



Swine dysentery

Surveillance and treatment update

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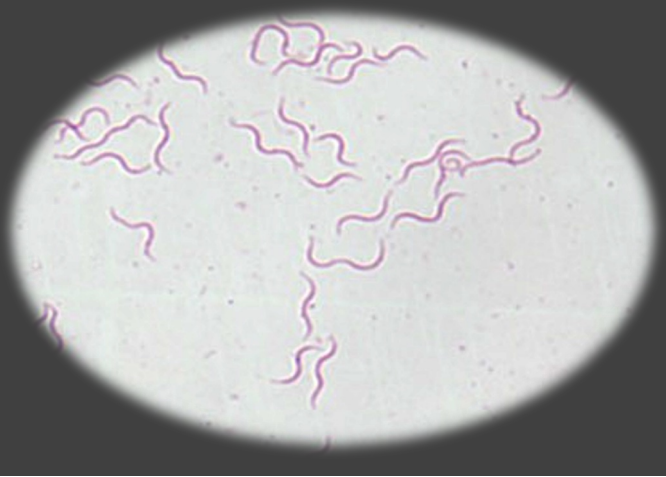
Swine Dysentery

First described in 1921

Brachyspira
hyodysenteriae
identified in 1971



Swine dysentery Now



- >8 weeks of age
 - **Fecal-oral** transmission
 - **Extremely contagious**
 - Between farms via **fomites** (boots, trucks...)
 - Incubation (2-14 d)
- **Long term survival** in the environment
 - Manure pits – 60 d
 - Many reservoirs (rodents, dogs, birds, pigs)
 - Mice – 1 yr

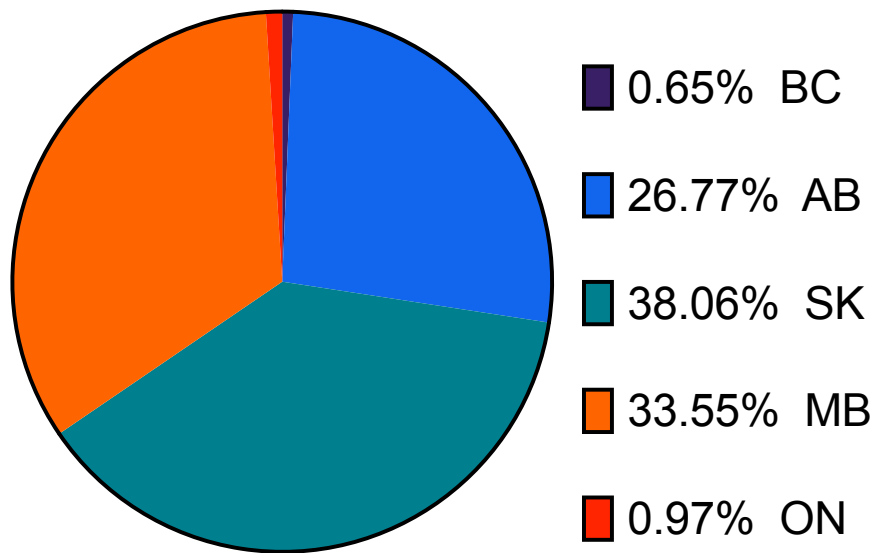


Swine dysentery Now

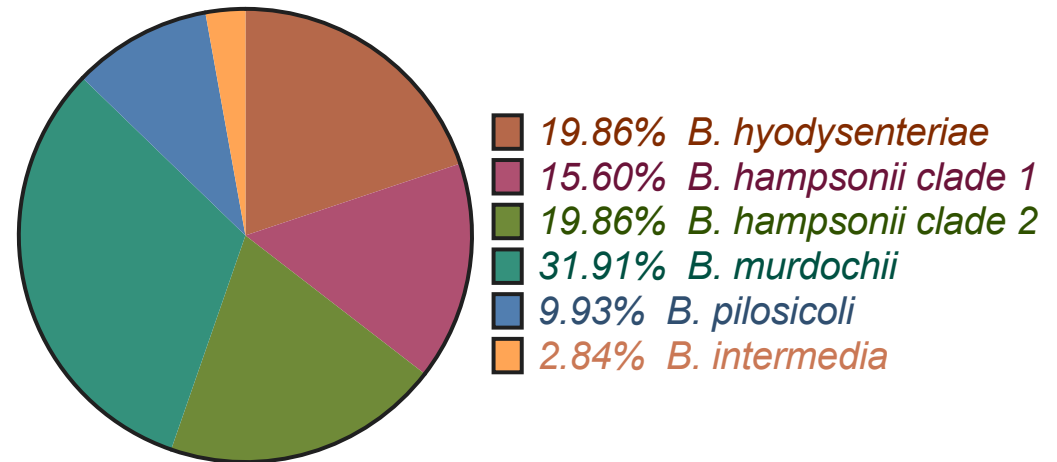
<i>Brachyspira</i> species	Non-pig hosts	Disease
<i>B. hyodysenteriae</i>	Rat, mouse, duck	Swine dysentery
<i>B. hampsonii</i>	Rat, mouse, duck	Swine dysentery
<i>B. suanatina</i>*	water fowl	Swine dysentery
<i>B. pilosicoli</i>	Human, non-human primates, dogs, horses, mouse, rat, chicken, turkey, duck, bird	Spirochetal diarrhea
<i>B. innocens</i>	Chicken, horse	Non-pathogenic
<i>B. intermedia</i>	Chicken, rat	Non-pathogenic
<i>B. murdochii</i>	Chicken, rat, mouse	Rare colitis, unclear
<i>B. suanatina</i>	Duck	Rare colitis

