismissed
- ☐ Distress caused by bullying/harassment from patients
- ☐ Distress caused by bullying/harassment from other colleagues/managers
- ☐ Training reasons
- ☐ Semi-retirement
- ☐ Other (please specify) _____

F If you had more than one reason for changing jobs, which two were the most important?

Most important reason _____

Second reason _____

G Are you currently seeking a change in employment?

- ☐ No change
- ☐ New job, same employer
- ☐ New job, different employer
- ☐ Retirement

8 General views about nursing as a career

Below are a number of statements. Please indicate the extent to which each statement matches your own views by ticking one box on each line. There are no right or wrong answers. We are interested in your views.

A Please select one of the following in each case:

	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree
(i) I would recommend nursing as a career	☐	☐	☐	☐	☐
(ii) I think that nursing is a rewarding career	☐	☐	☐	☐	☐

(iii) Most days I am enthusiastic about my job	☐	☐	☐	☐	☐
(iv) Nursing will continue to offer me a secure job for years to come	☐	☐	☐	☐	☐
(iii) I would not want to work outside of nursing	☐	☐	☐	☐	☐

B Please select one of the following in each case:

	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree
(i) It will be very difficult for me to progress from my current grade	☐	☐	☐	☐	☐
(ii) My employer provides me with opportunities to keep up with new developments related to my job	☐	☐	☐	☐	☐
(iii) I am unable to take time off for training	☐	☐	☐	☐	☐

C Please select one of the following in each case:

	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree

(i) I feel I am under too much pressure at work	☐	☐	☐	☐	☐
(ii) I am happy with my working hours	☐	☐	☐	☐	☐
(iii) Too much of my time is spent on non-nursing duties	☐	☐	☐	☐	☐
(iv) I am too busy to provide the level of care I would like	☐	☐	☐	☐	☐
(v) I am satisfied with the choice I have over the length of shifts I work	☐	☐	☐	☐	☐
(vi) I feel able to balance my home and work lives	☐	☐	☐	☐	☐

D Please select one of the following in each case:

	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree
(i) Bullying and harassment is not a problem where I work	☐	☐	☐	☐	☐

(ii) I am confident I would be treated fairly if I reported being harassed at work by a colleague	☐	☐	☐	☐	☐
(iii) I am confident that colleagues would be treated fairly if they reported being harassed at work by another member of staff	☐	☐	☐	☐	☐
(iv) My employer provides good occupational health support for staff	☐	☐	☐	☐	☐
(v) My manager supports me when I need it	☐	☐	☐	☐	☐

9 Personal profile

A Are you:

- ☐ Male
- ☐ Female

B What is your age?

- ☐ 18-25
- ☐ 26-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ Over 65

C In which country do you work?

- ☐ England
- ☐ Scotland
- ☐ Cymru/Wales
- ☐ Northern Ireland
- ☐ Channel Islands
- ☐ Other (please specify) _____

D Do you speak Welsh?

- ☐ Yes
- ☐ No

E If you speak Welsh, are you required to speak it professionally in your role?

- ☐ Yes
- ☐ No

F If you speak Welsh, are you able to speak it professionally in your role?

- ☐ Yes
- ☐ No

G If you work in England, in which region do you mainly work?

- ☐ East of England
- ☐ East Midlands
- ☐ Greater London
- ☐ North East
- ☐ North West
- ☐ South East
- ☐ South West
- ☐ West Midlands
- ☐ Yorkshire and Humberside
- ☐ Across different regions/nationally

H Which of the following nursing qualifications do you hold? Please tick all that apply.

- ☐ First level registration
- ☐ Second level registration
- ☐ NVQ/SVQ level 2, 3 or 4
- ☐ Nursing diploma
- ☐ Nursing degree
- ☐ Masters/PhD
- ☐ Other (please specify) _____

I Where did you first register as a qualified nurse?

- ☐ UK
- ☐ Other country (please specify) _____

J Were you recruited from your country of origin to work in the UK as a nurse?

- ☐ Yes
- ☐ No

K How would you describe your national identity?

- ☐ English
- ☐ Welsh
- ☐ Scottish
- ☐ Northern Irish
- ☐ British
- ☐ Prefer not to say
- ☐ Other (please specify) _____

L To which ethnic group do you belong?

- ☐ White
- ☐ Mixed/multiple ethnic groups
- ☐ Asian/Asian British
- ☐ Black/African/Caribbean
- ☐ Prefer not to say
- ☐ Other ethnic group (please specify) _____

White

M Which of the following best describes your ethnic background?

