

B. Collections of Information Employing Statistical Methods

1. Describe the potential respondent universe and any sampling or other respondent selection methods to be used.

Most investigations of outbreaks or emergencies require interviews of all producers whose operations are affected by the condition in question. Investigators may, on occasion, interview a sample of affected operations in a case series fashion. The respondent universe for this study includes all commercial swine farms with a history of Porcine Deltacoronavirus (PDCoV) located in 7 states (Iowa, Illinois, Indiana, Michigan, Minnesota, Montana and Ohio).

2. Describe the procedures for the collection of information including:

Methodology for sample selection:

A request for a list of PDCoV infected herds that would be willing to give limited case information up front and participate in a case series survey has come from the communications director of the American Association of Swine Veterinarians (AASV) to veterinary practitioners in the 7 states. Subsequently, the same request will come from the directors of three veterinary labs: University of Minnesota, Iowa State University and Ohio State University to veterinary practitioners and producers with known PDCoV infected herds (per lab submission) in the 7 states. Respondents to both requests will be compiled by the communications director of the AASV and sent to the Chief Epidemiologist of Veterinary Services.

This list will contain farms that have a history of either a PDCoV outbreak alone or PDCoV after a Porcine Epidemic Diarrhea (PED) outbreak. This list of farms with their contact information and limited case information will be divided by the 7 states they reside in and turned over from Chief Epidemiologist the VS Area Epidemiology Officer (AEO) or Area Veterinarian in Charge (AVIC) in each of the 7 states. Within each state the contacts will be divided by the AEO or AVIC among Field Veterinary Medical Officers (VMOs). Case survey data will be collected from to 29 operations in each state via personal interview.

? Estimation procedures:

Simple descriptive statistics will be generated possibly cross tabulated by farm characteristics. An example would be percent of farms that require truck disinfection prior to picking up pigs by herd size.

? Degree of accuracy needed:

- ? This is a case series investigation and is limited by number of available cases, budget, and personnel. Extrapolation to a larger population will not be done.**

Unusual problems requiring specialized sampling procedures and data collection cycles:

- ? No specialized sampling procedures or data collection cycles are anticipated.**

3. Describe methods to maximize response rates and to deal with issues of non-responses:

Study Design:

- ☐ The investigations minimize collection of data to that which is absolutely necessary.
- ☐ VS has worked closely with industry to design and carry out this epidemiologic investigation.
- ☐ In many instances, the data collector conducting the interviews has worked with these producers in the past.

Contacting Respondents:

Respondents may be contacted directly by an APHIS designated data collector, via mail questionnaire, telephone, or a farm visit depending on the situation.

Data Collection Steps:

- ☐ Respondents will complete the questionnaires via a personal interview.

Data Analysis Steps:

- ☐ No adjustment for non-response will be used in this study. Individual responses from the case series operations will be tallied in a summary form.

4. Describe any tests of procedures or methods to be undertaken.

Pilot tests of procedures for emergency outbreak investigations are rare because of the lack of time available before an investigation proceeds. The questionnaire has been reviewed by a variety of experts including industry representatives, veterinarians, and epidemiologists.

5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and /or analyze the information for the agency.

The statistical aspects of the design were coordinated by Dr. Bruce Wagner, Statistician and Center Director, USDA: APHIS, Veterinary Services, CEAH, Fort Collins, CO, (970) 494-7256.

The contact person for data collection is:

- Dr. John Clifford, Deputy Administrator, USDA: APHIS, Veterinary Services, Washington, DC (202) 447-6835.

Analysis of the data will be accomplished by NAHMS veterinarians, epidemiologists, and statisticians under the direction of:

- Dr. Bruce Wagner, National Animal Health Monitoring System, USDA: APHIS, VS, CEAH, 2150 Centre Avenue, Building B MS2E7, Fort Collins, CO 80526-8117 (970) 494-7256.

In most cases, investigators collecting information may be State, Federal, or local officials. All investigations are supervised by experienced epidemiologists with expert statistical resources available.