* Not found in Canada - yet

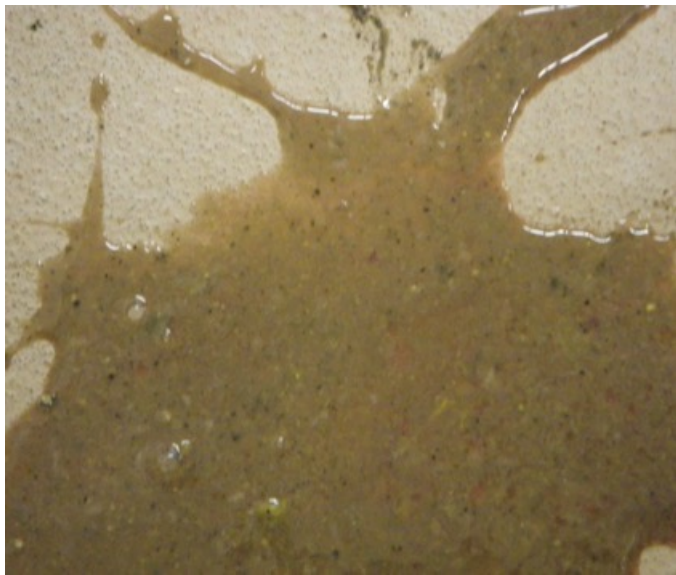
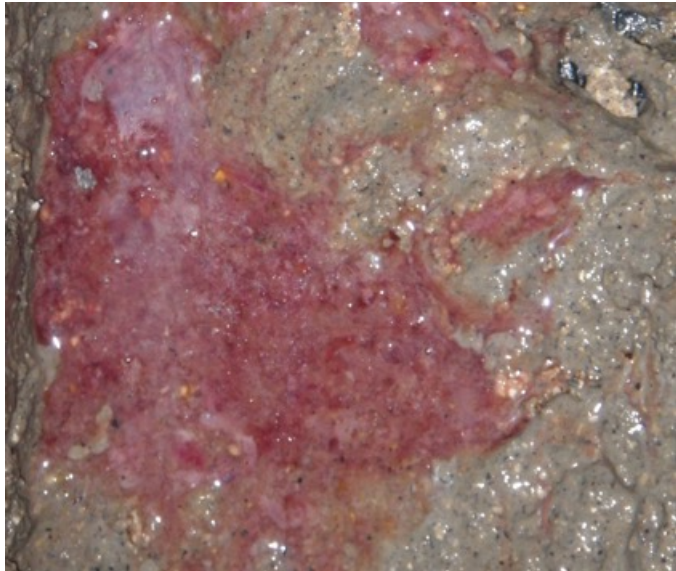
SD Surveillance - 2020/2022



Total=310



Total=141



Swine Dysentery challenges



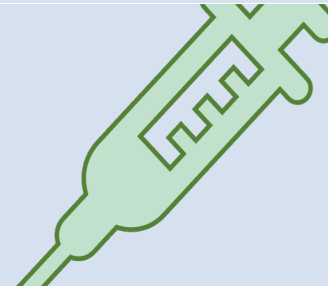
Treatment

Animals stop eating – feed medication doesn't work



Cost

Long term medication
(cost \$9-16/pig)



Prevention

- Biosecurity
- No licensed vaccines in Canada
- One licensed vaccine in the EU
 - Unlikely to work in Canada



Elimination

- Costly
- Availability of space
- Continuous auditing and staff training

Thank you!



Juan Parra

Dr. John Harding



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<https://research-groups.usask.ca/costalab/>