- ☐ English/Welsh/Scottish/Northern Irish/British
- ☐ Irish
- ☐ Gypsy or Irish Traveller
- ☐ Any other White background (please specify) _____

Mixed/multiple ethnic groups

N Which of the following best describes your ethnic background?

- ☐ White and Black Caribbean
- ☐ White and Black African
- ☐ White and Asian
- ☐ Any other Mixed/multiple ethnic background (please specify) _____

Asian/Asian British

O Which of the following best describes your ethnic background?

- ☐ Indian
- ☐ Pakistani
- ☐ Bangladeshi
- ☐ Chinese
- ☐ Any other Asian background (please specify) _____

Black/African/Caribbean

P Which of the following best describes your ethnic background?

- ☐ African
- ☐ Caribbean
- ☐ Any other Black/African/Caribbean background (please specify) _____

Other ethnic group

Q Which of the following best describes your ethnic background?

- ☐ Arab
- ☐ Any other ethnic background (please specify) _____

R Do you consider yourself to have a disability?

- ☐ Yes
- ☐ No

Y Pwyllgor Materion Cyfansoddiadol a Deddfwriaethol
Constitutional and Legislative Affairs Committee

Cynulliad Cenedlaethol Cymru
National Assembly for Wales

Christine Chapman AM
Chair
Children & Young People Committee
National Assembly for Wales
Tŷ Hywel
Cardiff Bay
CF99 1NA

3 July 2012

Dear Christine,

School Standards and Organisation (Wales) Bill

The Minister for Education and Skills, Leighton Andrews AM, attended our meeting on 28 May 2012 to answer questions about the subordinate legislation provisions contained in the above Bill.

Following the meeting I wrote to the Minister asking for clarification on a number of points. The Minister has now replied and your Committee may find his response helpful. I attach a copy along with my original letter.

Yours sincerely

David Melding AM
Chair

Bae Caerdydd
Caerdydd
CF99 1NA

Cardiff Bay
Cardiff
CF99 1NA

Ffôn / Tel: 029 8920 8732
E-bost / Email: David.Melding@wales.gov.uk

Leighton Andrews AC / AM
Y Gweinidog Addysg a Sgiliau
Minister for Education and Skills

Llywodraeth Cymru
Welsh Government

Eich cyf/Your ref
Ein cyf/Our ref LF/LA/0181/12

David Melding AM
Chair
Constitutional and Legislative Affairs
Committee
National Assembly for Wales
Cardiff Bay
CF99 1NA

25 June 2012

Dear David,

CONSITUTIONAL AND LEGISLATIVE AFFAIRS COMMITTEE - STAGE 1 SCRUTINY OF THE SCHOOL STANDARDS AND ORGANISATION (WALES) BILL

Thank you for your letter of 30 May following my appearance before the Constitutional and Legislative Affairs Committee on 28 May.

I agreed to provide the Committee with further information in order to clarify the following points:

1. The Draft of the School Organisation Code
I agreed to share the draft School Organisation code at Stage 2 subject to the Assembly's approval of the general principles of the Bill at Stage 1.

2. Details of where the powers contained in section 58, section 67, section 82 and para. 34(1)(b) of Schedule 5 are currently to be found and, specifically, whether, and if so when these powers have been used

The table below sets out the proposed power and the location of the existing legislative power.

Power contained in School Standards and Organisation Bill:	Existing Power can be found in :
Section 58	Section 34 of and paras 2 and 3 of Schedule 7 to the School Standards and Framework Act 1998
Section 67	Section 192 of the Education Act 2002

Bae Caerdydd • Cardiff Bay
Caerdydd • Cardiff
CF99 1NA

English Enquiry Line 0845 010 3300
Llinell Ymholiadau Cymraeg 0845 010 4400
Correspondence.Leighton.Andrews@wales.gsi.gov.uk

Section 82	Section 32 of the Schools Standards and Framework Act 1998
Para. 34(1)(b) of Schedule 5	Section 35 of the School Standards and Framework Act 1998 and Regulation 16 of and paragraph 19(3)(b) of Schedule 4 to The Change of Category of Maintained Schools (Wales) Regulations 2001

To date, none of the existing powers has ever been exercised.

3. A table of derivations for the Bill setting out the sources of the legislation proposed to be consolidated in the present Bill

Please refer to **Annex 1**.

