

Dear Veterinary Practitioner,

Thank you for agreeing to participate in the epidemiological investigation into the cause of the porcine epidemic diarrhea virus (PEDv) incursion into the U.S. swine herd. This investigation is designed to look for risk factors for PEDv infection in swine herds. This investigation will utilize a case-control study design where risk factors of infected herds (case herds) are compared to risk factors in non-infected herds (control herds). We are asking for your assistance in this study by completing the questionnaire as thoroughly as possible so that we have the best chance to identify the cause of PEDv incursion into infected herds. This questionnaire is not intended to look at transmission within or between herds; subsequent studies may have to be conducted to address that objective.

We are surveying herds that would be considered to have been primary cases of PEDv. **Please complete a questionnaire for the FIRST site/herd diagnosed with PEDv of each production type (sow farm, nursery, wean-to finish, etc.) that you work with.** If you are able to complete more than one questionnaire per production type, please fill out questionnaires on any other herds that broke **at approximately the same time** as your first herd, **or** the first herd within each production system you work with. **Additionally, for each case questionnaire that you complete, please select a site/herd of the same production type that has NOT had clinical signs to serve as a control herd,** and complete a questionnaire for that site/herd as well. Your case and control herds should be of similar size and in a similar geographical location.

If you are filling out a questionnaire for a nursery, wean-to-finish or finisher site/herd, please try to select sites where the timing of the infection at the site/herd indicate that it was a primary infection and NOT transmitted from the sow farm to this site. Ideally, we would prefer that these herds are not downstream from a known PEDv-infected sow farm, but we will gather and analyze that data if the disease break was at approximately the same time as the sow farm.

The questionnaire was designed by the USDA's Center for Epidemiology and Animal Health (CEAH) in cooperation with American Association of Swine Veterinarians, National Pork Board and National Pork Producers Council to help identify risk factors for infection. Questions about a variety of inputs are being asked in an attempt to identify risk factors common to infected herds. Some factors, such as herd size, may be confounders and need to be considered in the analysis of the data. If there are questions that you cannot answer, please indicate that on the form and complete the questions that you can answer. It is important to provide as much information as you can, since the more information we can collect, the greater the likelihood of identifying the cause.

When you complete and return your questionnaires, AASV staff will enter the data, which will be stored on the AASV server. The producers' names, addresses and premises IDs will be held in confidence. USDA's CEAH will be allowed access only to the non-identifying variables through a dashboard system run by the National Center for Foreign Animal and Zoonotic Disease Defense at Texas A&M University. CEAH and FAZD epidemiologists will collaborate to analyze the variables to look for significant

risk factors and outbreak characteristics. AASV, CEAH and FAZD, working together, are able to provide protection from Freedom of Information Act (FOIA) requests. We know that you are busy providing veterinary care for your PEDv-positive herds, but we are asking that this information be returned as quickly as possible, preferably within 48 hours. If you cannot complete the survey within that time frame, we will accept the information whenever you can get it to us. However, the sooner we get the information, the sooner we can analyze the data and start looking for the causes of PEDv infection.

Thank you for your participation,



Thomas J. Burkgren, DVM, MBA
Executive Director
American Association of Swine Veterinarians



PEDv Investigation 2013

Instructions

This form is used to collect herd, illness, and exposure information on swine herds associated with PEDv infection.

The form should be completed through a personal interview with the individual who has the greatest degree of knowledge of the information asked in each section (e.g., owner or herdsman). Ask each question as it is written and answer all questions. If a question is not applicable, write NA. If a respondent does not know the answer, write DK.

Please return completed surveys as instructed at the end of the form.

