

Briefing Paper for Bryn Compost Liaison Group

This briefing updates previous reports presented to the Liaison Group, compiled in response to residents' concerns expressed about the possible health effects of Bryn Compost.

Public Health Effects

A briefing was produced for a meeting of Bryn Compost Liaison Group chaired by Mr Jeff Cuthbert in July 2009. This summarised a literature review conducted on the health effects of in-vessel composting by Mr Huw Brunt, Consultant in Environmental Health Protection, Public Health Wales. Records of bioaerosol monitoring at Bryn Composting were also examined and levels found to be below that which would affect the physical health of residents. Recommendations for future monitoring were made.

In July 2010, Dr Gill Richardson and Mr Huw Brunt made a presentation to the Liaison Group. This summarised the available evidence and concluded that any risk to the physical health of the public was very low.

There have been requests by residents in the past for health surveys to be conducted. However, the advice from the UK Expert Committee on the Medical Effects of Air Pollution states that 'single site studies of the effects of air pollutants on health are unlikely to have sufficient statistical power to confirm or refute assertions of effects and there is significant risk that the results of such investigations will be impossible to interpret'. In addition, other limitations include the fact that it would not be possible to attribute small area study findings to a specific potential point source. It would be difficult to separate out the other causes of ill health, including socio-economic influences such as lifestyle behaviours, deprivation, education and employment.

An examination had been conducted, however, of 'Quality and Outcomes Framework' data, which GPs collect routinely as part of their contract. These data have been presented previously in 2011 and 2013 to the Liaison Group, which indicated no significant effect on the health of the public. Updated data are presented below.

Quality and Outcomes Framework

GP practices can voluntarily participate in the Quality and Outcomes Framework (QoF). This allows them to be rewarded, through financial incentives, for good practice (and its associated workload).

Prevalence for specific diseases can be recorded as part of QoF process. It must be noted that prevalence data is only for conditions have been **diagnosed** and then captured by GP information systems. Also, as the QoF data is primarily used to monitor GP practice performance against their contract, secondary uses of the data need to be interpreted with caution.

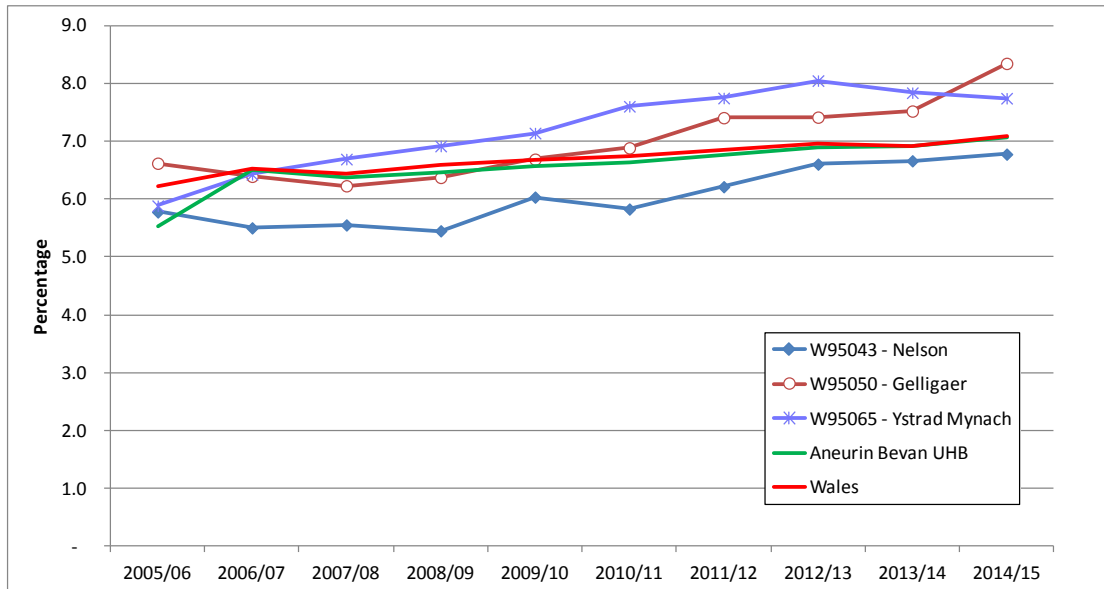
Practices do vary in the prevalence rates recorded. The least variability is found for conditions with an onset that is easily recognised by both the patient and clinician (for example, a stroke), and the greatest variability for conditions where identification is more dependent on individual and clinician practice (for example depression).

