

Cryptosporidium- information to customers

Dear Madam / Sir

In the latest Health Monitoring Report (HMR) issued December 2023 it is reported that 1 of 15 fecal samples from Barrier 3 tested positive for *Cryptosporidium* in a fecal sample. The initial test method used is a duplex real time PCR targeting the 18S rRNA genes for *Cryptosporidium spp* and *Giardia duodenalis*. Subsequent genotyping as described by Rotovnik et al, 2024 targeting the gp60 gene has shown the sample to be a *Cryptosporidium parvum* subtype *lldA22G2R1*. Repeated re-testing of the minipig in question as well as pen mates was performed by our primary laboratory, Statens Serum Institut (SSI), which is under the auspices of the Danish Ministry of Health, as well as a second opinion laboratory, LABOKLIN. These provided conflicting results with the first yielding some positive results, and the latter none. The results from SSI demonstrated relatively high Ct-values (>34), indicating low quantity DNA presence.

There are no clinical findings in the minipigs in Barrier 3 which could be related to the finding and no apparent impact on productivity, which is in agreement with literature (Petterson et al, 2020). These infections are generally self-limiting. As all animals are in a strict barrier facility with comprehensive rules of access in place, a new introduction of this organism is less likely. Rather, it has just been detected now as testing for *Cryptosporidium* was only recently implemented in the HMR.

Conclusion

In conclusion, the results indicate that a presence of *Cryptosporidium* is likely limited and with no clinical effects in the minipigs.

The incidence of *Cryptosporidium* will be monitored closely over the next months.

Cryptosporidium parvum is potentially zoonotic. However, the limited prevalence of this organism, and the fact that housing and husbandry standards for animals used for scientific purposes are high, make this a finding of little human health concern.

As always when handling minipigs and other animals, we recommend proper hygienic measures, e.g., not eating in the room where the animals are housed, washing of hands before eating etc.

For questions to this matter, please contact veterinarian@minipigs.dk

Sincerely,
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References

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