

Why does DEFRA concentrate on incidence rather than prevalence?

When illustrating TB statistics, DEFRA often show incidence but rarely show prevalence. Incidence shows how TB is changing but does not reveal the extent to which the disease has piled up. Showing prevalence is important because in High Risk Areas prevalence feeds incidence in the Low Risk Areas so it is important that focus on prevalence is maintained.

DEFRA omit prevalence in the graphs which they show when they announce their monthly statistics (Ref 1). They also give poor coverage to prevalence maps in their annual surveillance reports for Great Britain (Ref 2). DEFRA do show a prevalence map (Ref 3) but the bands used in that map are so big as to severely limit usefulness.

Breakdown duration maps are very important because in High Risk Areas these maps would give a good indication of how areas subjected to TB persistence are expanding and in edge counties how TB persistence is being introduced into new areas. Breakdowns which prevail hurt the farming industry far more than transients which DEFRA are highlighting by concentrating on incidence. If the aim is to get on top of the disease to help the farming industry, greater use should be made of breakdown duration maps which show persistence. These maps should be shown in different regions and at different scale and, if possible, in the form of time-lapse videos if this has potential to reveal how TB is developing.

Currently the incidence maps which AHVLA show in Ref 1 are misleading. Intuitively such maps should show less content in a good year. In fact they show the opposite because in a good year when a lot of long term breakdowns are cleared up, the map will show many breakdown points. Also in a bad year when very few breakdowns are cleared up, very few breakdown points will be shown on the map. Hence a good year will result in a cluttered map and a bad year will result in a relatively clear map. This is very counter-intuitive.

In any strong drive to resolve issues for struggling farmers in the High Risk Areas, the focus would be on persistence rather than incidence.

What is making DEFRA focus on incidence rather than prevalence?

References

1. <https://www.gov.uk/government/publications/incidence-of-tuberculosis-tb-in-cattle-in-great-britain> (Figs 1 and 2 in first document)
2. <http://www.defra.gov.uk/ahvla-en/files/pub-survreport-tb12.pdf> (Fig 4.3 on Page 34)
3. <http://www.defra.gov.uk/ahvla-en/files/pub-survreport-tb12.pdf> (Fig 3.3 on Page 30)