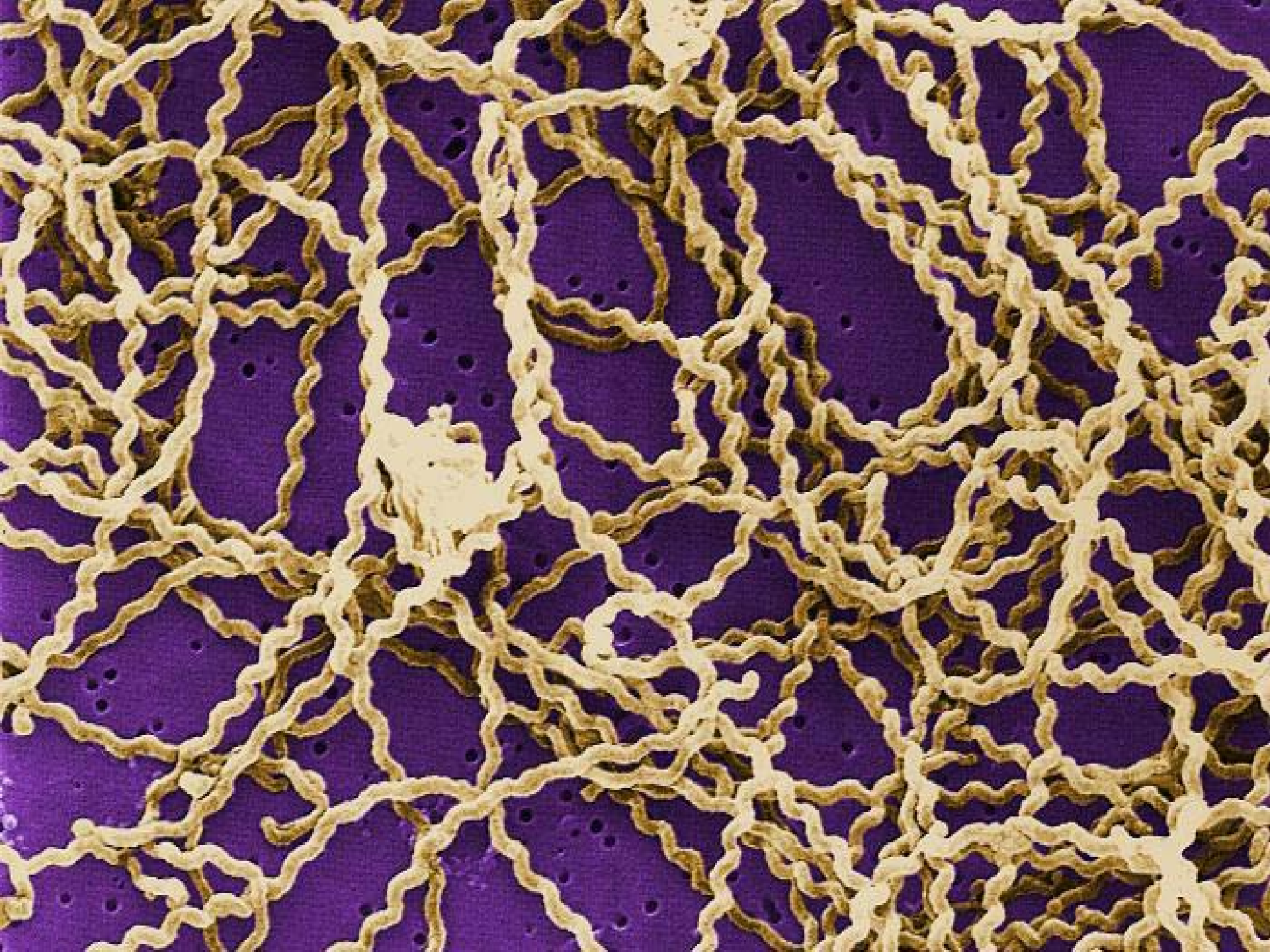


Leptospirosis in Deer

Summary

- Leptospirosis is a very common infection of deer, that can be transmitted to people.
- Recent research shows that infection reduces growth and decreases weaning percentage, and
- along with preventing human exposure vaccination with Leptavoid will prevent these losses.



Serovar	Maintenance host(s)	Accidental host(s)
Hardjo	cattle deer sheep	humans
Balcanica	possums	humans cattle
Ballum	mice black rats hedgehogs	Humans, deer cattle
Tarassovi	pigs	humans dogs cattle
Pomona	pigs	Deer, humans cattle sheep
Copenhageni	brown rats	humans cattle, deer dogs horses

How common is Leptospirosis?

- Most herds have evidence of infection.
- Hardjo endemic ~80% of farms
- Pomona is present in about 20% of herds
- There are no regional differences







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TO-DO LIST

~~NOTHING~~



Growth?

Hind ¼ Primals

Loins
(Backstraps)

Front ¼ Primals



Study 1. Infected vs. non-infected deer:

- Red deer farm
 - 80 deer 3 – 12 months
- Infection vs. non infection
- Weight gain 3 – 12 months

Lepto “negative”

3.71 kg

**heavier than
“positive” deer**

+\$15

carcass value

Study 2: Response to vaccine: Method

- 5 red deer farms
- 3- months-old
 - Vaccination
 - “Leptavoid – 2”
 - Booster after 1 month
 - Controls
- 11-months-old
 - Weigh



Study 2: Response to vaccine: - Results

Farm	No	Seroprevalence (%)		Mean weight gain (Vaccinate v. Control) (g/d)
		Hardjo	Pomona	
1	15	87.5	0	+26.5
2	25	5	0	+12.4
3	21	6.7	0	+16.3
4	26	0	0	0
5	24	0	0	-4.8

Study 2: Response to vaccine: Results



Carcass value increase

\$15 - \$33

Reproduction?