Also to note is the fact that the data shown below have not been age standardised. Age standardisation allows comparison of rates across different populations while taking account of the different age structures of those populations. Differences in prevalence may be due to different population structures in practices.

The following charts show QoF data on disease prevalence for Asthma, Chronic Obstructive Pulmonary Disease (COPD) and Depression for Wales, Aneurin Bevan University Health Board as a whole, and for practices in Gelligaer, Nelson and Ystrad Mynach.

Asthma

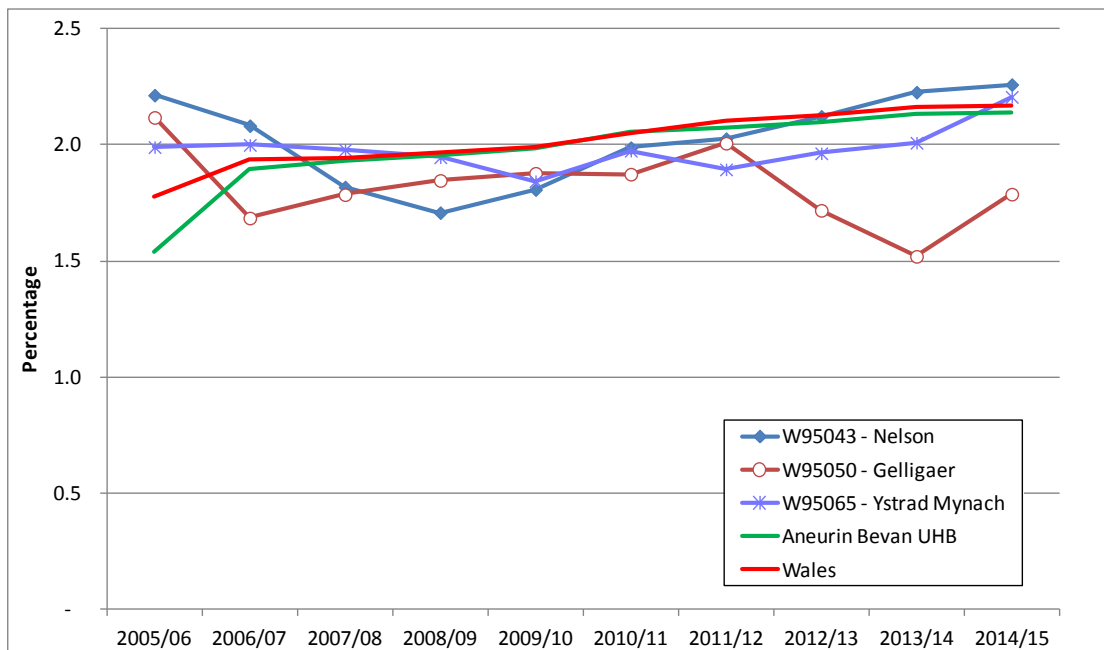
Asthma prevalence has been increasing for some time; this is a national trend. Trend data show that prevalence has tended to be highest overall over the period of monitoring in Ystrad Mynach, the practice furthest away from the area of interest. Although the percentage was slightly higher in Gelligaer for 2014/15, the difference between Gelligaer and Ystrad Mynach was not statistically significant.



Chronic Obstructive Pulmonary Disease (COPD)

Prevalence for COPD is low, around 2% of the population. Small numbers means that year to year fluctuations are likely and small numbers influence percentage prevalence unduly.

Prevalence in Nelson and Ystrad Mynach practices are similar to the Aneurin Bevan and Wales rates. Whilst rates in Gelligaer have been lower in recent years.