Section 1 – Administrative

1. Date of the interview (mm/dd/yy) 0101 _____ date
2. Name of person completing survey 0102 _____ name
3. ID (assigned by AASV) 0103 _____ ID
4. Name of herd veterinarian (if different from question 2) 0104 _____ vet
5. Owner's name 0105 _____ owner
6. Address of site: street, city, county, State 0106 _____ address
7. Premises ID number (optional) 0107 _____ prem
8. Has this site been laboratory confirmed with PEDv infection? 0108/0109 YES (case) _____
NO; no clinical signs have been observed (control) _____

Section 2 – Herd Information

1. Of the total hogs and pigs at this site on **April 22 of this year**, how many were:
- a. Sows and gilts for breeding? 0201 _____ head
- b. Pigs between 1-21 days of age? 0202 _____ head
- c. Pigs between 21-65 days of age? 0203 _____ head
- d. Pigs between 65-120 days of age? 0204 _____ head
- e. Finisher hogs over 120 days of age? 0205 _____ head
- f. Other types of pigs? 0206 _____ head
- g. Then the **total** number of hogs and pigs on April 22 at this site was: 0207 _____ **total**
2. Other than this herd, how many sites with swine are within **3 miles** of this operation? 0208 _____ ops
3. Before entering the hog and pig facilities on this site, are **employees** required to:
- a. Take a shower? 0209 ₁ Yes ₃ No ₂NA
- b. Change to clean boots and coveralls? 0210 ₁ Yes ₃ No ₂NA
- c. Use the Danish Entry or "Bench" system? 0211 ₁ Yes ₃ No ₂NA
- d. Wait 24 hours or more after visiting any other hog site? 0212 ₁ Yes ₃ No ₂NA

4. Before entering the hog and pig facilities on this site, are **nonemployees** required to:
- a. Take a shower? 0213 ₁ Yes ₃ No ₂NA
 - b. Change to clean boots and coveralls? 0214 ₁ Yes ₃ No ₂NA
 - c. Use the Danish Entry or “Bench” system? 0215 ₁ Yes ₃ No ₂NA
 - d. Wait 24 hours or more after visiting any other hog site? 0216 ₁ Yes ₃ No ₂NA
5. In the last 90 days, how many **nonemployees** entered the hog and pig facilities on this site? 0217 _____
- a. Have these nonemployees had contact with swine on other farm..... 0218 ₁ Yes ₃ No ₂NA
6. Are trucks and trailers from animal haulers or commercial livestock transporters allowed to enter the hog and pig areas on this site? (Livestock include cattle, poultry, and sheep—not just swine.)..... 0219 ₁ Yes ₃ No

[If question 6 = No, SKIP to question 9.]

7. Before livestock trucks and trailers are brought onto this site to **pick up** hogs or pigs, is it required that:
- a. The animal area inside of the truck be cleaned? 0220 ₁ Yes ₃ No ₄ DK
 If Yes, please specify with what (e.g., clean water, recycled water, etc.): _____ 0221
 - b. The animal area inside of the truck be disinfected? 0222 ₁ Yes ₃ No ₄ DK
 If Yes, please specify with what product: _____ 0223
 - c. The outside of the truck be cleaned? 0224 ₁ Yes ₃ No ₄ DK
 If Yes, please specify with what (e.g., clean water, recycled water, etc.): _____ 0225
 - d. The outside of the truck be disinfected? 0226 ₁ Yes ₃ No ₄ DK
 If Yes, please specify with what product: _____ 0227
 - e. Other cleaning and disinfecting protocols are performed? 0228 ₁ Yes ₃ No ₄ DK
 If Yes, please specify: _____ 0229
8. Before livestock trucks and trailers are brought onto this site to **deliver** hogs or pigs, is it required that:
- a. The animal area inside of the truck be cleaned before loading the pigs? 0230 ₁ Yes ₃ No ₄ DK
 If Yes, please specify with what (e.g., clean water, recycled water, etc.): _____ 0231
 - b. The animal area inside of the truck be disinfected before loading the pigs? .. 0232 ₁ Yes ₃ No ₄ DK
 If Yes, please specify with what product: _____ 0233
 - c. The outside of the truck be cleaned before loading the pigs? 0234 ₁ Yes ₃ No ₄ DK
 If Yes, please specify with what (e.g., clean water, recycled water, etc.): _____ 0235
 - d. The outside of the truck be disinfected before loading the pigs? 0236 ₁ Yes ₃ No ₄ DK
 If Yes, please specify with what product: _____ 0237
 - e. Other cleaning and disinfecting protocols are performed (e.g. “baking”)? 0238 ₁ Yes ₃ No ₄ DK
 If Yes, please specify: _____ 0239

