



Disease Mapping

SDI Network Resource

Advice to client

Understand disease event sufficiently to prevent further cases

History & Provisional diagnosis

Collect systematic history to increase the chance of a confirmed diagnosis

1 Case definition

Case features of the presenting problem



- Species and class, typical clinical signs, duration...
- Gives focus when more than one disease process in place

4 Relative risk

Explore animal / management / environment risk factors

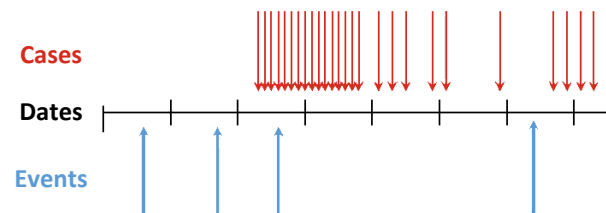
- Compare cases with non-cases
- Use Venn circles and mapping to interrogate
- Jackpot if reach point of applying criteria for causation

	Cases	Total at risk	Attack rate	Relative risk
With feature	n_1	N_1	n_1/N_1	$\frac{\text{Attack rate}_1}{\text{Attack rate}_2}$
Without feature	n_2	N_2	n_2/N_2	

2 Timeline

When cases occurred, when they didn't

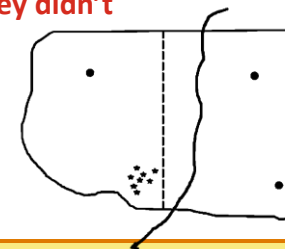
- Sequences events, Lets you see clusters
- Find the first case – and what happened before
- What differs when cases occur or don't
- Use Venn circle thinking to interrogate



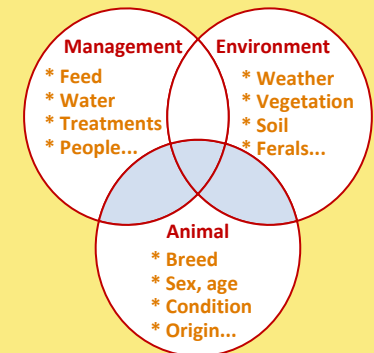
3 Spatial mapping

Where cases occurred, where they didn't

- Lets you see clusters
- Overlay infrastructure, geography...



Tips



- Avoid early conclusions
- Do the analysis first
- Ask open questions
- Listen
- Use collective memory
- Delegate tasks
- Revisit case definition as you progress