A *shiny* online epidemiological resource centre

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The Resource Centre

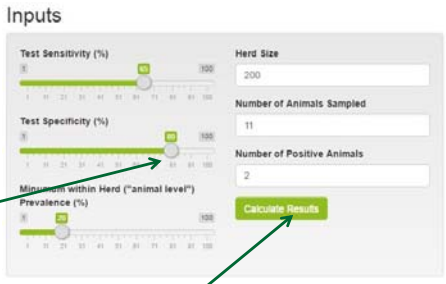
The SRUC epidemiology resources website showcases the models and online applications the Epidemiology Unit has built. The online applications and models have been created and published using R, RStudio® and Shiny®.

How does it work?

Free to use

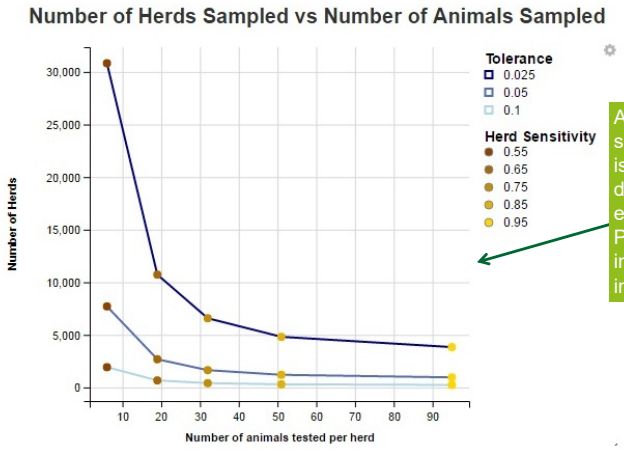
Choose your app or model.

Adjust the input values using the sliders or textboxes provided. In some apps tooltips give additional help.



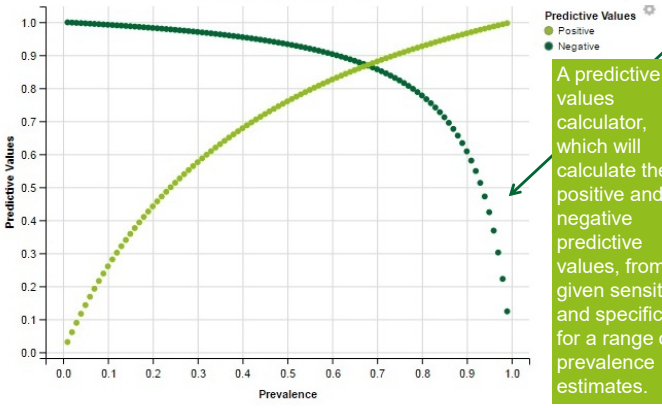
Once you're happy with the inputs click 'calculate results'. Then the graphs and tables will be redrawn with the updated outputs.

Applications

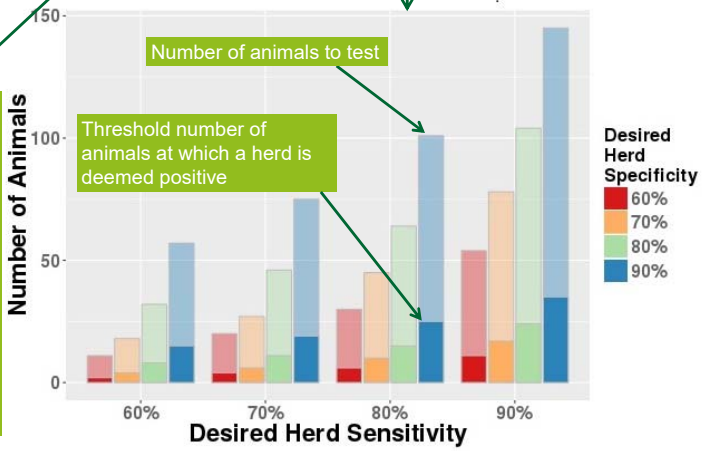


A two stage sample size calculator, which is designed to help design surveys to estimate Herd Level Prevalence when the individual test is imperfect.

A within herd sample size calculator for designating a herd as positive or negative based on a number of animals tested using an imperfect test. Also known as "demonstrating freedom of disease".



A predictive values calculator, which will calculate the positive and negative predictive values, from a given sensitivity and specificity, for a range of prevalence estimates.



Models

The resource centre also provides interactive models ("calculators"):

For example the **Herd Health Cost Calculators** for breeding and finishing pig herds provide estimates of Economic Cost and Herd Health Score for PRRS or Enzootic Pneumonia. The calculations are based on a number of farm characteristics and the herd status for the particular disease.

Acknowledgements

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Further Information is available from:
SRUC Research, Epidemiology Research Unit, An Lòchran, Inverness Campus, Inverness, IV2 5NA

Access the *shiny* online epidemiological resource centre at https://epidemiology.sruc.ac.uk