9. During the **last 90 days**, has anyone from this site who works with pigs, including your veterinarian or their partners, been in a foreign country? *(Include employees who may no longer be on this operation.)*..... 0240 ₁ Yes ₃ No ₄ DK
 If Yes, what countries were visited, and when? _____ 0241
10. During the **last 90 days**, has anyone from a foreign country visited this site? ... 0242 ₁ Yes ₃ No ₄ DK
 If Yes, what countries were they from, and on what dates did they visit? _____ 0243
11. During the **last 90 days**, were any pigs, semen, or embryos obtained from a source in a foreign country? 0244 ₁ Yes ₃ No ₄ DK
 If Yes, please specify what and from which country _____ 0245
12. What is the source of semen for this herd? _____ 0246
13. What semen extender is used? *(Please include manufacturer, trade name, and lot number/expiration date.)*
 _____ 0247
14. How is semen delivered to the site? (e.g., commercial courier, private vehicle, direct to farm, etc.):
 _____ 0248
15. Have there been any unusual occurrences, or security breaches, on this site in the last 90 days? (e.g., locked doors found unlocked, unknown cars or people seen on the premises, etc.) 0249 ₁ Yes ₃ No ₄ DK
 If Yes, please describe, including the date of the occurrence:
 _____ 0250

Section 3 – Breeding Herd

1. For the period January 1–March 30, 2013, what was the average preweaning mortality? 0301 _____ pct
2. During the **last 90 days**, how many replacement gilts, boars, or other breeding animals were introduced into the breeding herd on this site? 0302 _____ number
3. What **percentage** of the (question 2) animals were from
- a. This site? 0303 _____ pct
- b. Another site belonging to this operation? 0304 _____ pct
- c. Another site not belonging to this operation? 0305 _____ pct
- Total [should equal 100%]**
4. What **percentage** of the (question 2) animals were from:
- a. This county? 0306 _____ pct
- b. This State? 0307 _____ pct
- Specify county within this State? 0308 _____
- c. Another State? (specify: _____) 0309oth 0309 _____ pct
- Specify county within the other State? 0310 _____
- Total [should equal 100%]**

5. During the last 90 days were any of the following acclimatization procedures used for newly arriving breeding stock:
- a. Feedback of feces from other swine? 0311 ₁ Yes ₃ No
 - b. Feedback of mummies, placentas, or stillborn pigs? 0312 ₁ Yes ₃ No
 - c. Exposure to cull gilts and sows? 0313 ₁ Yes ₃ No
 - d. Exposure to sick pigs? 0314 ₁ Yes ₃ No

6. Were breeding females on this site during the **last 6 months** vaccinated at any time (including prior to their arrival on this site) against the following diseases?

- a. APP (*Actinobacillus pleuropneumoniae*) 0315 ₁ Yes ₃ No
- b. *Actinobacillus suis* (autogenous) 0316 ₁ Yes ₃ No
- c. Atrophic rhinitis (*Bordetella/Pasteurella*) 0317 ₁ Yes ₃ No
- d. *Clostridium difficile* (autogenous) 0318 ₁ Yes ₃ No
- e. *Clostridium perfringens* Type A 0319 ₁ Yes ₃ No
- f. *Clostridium perfringens* Types C and D 0320 ₁ Yes ₃ No
- g. Erysipelas 0321 ₁ Yes ₃ No
- h. *E. coli* (K88, K99, 987P, F41) 0322 ₁ Yes ₃ No
- i. Glasser's disease (*Haemophilus parasuis*) 0323 ₁ Yes ₃ No
- j. Ileitis/proliferative enteritis (*Lawsonia intracellularis*) 0324 ₁ Yes ₃ No
- k. Influenza 0325 ₁ Yes ₃ No
- l. Leptospirosis 0326 ₁ Yes ₃ No
- m. *Mycoplasma hyopneumoniae* 0327 ₁ Yes ₃ No
- n. Parvovirus 0328 ₁ Yes ₃ No
- o. Porcine circovirus 2 0329 ₁ Yes ₃ No
- p. PRRS..... 0330 ₁ Yes ₃ No
- q. Rotavirus 0331 ₁ Yes ₃ No
- r. *Salmonella* 0332 ₁ Yes ₃ No
- s. *Streptococcus suis* 0333 ₁ Yes ₃ No
- t. TGE (transmissible gastroenteritis) 0334 ₁ Yes ₃ No
- u. Other vaccinations (specify: _____) 0335oth 0335 ₁ Yes ₃ No

