Classical Swine Fever Case Definition

Clinical Signs (in an area where CSF is not known to be present)
Swine affected with a viremia characterized by persistent fever, skin discoloration, conjunctivitis, abortion and/or diarrhea that is unresponsive to antibiotics. Leucopenia is a consistent clinical laboratory finding. Severity is variable. Three common forms are acute, chronic, late onset.

<u>Acute</u> – illness in weaned pigs under 12 weeks of age that is unresponsive to antibiotics and characterized by fever, skin discoloration, conjunctivitis, hind-limb weakness and/or diarrhea.

<u>Chronic</u> – characterized by subdued acute infection followed by brief recovery before relapse of fever, anorexia leading to wasting and death 1-3 months after onset.

<u>Late onset</u> –pigs born to sows infected after day 50-70 of gestation may be persistently infected and appear normal for several months before dying or be born with congenital tremors. (Sows infected prior to day 50-70 of gestation may abort or give birth to stillbirths, mummies, or pigs with congenital defects).

Clinical Case Definition

A herd exhibiting one or more of the following clinical features:

- * a herd with clinically compatible cases
- ❖ a herd with clinically compatible cases with necropsy examination demonstrating splenic infarcts, hemorrhages of the kidney, bladder, lymph nodes, larynx, or other evidence of septicemia
- ❖ a herd with clinically compatible cases that in the previous three months had either imported genetic material from a foreign country, fed waste to swine, or had on site a person recently on a farm in a foreign country

Laboratory Criteria for Diagnosis

Compatible clinical case plus one or more of the following:

- ❖ PCR positive confirmed by sequence analysis
- ❖ Virus isolation positive with identification by Avidin Biotin Complex (ABC) assay and/or PCR
- Detection of CSF antibody by ELISA with confirmation by immunoperoxidase virus neutralization (IP-VN) assay

Case Classification

Suspect: A case that meets either of the following conditions:

- ❖ A CSF suspicious case that meets the clinical case definition
- ❖ An inconclusive or positive result on real-time rRT-PCR by a NAHLN laboratory

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Appendix A: Classical Swine Fever (CSF) Case Definition

<u>Presumptive</u>: A suspect case that is laboratory confirmed by FADDL based on one of the following agent detection methods:

- ❖ Positive reading on real time rRT-PCR or conventional PCR
- Positive ABC assay result on tissues (prior to virus isolation).

<u>Non-definitive</u>: Detection of CSF antibody by ELISA with confirmation by IP-VN assay by FADDL but negative on PCR and virus isolation.

<u>Confirmed</u>: A case that meets the clinical case definition and which is laboratory confirmed at FADDL via virus isolation with sequence confirmation.

Comments:

CSF suspicious cases should be reported immediately to the State AVIC. The AVIC's responsibilities are detailed in VS Memorandum 580.4 and result in a timely investigation of the suspected herd by a FADD.

NAHLN samples from high risk VDL swine submissions or slaughter condemnations are assumed to meet the clinical case definition.

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