



Ein cyf/Our ref WQ 85755 and WQ85757

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Please find below answer to your Written Questions.

**WQ85755**

**Janet Finch-Saunders (Aberconwy):** What evidence has the Minister received that slurry spreading may be contributing to bovine TB transmission and persistence?

**Lesley Griffiths:** Historical research data suggests that TB infected cattle can intermittently shed *Mycobacterium bovis* (*M.bovis*) via their faeces, which contaminates the environment and increases the risk of exposure. Previous studies have reported that *M.bovis* can survive for 6 months in slurry under certain conditions and for 30 days in a well maintained manure heap.

The results of a recent study, Assessment of the frequency of *Mycobacterium bovis* shedding in the faeces of naturally and experimentally TB infected cattle (Palmer et al, 2022), found the prevalence of *M. bovis* in the faecal samples was extremely low. The study suggests that the risk of spreading TB through the use of slurry or manure as an agricultural fertilizer may be lower than that suggested in some historical literature. The authors go on to say that given the limits of detection of the methods used in this study, it is possible that *M. bovis* is present at sub-detectable levels in the faeces from reactor cattle. The large volumes of faeces spread on farmland (via slurry and manure) may mean that even very low levels of *M. bovis* could represent a risk of spread of disease, although it is difficult at present to quantify this risk.

Uncertainty remains about the overall importance of the risk of transmission of *M.bovis* to other cattle and wildlife via the spreading of slurry. Whilst uncertainty remains best practice advice on slurry application, transport and cattle grazing following slurry application, should be maintained.

**WQ85757**

**Janet Finch-Saunders (Aberconwy):** What steps is the Welsh Government taking to increase knowledge of how bovine TB is transmitted between wildlife and cows and within the wildlife population?

**Lesley Griffiths:** The results from a number of studies which examined the relative rate of transmission between and within species have recently been published.

The strongest evidence so far is currently being provided by the modelling of Whole Genome Sequencing (WGS) results. The studies are providing similar results but varying between whether cattle to badger or badger to cattle transmission is higher and this may depend on local circumstances. All of these studies so far have recognised within species transmission as being significantly higher.

We will continue to work with partners, particularly DEFRA and APHA. Developments in WGS technology, Single Nucleotide Polymorphisms and phylogenetic trees will add to our epidemiological understanding of local disease transmission.

It is now, not really so much about understanding the mechanisms of transmission in greater detail, as we know they occur, but more about understanding of the relative frequency with which they occur and why in different local situations.

Regards

A handwritten signature in black ink that reads "Lesley Griffiths". The signature is written in a cursive style with a large, sweeping flourish at the end of the name.

**Lesley Griffiths AS/MS**

Y Gweinidog Materion Gwledig a Gogledd Cymru, a'r Trefnydd  
Minister for Rural Affairs, North Wales and Trefnydd