Vaccine manufacturer & trade name, lot/serial number if available
0315a
0316a
0317a
0318a
0319a
0320a
0321a
0322a
0323a
0324a
0325a
0326a
0327a
0328a
0329a
0330a
0331a
0332a
0333a
0334a
0335a

7. During the **last 6 months** were the following types of TGE vaccines used in **suckling piglets**?
- a. Commercial attenuated vaccine (MLV) 0336 ₁ Yes ₃ No ₄ DK
 - b. Autogenous vaccine (killed) 0337 ₁ Yes ₃ No ₄ DK

Please specify manufacturer, trade name and lot/serial number if available:

_____ 0338

8. During the **last 6 months** what other vaccines were used in **suckling piglets**?
Please specify products including manufacturer, trade name and lot/serial number if available:

_____ 0339

Section 4 – Weaned market pigs (Nursery, GrowFin, Wean-to-Finish)

1. For the period January 1–March 30, 2013, what was the average mortality in weaned market pigs (nursery, grower, or finisher pigs) in the following production units? (*Write NA if the production unit is not on this site.*)
- a. Nursery unit 0401 _____ pct
- b. Grower/finisher unit 0402 _____ pct
- c. Wean-to-finish unit..... 0403 _____ pct
2. During the **last 90 days**, how many pigs were introduced into this site? 0404 _____ number
3. What **percentage** of the (question 2) pigs were from:
- a. This site? 0405 _____ pct
- b. Another site belonging to this operation? 0406 _____ pct
- c. Another site not belonging to this operation? 0407 _____ pct
- Total [should equal 100%]**
4. What **percentage** of the (question 2) pigs were from:
- a. This county? 0408 _____ pct
- b. This State? 0409 _____ pct
- Specify county of this State? 0410 _____
- c. Another State? (specify: _____) 0411oth 0411 _____ pct
- Specify county of the other State? 0412 _____
- Total [should equal 100%]**
5. Were pigs introduced on this site sourced from a sow farm that has been confirmed positive for PEDv? 0413 ₁ Yes ₃ No ₄ DK

6. Were weaned market pigs on this site during the **last 6 months** vaccinated at any time (including prior to their arrival on this site) against the following diseases?

		Vaccine manufacturer & trade name, lot/serial number if available
a. APP (<i>Actinobacillus pleuropneumoniae</i>)	0414 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0414a
b. <i>Actinobacillus suis</i> (autogenous)	0415 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0415a
c. Atrophic rhinitis (<i>Bordetella/Pasteurella</i>)	0416 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0416a
d. <i>Clostridium difficile</i> (autogenous)	0417 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0417a
e. <i>Clostridium perfringens</i> Type A	0418 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0418a
f. <i>Clostridium perfringens</i> Types C and D	0419 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0419a
g. Erysipelas	0420 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0420a
h. <i>E. coli</i> (K88, K99, 987P, F41)	0421 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0421a
i. Glasser's disease (<i>Haemophilus parasuis</i>)	0422 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0422a
j. Ileitis/proliferative enteritis (<i>Lawsonia intracellularis</i>)	0423 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0423a
k. Influenza	0424 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0424a
l. Leptospirosis	0425 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0425a
m. <i>Mycoplasma hyopneumoniae</i>	0426 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0426a
n. Parvovirus	0427 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0427a
o. Porcine circovirus 2	0428 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0428a
p. PRRS	0429 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0429a
q. Rotavirus	0430 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0430a
r. <i>Salmonella</i>	0431 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0431a
s. <i>Streptococcus suis</i>	0432 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0432a
t. TGE (transmissible gastroenteritis)	0433 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0433a
u. Other vaccinations (specify: _____) 0434oth	0434 <input type="checkbox"/> 1 Yes <input type="checkbox"/> 3 No	0434a

Section 5 – Feed source

Questions 1 to 7 ask about sow feed which include final rations fed to gestating or lactating sows. Skip Questions 1 to 7 if this is a nursery, wean-to-finish, or finisher site.