4. Clarification of the possibility of compulsory purchase of land

The power contained in para. 34(1)(b) of Schedule 5 could not be used for the compulsory purchase of land; it could only be used in relation to the transfer of land when a school changes category. A school can only change category in accordance with the detailed provisions set out in the Bill. The process will require the making of a proposal, a statutory period of consultation, a notice period during which objections can be made and then the determination of the proposal. If a determination is made to approve the proposal, the implementation of the change of category must be done in accordance with Schedule 5 to the Bill. Paragraph 34(1)(b) of Schedule 5 is only relevant in the event that agreement cannot be reached between the transferor and the transferee on whether an area of land, already used for the purposes of a school, should be excluded from the transfer of land taking place between them. In those very specific circumstances, the purpose of this paragraph is to enable the Welsh Ministers to determine whether that piece of land should be excluded from the transfer. If the Welsh Ministers do *not* determine that the land should be excluded from the transfer, that land will be transferred in accordance with the provisions set out in the Schedule.

I trust that the information contained in the letter and attached annexes is helpful and responds to the Committee's specific questions.

Yours sincerely,

Leighton Andrews AC / AM
Y Gweinidog Addysg a Sgiliau
Minister for Education and Skills

SCHOOL STANDARDS AND ORGANISATION (WALES) BILL
TABLE OF DERIVATION

1. This document is intended as an informal aid to debate on the Bill in the National Assembly for Wales. While care has been taken to ensure that the document is as accurate as reasonably practicable, it does not purport to be, and should not be relied on as, authoritative.

2. The attached table is intended to provide information on the derivation of the provisions of the School Standards and Organisation (Wales) Bill. The table does not provide definitive or exhaustive guidance, and should be read in conjunction with the Bill and with the explanatory notes on the Bill.

KEY TO ABBREVIATIONS

EA 1996 – Education Act 1996
EA 2002 – Education Act 2002
EA 2005 – Education Act 2005
LSA 2000 – Learning and Skills Act 2000
SSFA 1998 – School Standards and Framework Act 1998
SI 1999/1671 – The Education (School Organisation Proposals) (Wales) Regulations 1999
SI 1999/1780 – The Education (Maintained Special Schools) (Wales) Regulations 1999
SI 2001/2678 – The Change of Category of Maintained Schools (Wales) Regulations 2001
SI 2004/1576 – The School Organisation Proposals by the National Assembly for Wales Regulations 2004
S. – section
R. – regulation
P. – paragraph
Sch. - Schedule

TABLE OF DERIVATIONS

SECTION / PARAGRAPH	CORRESPONDING REFERENCE IN EXISTING LEGISLATION	SUBSTANTIVE CHANGE?
PART 1 : INTRODUCTION		
1	New	-
PART 2 : STANDARDS **CHAPTER 1 – INTERVENTION IN CONDUCT OF MAINTAINED SCHOOLS**		
2	Ground 1: S.15(2)(a)(i) SSFA 1998	No
	Ground 2: S.15(2)(a)(ii) SSFA 1998	No
	Ground 3: S.62 SSFA 1998	No
	Ground 4: S.15(2)(a)(iii) SSFA 1998	No
	Ground 5: new, but based partly on S.497 EA 1996 and S.15(2)(a)(iv) and (v) SSFA 1998	-
	Ground 6: new, but based partly on S.496 EA 1996 and S.15(2)(a)(iv) and (v) SSFA 1998	-
	Ground 7: S.15(4) SSFA 1998	No
	Ground 8: S.15 (6) SSFA 1998	No
3	S.15 SSFA 1998	No
4	S. 14 and S.15 SSFA 1998	Yes
5	New	-
6	S.16 SSFA 1998	No
7	S16A SSFA 1998	Yes
8	S.17 SSFA 1998	No
9	New	-
10	New	-
11	Partly S.18, S.18A, S.18B, S.19, S.19ZA and 19A SSFA 1998, partly new	Yes/-
12	New	-
13	S.18 SSFA 1998	No
14	S.18A SSFA 1998	No

