

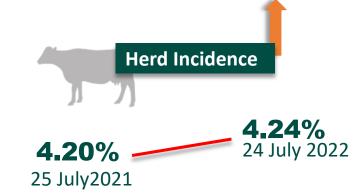
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**Herds Restricted** 

**4,460**In the last 12 months

4,467 In the previous 12 months

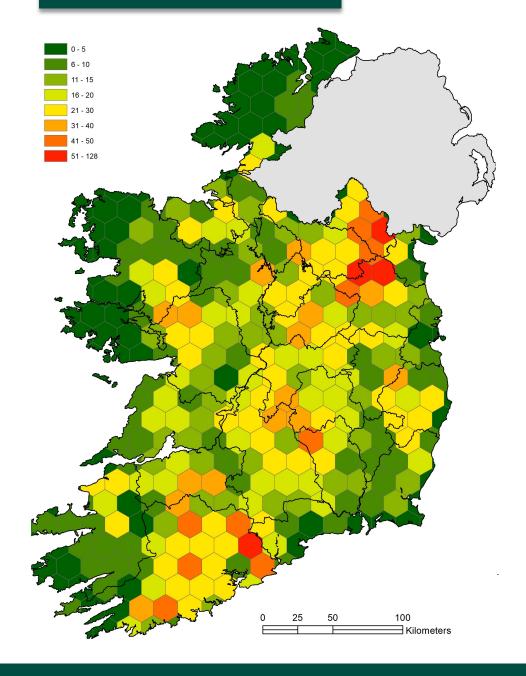
Reactors 20,764 in the last 12 months 21,546 in the previous 12 months



#### 5-year herd Incidence



2017 - 3.47% 2018 - 3.51%



# Clear felling Forestry (Byrne et al., 2022)

- Mixed evidence of an association between bTB breakdown risk and the timing of clearfelling activities in Ireland, for herds with farmsteads within 3 km.
- The percent of herds positive rose from 3.47% prior to clearfelling to 4.08% after exposure. After controlling for confounders (e.g., herd size, herd type), we found that cattle herds significantly increased their odds of experiencing a bTB breakdown by 1.2-times (95%CIs: 1.07–1.36) up to 1 year after a clearfell risk period.
- The association was significant for a model, defining breakdowns as those with one or more reactors disclosed.
- The association was non-significant for a model where only breakdowns with two or more reactors were included as positive cases
- Further studies ongoing
- Risk associated with Herd type, herd size, inward cattle movement and previous TB history were also risk factors

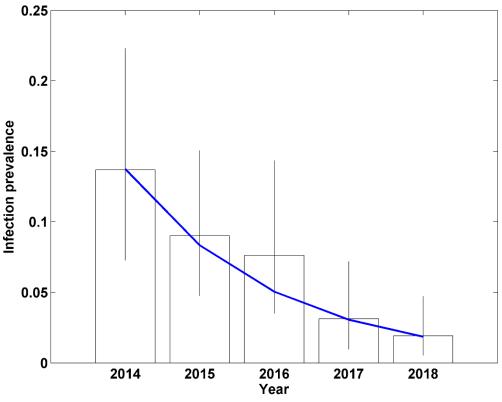
## Road Building (Barrosa et al., 2021)

- Slightly Increased risk of TB breakdown within 1 Km of road building (from 0.02 to 0.04)
- Risk associated with Herd type, herd size, inward cattle movement and previous TB history were also risk factors

### Annual badger bTB prevalence in TVR (2014-2018)

Annual 39% reduction in badger bTB prevalence Statistically significant trend 14% (year 1) to 2% (year 5)

Estimates of bovine TB infection prevalence for badgers in Northern Ireland using a Bayesian model applied to data from 3 diagnostic tests, using independent parameters for the prevalence each year (bars) and fitting an exponentially declining trend for the prevalence each year (blue line).



Arnold, M.E., Courcier, E.A., Stringer, L.A., M<sup>c</sup>Cormick, C.M., Pascual-Linaza A.V., Collins, S.F., Trimble, N.A., Ford, T., Thompson, S. and Menzies, F.D. (2021). A Bayesian analysis of a test and vaccinate or remove study to control bovine tuberculosis in badgers. *PLoS ONE*, , **16**, e0246141.

# Test Vaccinate Remove (NI) (Allen et al., 2022)

 No compelling evidence of a generalized social perturbation effect in badgers at the population level under this selective culling protocol.