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.

Acute – 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.

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

Late onset – 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
Appendix A: Classical Swine Fever (CSF) Case Definition

Presumptive: 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).

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

Confirmed: 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.