15	S.18B SSFA 1998	No
16	S.19 SSFA 1998	No
17	S.496 EA 1996 and S.497 EA 1996	Yes
18	S.19A and Sch. 1A SSFA 1998	No
19	S.496 EA 1996 and S.497 EA 1996	Yes
20	New	-
CHAPTER 2		
21	S.496, 497 and 497A EA 1996	No
22	New	-
23	Partly S.496, 497 and 497A EA 1996, partly new	Yes/-
24	S.63 EA 2002	No
25	S.497A EA 1996	No
26	S.497A EA 1996	No
27	S.497A EA 1996	No
28	S.496, 497 and 497A EA 1996	Yes
29	S.496, 497 and 497A EA 1996	No
30	S.497AA EA 1996 and S.497B EA 1996	No
31	S.497A EA 1996 and S.497B EA 1996	No
CHAPTER 3		
32	New	-
33	New	-
34	New	-
35	New	-
36	New	-
37	New	-
PART 3 : SCHOOL ORGANISATION CHAPTER 1		
38	New	-
39	New	-
CHAPTER 2		
40	S.28(11) and S.33 SSFA 1998	No

41	S.28 SSFA 1998	No
42	S.28 SSFA 1998	Yes
43	S.29 SSFA 1998	No
44	S.31 SSFA 1998	No
45	S.35 and P.1 Sch 8 SSFA 1998	No
46	S.35 and P.3 Sch 8 SSFA 1998	No
47	S.35 and P.4 Sch 8 SSFA 1998 and R.5 SI 2001/2678	No
48	S.35 and P.6 Sch 8 SSFA 1998	No
49	New	-
50	Ss 28. 29. 31 and P.7 Sch 6 SSFA 1998	Yes
51	New	-
52	New	-
53	New	-
54	New	-
55	Ss 28. 29. 31 and P.9 Sch 6 SSFA 1998	Yes
56	Ss 28. 29. 31 and P.10 Sch 6 SSFA 1998	Yes
57	New	-
CHAPTER 3		
58	S. 34 and P.2 – P.3 Sch 7 SSFA 1998	No
59	S. 34 and P.4 Sch 7 SSFA 1998	No
60	S. 34 and P.5 Sch 7 SSFA 1998	No
61	S. 34 and P.12 Sch 7 SSFA 1998	No
62	S. 34 and P.13 Sch 7 SSFA 1998	No
63	S. 34 and P.14 Sch 7 SSFA 1998	No
64	S. 34 and P.15 Sch 7 SSFA 1998	No
CHAPTER 4		
65	S.191 EA 2002	No
66	S.191 EA 2002	No
67	S.192 EA 2002	No
68	Partly S.192 EA 2002, partly new	No/-
69	S.193 EA 2002	No

70	New	-
71	New	-
CHAPTER 5		
72	S.113A LSA 2000	Yes
73	S.113A LSA 2000 and R. 4 - R. 6 SI 2004/1576	Yes
74	S.113A LSA 2000, R.8A SI 2004/1576	Yes
75	S.113A and P.1 Sch 7A LSA 2000	No
76	S.113A and P.2 - P.4 Sch 7A LSA 2000	No
77	S.113A and P.5 - P.7 Sch 7A LSA 2000	No
78	S. 113 and P 1 – P6 Sch 7 LSA 2000 and part new	Yes/-
CHAPTER 6		
79	S 68 EA 2005	No
80	S 69 EA 2005	No
81	S.30 SSFA 1998	No
82	S.32 SSFA 1998	No
83	Ss 28. 29. 31 and P.22 Sch 6 SSFA 1998	No
84	New	-
PART 4 : WELSH IN EDUCATION STRATEGIC PLANS		
85	New	-
86	New	-
87	New	-
88	New	-
PART 5 : MISCELLANEOUS SCHOOLS FUNCTIONS		
89	New	-
90	New	-
91	New	-
92	New	-
93	New	-
94	New	-
95	New	-

96	New	-
97	New	-
PART 6 : GENERAL		
98	New	-
99	New	-
100	New	-
101	New	-
102	New	-
SCHEDULE 1 : GOVERNING BODIES CONSISTING OF INTERIM EXECUTIVE MEMBERS		
1	S.19A and P.1 Sch. 1A SSFA 1998	No
2	S.19A and P.2 Sch. 1A SSFA 1998	No
3	S.19A and P.3 Sch. 1A SSFA 1998	No
4	S.19A and P.4 Sch. 1A SSFA 1998	No
5	S.19A and P.5 Sch. 1A SSFA 1998	No
6	S.19A and P.6 Sch. 1A SSFA 1998	No
7	S.19A and P.7 Sch. 1A SSFA 1998	No
8	S.19A and P.8 Sch. 1A SSFA 1998	No
9	S.19A and P.9 Sch. 1A SSFA 1998	Yes
10	S.19A and P.10 Sch. 1A SSFA 1998	No
11	S.19A and P.11 Sch. 1A SSFA 1998	Yes
12	S.19A and P.12 Sch. 1A SSFA 1998	No
13	S.19A and P.13 & P.14 Sch. 1A SSFA 1998	Yes
14	S.19A and P.15 and P.16 Sch. 1A SSFA 1998	No
15	S.19A and P.17 Sch. 1A SSFA 1998	No
16	S.19Aand P.18 Sch. 1A SSFA 1998	No
17	S.19A and P.19 Sch. 1A SSFA 1998	No
SCHEDULE 2 : REGULATED ALTERATIONS		
1	New	-
2	S 28 and 31 SSFA 1998 and R. 3, 3A and P.8 Sch 2 and P. 5 of Sch 2A SI 1999/1671 and R. 3 and P. 7 Sch 1 SI 1999/1780	Yes
3	S 28 and 31 SSFA 1998 and R. 3, 3A P.5 Sch	No