- During the **last 90 days**, how many of the different rations fed to sows were:

Meal/mash?	0501	_____ rations
Pellet?	0502	_____ rations
Other?	0503	_____ rations
Total number of rations fed to sows?	0504	_____ total rations

- Was the sow feed used in the last 90 days: 0505
 - 1 – Purchased as a complete feed?
 - 2 – Mixed by the farm on site?
 - 3 – Mixed by the farm/company but off site?
 - 4 – Custom-mixed off farm? _____ code (1, 2, 3, or 4)

[If question 2 = 2, 3, or 4, SKIP to question 4.]

3. For complete sow feed purchased in the last 90 days, provide the name of the feed company that mixed the feed, the feed manufacturer that supplied the feed (if different) and the date of the last feed shipment received from that feed company.

	Name of feed company	Name of feed manufacturer	Date last shipment was received from this feed company
1	0506	0508	0510
2	0507	0509	0511

[If question 3 is answered [question 2 = 1], SKIP to question 9.]

4. For the sow feed used in the last 90 days, was the grain: 0512
- 1 – Mixed with a **supplement** (e.g., typical inclusion rate of 300–500 lb/ton)?
- 2 – Mixed with an amino acid source and a **base mix** (typical inclusion rate of 35–100 lb/ton)?
- 3 – Mixed with an amino acid source, salt, calcium, phosphorus and a **premix** (e.g., typical inclusion rate of 1.5–7.5 lb/ton)? _____ code (1, 2, or 3)
5. List the name of all feed mills that provided feed with supplement, base mix, or premix and the date of the last feed shipment received from that feed mill; the inclusion rate; and the source of supplement, base mix, or premix (from list 1).

	Name of feed mill	Date last shipment was received from this feed mill	Inclusion rate of the supplement, base mix, or premix (lbs per ton of feed)	Source of supplement, base mix or premix (enter code from list 1 below)	Trade name of supplement, base mix, or premix
1	0513	0518	0523	0528	0533
2	0514	0519	0524	0529	0534
3	0515	0520	0525	0530	0535
4	0516	0521	0526	0531	0536
5	0517	0522	0527	0532	0537

List 1

Source of supplement, base mix, or premix	Code
ADM	1
Akey	2
BASF	3
Cargill	4
DSM	5
Hubbard	6
JBS-United	7
Nutra Blend	8
Purina-Land O'Lakes	9
Other (specify: _____) 0537oth	10

[If question 4 = 1 or 2, SKIP to question 8.]

6. Does the premix for the most recent sow diet consist of: 0538
- 1 – Vitamins and trace minerals in separate premixes?
- 2 – Vitamin and trace mineral premix in the same premix? _____ code (1 or 2)

7. Does the premix for the most recent sow diet consist of: 0539
 1 – A commercial premix?
 2 – A custom premix? _____ code (1 or 2)

8. Is there an additional source of amino acids not listed above?0540 ₁ Yes ₃ No ₄ DK
 If Yes, please list manufacturer, product and lot number (if available):
 _____ 0541

Questions 9 to 16 ask about nursery feed. (Please complete only if this questionnaire is for a site with nursery pigs.) If this is a wean-to-finish site please complete both nursery AND finisher feed questions.

9. During the **last 90 days**, how many of the different rations fed to nursery pigs were:
 Meal/mash? 0542 _____ rations
 Pellet? 0543 _____ rations
 Other? 0544 _____ rations
 Total number of rations fed to nursery pigs..... 0545 _____ rations

10. Was the nursery feed used in the last 90 days: 0546
 1 – Purchased as a complete feed?
 2 – Mixed by the farm on site?
 3 – Mixed by the farm/company but off site?
 4 – Custom-mixed off farm? _____ code (1, 2, 3, or 4)

[If question 10 = 2, 3, or 4, SKIP to question 12.]

11. For complete nursery feed purchased in the last 90 days, provide the name of the feed company that mixed the feed, the feed manufacturer that supplied the feed (if different) and the date of the last feed shipment received from that feed company.

	Name of feed company	Name of feed manufacturer and trade name of feed	Date last shipment was received from this feed company
1	0547	0549	0551
2	0548	0550	0552

[If question 11 is answered [question 10 = 1], SKIP to Section 6. If this is a wean-to-finish site, SKIP to question 18.]