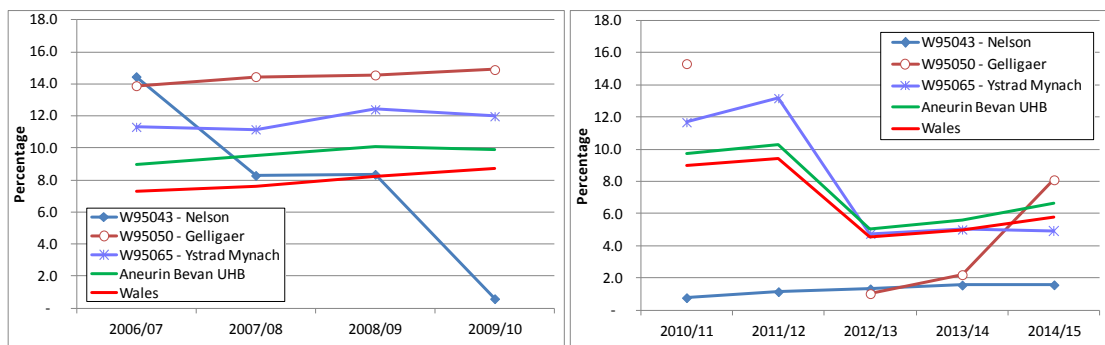
Depression

Data on depression are only available from 2006/07, so a baseline for mental health before Bryn Composting was operational is not available. Over time there has been a change in the way the QoF data has been requested and reported, meaning that it is difficult to

make comparisons (see Appendix 1), so the trend data are separated into two charts below.

The improvement in depression levels in Nelson from 2007/8 may be an artefact of reporting, but it is known that the practice underwent a change in software in 2009/10 which affected their data collection process.

For the earlier years, prevalence is highest in the Gelligaer practice. Data are not shown for 2011/12 for Gelligaer as the practice changed its clinical data system which affected the quality of the coding for depression. The sharp increase in 2014/15 is possibly an artefact of reporting and due to delay getting accurate coding entered for depression cases in 2012/13 and 2013/14. It would have been unlikely for depression prevalence to have dropped suddenly from 14.5% in 2009/10 to 2% in 2012/13 and 2013/14. The level of 8.1% prevalence in 2014/15 is still lower than the 14.5% level reported in 2009/10. Future prevalence will be necessary before any indication of trend. The diagnosis of mild depression can be difficult and thresholds for diagnosis may vary between clinicians and practices.



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Appendix

QoF Depression definitions

2006/07, 2007/08 and 2008/09	In those patients with a new diagnosis of depression, recorded between the preceding 1 April and 31st March, the percentage of patients who have had an assessment of severity <u>at the outset</u> of treatment.
2009/10	Patients diagnosed with depression between the preceding 1 April and 31 March.
2010/11	In those patients with a new diagnosis of depression, recorded between the preceding 1 April to 31 March, the percentage of patients who have had an assessment of severity <u>at the outset or have had a further assessment of severity 5-12 weeks (inclusive) after the initial recording.</u>
2011/12	In those patients with a new diagnosis of depression, recorded between the preceding 1 April to 31 March, the percentage of patients who have had an assessment of <u>severity at the time of diagnosis or who have had a further assessment of severity 4 - 12 weeks (inclusive) after the initial recording.</u>
2012/13	In those patients with a new diagnosis of depression, recorded between the preceding 1 April to 31 March, the percentage of patients who have had an assessment of <u>severity at the time of diagnosis or who have had a further assessment of severity 2-12 weeks (inclusive) after the initial recording.</u>
2013/14	Patients aged 18 or over with a new diagnosis of depression in the preceding 1 April to 31 March, who have had a <u>bio-psychosocial assessment by the point of diagnosis or who have been reviewed not earlier than 10 and not later than 35 days after the date of diagnosis.</u>
2014/15	Patients aged 18 or over with a new diagnosis of depression in the preceding 1 April to 31 March, who have been reviewed not earlier than 2 weeks after and not later than 8 weeks after the date of diagnosis.