	2 and P.3 Sch 2A SI 1999/1671 and R. 3 and P.3 Sch 1 SI 1999/1780	
4	New	-
5	S 28 and 31SSFA 1998 and R. 3, P.2 Sch 2 SI 1999/1671 and R. 3 and P.2 Sch 1 SI 1999/1780	No
6	Based on S 28 and 31 SSFA 1998 and R. 3, P.2 Sch 2 SI 1999/1671 and R. 3 and P.2 Sch 1 SI 1999/1780 partly new	Yes/-
7	S 28 and 31 SSFA 1998 and R. 3, P.6 Sch 2 SI 1999/1671 and R. 3 and P.6 Sch 1 SI 1999/1780	Yes
8	S 28 and 31 SSFA 1998 and R. 3, P.6 Sch 2 SI 1999/1671 and R. 3 and P.6 Sch 1 SI 1999/1780	No
9	New	-
10	S 28 SSFA 1998 and R. 3, P.1 Sch 2 SI 1999/1671	No
11	S 28 SSFA 1998 and R. 3, P.1 Sch 2 SI 1999/1671	No
12	S 28 SSFA 1998 and R. 3, P.1 Sch 2 SI 1999/1671	No
13	New	-
14	S 28 SSFA 1998 and Rs. 2 and 3, P.1 Sch 2 SI 1999/1671	No
15	S 28 SSFA 1998 and R. 3, P.3 Sch 2 SI 1999/1671	No
16	S 28 SSFA 1998 and R. 3, P.4 Sch 2 SI 1999/1671	No
17	S 28 SSFA 1998 and R. 3, P.7 Sch 2 SI 1999/1671	No
18	New	-
19	S. 31 SSFA 1998 and R. 3 and P.1 Sch 1 SI 1999/1780	No
20	S. 31 SSFA 1998 and R. 3 and P.4 Sch 1 SI 1999/1780	No
21	S. 31 SSFA 1998 and R. 3 and P.5,Sch 1 SI 1999/1780	No
22	New	-

23	S.28 SSFA 1998 and R.3A and P.1 Sch 2A SI 1999/1671	No
24	S.28 SSFA 1998 and R.3A and P.2 Sch 2A SI 1999/1671	No
25	S.28 SSFA 1998 and R.3A and P.4 Sch 2A SI 1999/1671	No
26	Ss 28 and 31 SSFA 1998 / partly new	Yes/-
SCHEDULE 3 : LOCAL DETERMINATION PANELS		
1	New	-
2	New	-
3	New	-
4	New	-
5	New	-
6	New	-
7	New	-
8	New	-
9	New	-
10	New	-
11	New	-
12	New	-
13	New	-
14	New	-
SCHEDULE 4 : IMPLEMENTATION OF STATUTORY PROPOSALS		
1	New	-
2	Ss 28, 29 and 31 and P.12 Sch 6 SSFA 1998	No
3	Ss 28, 29 and 31 and P.13 Sch 6 SSFA 1998	No
4	Ss 28, 29 and 31 and P.14 Sch 6 SSFA 1998	No
5	Ss 28, 29 and 31 and P.15 Sch 6 SSFA 1998	No
6	New	-
7	Ss 28, 29 and 31 and P.16 Sch 6 SSFA 1998	No
8	Ss 28, 29 and 31 and P.17 Sch 6, SSFA 1998	No
9	Ss 28, 29 and 31 and P.18 Sch 6 SSFA 1998	No
10	Ss 28, 29 and 31 and P.19 Sch 6 SSFA 1998	No

