Switzerland-wide *Neospora caninum* seroprevalence in female cattle and identification of risk factors for infection

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Questionnaire survey for cattle farms in Switzerland

# 1. General information about owner and farm

## Owner: name, address, telephone number, e-mail

Farm: registration number; production type (dairy, beef, dairy+beef, other: …….)

Number of animals

Restocking: rearing of replacement heifers (yes/no), buying-in (yes/no), rearing of replacement heifers + buying-in (yes/no)

# 2. Information on bovine husbandry and bovine health

Type of husbandry:

stable and pen: tie-stall (yes/no), free stall (yes/no)

stable and local pasture: tie-stall (yes/no), free stall (yes/no)

alpine summer grazing (yes/no)

Type of water supply:

public supply water (yes/no)

private water source: groundwater (by water pump) or spring (yes/no)

pond/stream (yes/no)

other: …….

Feed for cattle:

pasture/ fresh grass (yes/no), hay (yes/no), grass silage (yes/no), corn silage (yes/no),

concentrated feed (yes/no), other: …….

Proportion of pasture in whole feed (if grazing):

<25%, 25 - 50%, or >50%

Storage of feed:

open (dog has access) (yes/no); closed (yes/no), how is it closed: …….

History of cattle abortion in the previous 5 years?

don't know

no

yes, how many: …….

* + if yes, was aborted material examined (yes/no)
    - if yes, were abortifacient pathogens detected? (yes/no)
      * if yes, which ones: *Neospora caninum* (yes/no), others: …….

# 3. Information on dog ownership

Have there been own dogs on the farm in the last 6 years? If so, tick affected years.

no

yes: 2021, 2020, 2019, 2018, 2017, 2016, 2015

* If yes:

Did your own farm dogs have access to: stable (yes/no), pasture (yes/no), feed storage (yes/no)?

Have there been puppies (≤6 months) on the farm in the last 4 years? (yes/no/don’t know)

Do foreign dogs (e.g., dogs of hikers) have access to: stable (yes/no), pasture (yes/no), feed storage (yes/no)?

What are the dogs fed with? canned/dry food (yes/no), leftovers (yes/no), raw meat (yes/no), dog hunts rodents/birds (yes/no)

# 4. Information on other animal species

Have you had problems with rodents (mice, rats) in the last 2 years? (yes/no)

Do you keep other animal species besides cattle (and dogs) on the farm? If so, which animal species and how many animals each?