Study 1. Infected vs. non-infected deer:

- R2 red hinds
- Infection vs. non infection
- Weaning %
– 97 vs 88%

Lepto “negative”

9%

more fawns at
weaning

\$ Weaner

Study 2: Response to vaccine: Method

- 4 red deer farms
- Maiden hinds
 - Vaccination autumn
 - “Leptavoid – 2”
Booster after 1 month
 - Controls
- Low level Hardjo



Study 2: Response to vaccine: Results



5%

Increase in weaning %

2 – 9%

**Return /\$ investment
vaccination**



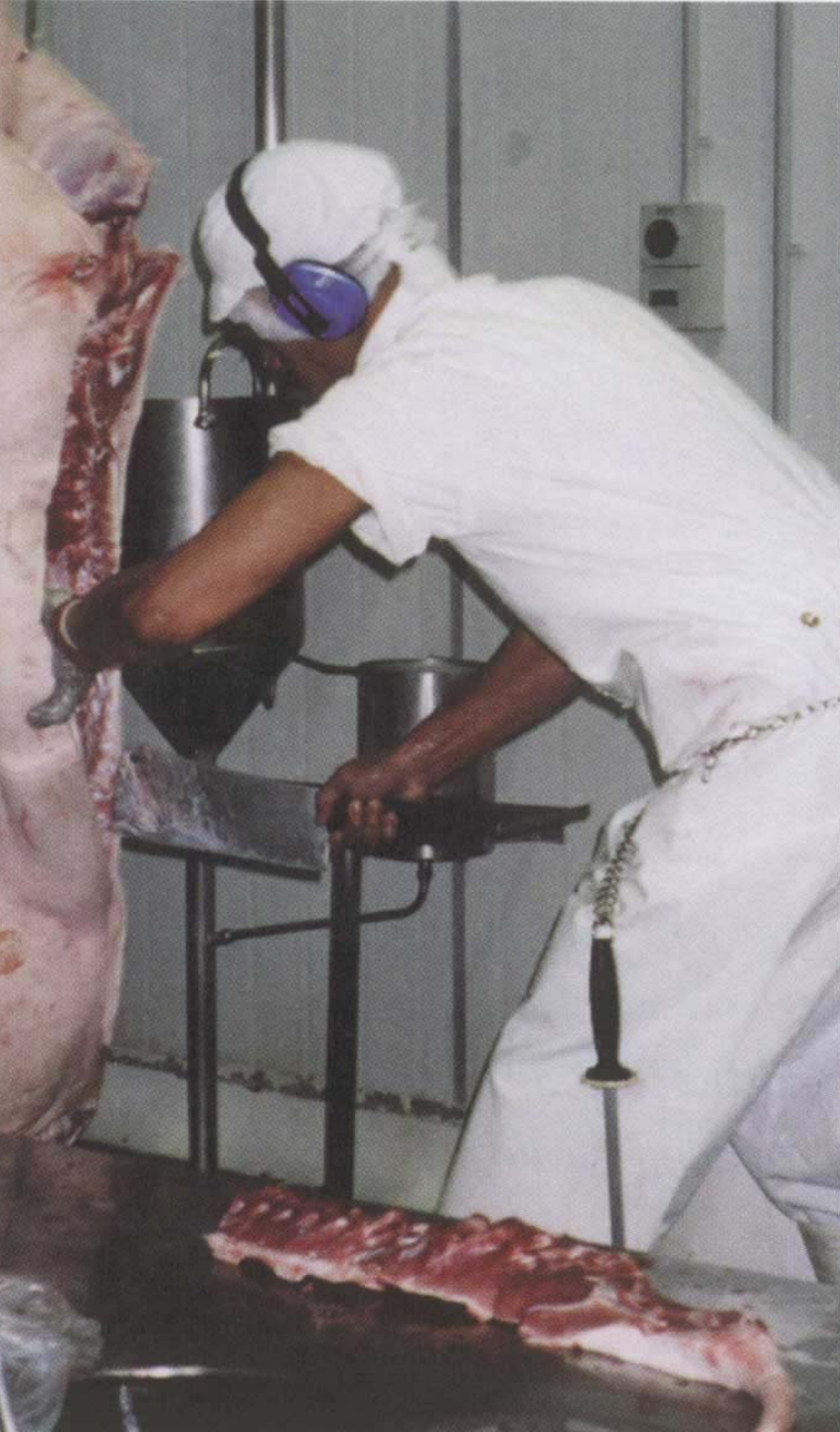
**If infected a cost-effective response to
vaccination**

How do I diagnose infection?

- Simple
- Vet sample 15 deer
- 1 > deer
- Herd positive







How do I prevent infection?



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Vaccination



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Vaccination

- First Leptavoid at about 3 months of age
- booster 4 to 6 weeks later.
- Annual revaccination
 - hinds 4 to 2 weeks prior to calving
 - stags when convenient.
- Veterinary prescription.



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