11	Ss 28, 29 and 31 and P.20 Sch 6 SSFA 1998	No
12	Ss 28, 29 and 31 and P.22 Sch 6 SSFA 1998	No
SCHEDULE 5 : IMPLEMENTATION OF PROPOSALS TO CHANGE CATEGORY OF SCHOOL		
1	New	-
2	S. 35 SSFA 1998 and R.8 SI 2001/2678	No
3	S. 35 SSFA 1998 and R.9 and P.1 – P.6 Sch 2 SI 2001/2678	No
4	S. 35 SSFA 1998 and R.9 and P.7 – P.12 Sch 2 SI 2001/2678	No
5	S. 35 SSFA 1998 and R.9 and P.13 Sch 2 SI 2001/2678	No
6	S. 35 SSFA 1998 and R.16 and P.1 Sch 4 SI 2001/2678	No
7	S. 35 SSFA 1998 and R.16 and P.1 Sch 4 SI 2001/2678	No
8	S. 35 SSFA 1998 and R.16 and P.1 Sch 4 SI 2001/2678	No
9	S. 35 SSFA 1998 and R.16 and P.2 Sch 4 SI 2001/2678	No
10	S. 35 SSFA 1998 and R.16 and P.4 Sch 4 SI 2001/2678	No
11	S. 35 SSFA 1998 and R.16 and P.4 Sch 4 SI 2001/2678	No
12	S. 35 SSFA 1998 and R.16 and P.5 Sch 4 SI 2001/2678	No
13	S. 35 SSFA 1998 and R.16 and P.5 Sch 4 SI 2001/2678	No
14	S. 35 SSFA 1998 and R.16 and P.6 Sch 4 SI 2001/2678	No
15	S. 35 SSFA 1998 and R.16 and P.6 Sch 4 SI 2001/2678	No
16	S. 35 SSFA 1998 and R.16 and P.7 Sch 4 SI 2001/2678	No
17	S. 35 SSFA 1998 and R.16 and P.8 Sch 4 SI 2001/2678	No
18	S. 35 SSFA 1998 and R.16 and P.8 Sch 4 SI 2001/2678	No
19	S. 35 SSFA 1998 and R.16 and P.9 Sch 4 SI 2001/2678	No

20	S. 35 SSFA 1998 and R.16 and P.9 Sch 4 SI 2001/2678	No
21	S. 35 SSFA 1998 and R.16 and P.11 Sch 4 SI 2001/2678	No
22	S. 35 SSFA 1998 and R.16 and P.11 Sch 4 SI 2001/2678	No
23	S. 35 SSFA 1998 and R.16 and P.16 Sch 4 SI 2001/2678	No
24	S. 35 SSFA 1998 and R.16 and P.12 Sch 4 SI 2001/2678	No
25	S. 35 SSFA 1998 and R.16 and P.12 Sch 4 SI 2001/2678	No
26	S. 35 SSFA 1998 and R.16 and P.14 Sch 4 SI 2001/2678	No
27	S. 35 SSFA 1998 and R.16 and P.15 Sch 4 SI 2001/2678	No
28	S. 35 SSFA 1998 and R.16 and P.17 Sch 4 SI 2001/2678	No
29	S. 35 SSFA 1998 and R.16 and P.18 Sch 4 SI 2001/2678	No
30	S. 35 SSFA 1998 and R.16 and P.18 Sch 4, SI 2001/2678	No
31	S. 35 SSFA 1998 and R.16 and P.18 Sch 4 SI 2001/2678	No
32	S. 35 SSFA 1998 and R.16 and P.19 Sch 4 SI 2001/2678	No
33	S. 35 SSFA 1998 and R.16 and P.19 Sch 4 SI 2001/2678	No
34	S. 35 SSFA 1998 and R.16 and P.19 Sch 4 SI 2001/2678	No
35	S. 35 SSFA 1998 and R.16 and P.19 Sch 4 SI 2001/2678	No
36	S. 35 SSFA 1998 and R.16 and P.19 Sch 4 SI 2001/2678	No
37	S. 35 SSFA 1998 and R.16 and P.20 Sch 4 SI 2001/2678	No
38	S. 35 SSFA 1998 and R.16 and P.21 Sch 4 SI 2001/2678	No
39	S. 35 SSFA 1998 and R.16 and P.22 Sch 4 SI 2001/2678	No

40	S. 35 SSFA 1998, Sch. 8, P. 5	No
41	S. 35 SSFA 1998 and R.17 – R.18 SI 2001/2678	No
SCHEDULE 6 : MINOR AND CONSEQUENTIAL AMENDMENTS		
Contains minor and consequential amendments		