Control of leptospirosis in livestock

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Leptospirosis: an occupational disease
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Complex disease
WHAT ARE WE TRYING TO ACHIEVE?
Protect the livestock?

- Hardjo and Pomona
  - Likely no loss
  - Possibly abortion
  - Reduced weaning rate
  - Reduced growth rate
  - Possible reduced milk production

- Other serovars?
Protect humans
HOW?
We will build a great, great wall
And we’ll make the livestock pay for it
Strategies

- Eradication
- Culling of infected animals
- Awareness
- Risk management
  - Protective equipment
  - Biosecurity
- Vaccination!
Vaccination works!

- Meta-analysis (cattle & deer, J. Sanhueza)
  - 71-89% protection
- Effectiveness in sheep
  - 100% protection
  - Even when schedule not optimal
- Dairy (Y. Yupiana)
Vaccination works!… But...

• Serovar-specific
  • Currently 3 (out of 6) in the vaccine

• TIMING is key
  • Not too early (maternal immunity)
  • Not too late (before exposure)
Leptosure®

- NZVA & Diary cattle vets initiative
  - Reduce human leptospirosis on dairy farms
- Working plan between dairy farmer and veterinarian
- Risk identification and management
So?

• Know your risks!

• Vaccinate
  • More serovars?