12. For the nursery feed used in the last 90 days, was the grain: 0553
 1 - Mixed with a **supplement** (e.g., typical inclusion rate of 300–500 lb/ton)?
 2 - Mixed with an amino acid source and a **base mix** (typical inclusion rate of 35–100 lb/ton)?
 3 – Mixed with an amino acid source, salt, calcium, phosphorus and a **premix** (e.g., typical inclusion rate of 1.5–7.5 lb/ton)? _____ code (1, 2, or 3)

13. List the name of all feed mills that provided feed with supplement, base mix or premix and the date of the last feed shipment received from that feed mill; the inclusion rate; and the source of supplement, base mix or premix (from list 1).

	Name of feed mill	Date last shipment was received from this feed mill	Inclusion rate of the supplement, base mix, or premix (lbs per ton of feed)	Source of supplement, base mix or premix (enter code from list 1 below)	Trade name of supplement, base mix, or premix
1	0554	0559	0564	0569	0574
2	0555	0560	0565	0570	0575
3	0556	0561	0566	0571	0576
4	0557	0562	0567	0572	0577
5	0558	0563	0568	0573	0578

List 1

Source of supplement, base mix, or premix	Code
ADM	1
Akey	2
BASF	3
Cargill	4
DSM	5
Hubbard	6
JBS-United	7
Nutra Blend	8
Purina-Land O'Lakes	9
Other (specify: _____) 0578oth	10

[If question 12 = 1 or 2, SKIP to question 16.]

14. Does the premix for the most recent nursery diet consist of: 0579

1 – Vitamins and trace minerals in separate premixes?

2 – Vitamin and trace mineral premix in the same premix? _____ code (1 or 2)

15. Does the premix for the most recent nursery diet consist of: 0580

1 – A commercial premix?

2 – A custom premix? _____ code (1 or 2)

16. What additional animal protein sources (e.g., fish meal, whey products, etc.) are included in the nursery feed?

	Name of feed mill	Date last shipment was received from this feed mill	Protein source	Trade name if applicable	Lot number if available
1	0581	0586	0591	0596	0601
2	0582	0587	0592	0597	0602
3	0583	0588	0593	0598	0603
4	0584	0589	0594	0599	0604
5	0585	0590	0595	0600	0605

17. Is there an additional source of amino acids not listed above?0606 ₁ Yes ₃ No ₄ DK

If Yes, please list manufacturer, product and lot number (if available):

_____ 0607

**Questions 18 to 25 ask about finisher feed.
(Please complete only if this questionnaire is for a site with grow/finish pigs.)**

18. During the **last 90 days**, how many of the different rations fed to finishers were:

- Meal/mash?0608 _____ rations
- Pellet?0609 _____ rations
- Other?0610 _____ rations
- Total number of rations fed to finishers?0611 _____ rations

19. Was the finisher feed used in the last 90 days:

0612

- 1 – Purchased as a complete feed?
- 2 – Mixed by the farm on site?
- 3 – Mixed by the farm/company but off site?
- 4 – Custom-mixed off farm?

_____ code (1, 2, 3, or 4)

[If question 19 = 2, 3, or 4, SKIP to question 21.]

20. For complete finisher feed purchased in the last 90 days, provide the name of the feed company that mixed the feed, the feed manufacturer that supplied the feed (if different) and the date of the last feed shipment received from that feed company.

	Name of feed company	Name of feed manufacturer and trade name of feed	Date last shipment was received from this feed company
1	0613	0615	0617
2	0614	0616	0618

[If question 20 is answered [question 19 = 1], SKIP to section 6.]

21. For the finisher feed used in the last 90 days, was the grain:

0619

- 1 – Mixed with a **supplement** (e.g., typical inclusion rate of 300–500 lb/ton)?
- 2 – Mixed with an amino acid source and a **base mix** (typical inclusion rate of 35–100 lb/ton)?
- 3 – Mixed with an amino acid source, salt, calcium, phosphorus and a **premix** (e.g., typical inclusion rate of 1.5–7.5 lb/ton)?

_____ code (1, 2, or 3)

22. List the name of all feed mills that provided feed with supplement, base mix or premix and the date of the last feed shipment received from that feed mill; the inclusion rate; and the source of supplement, base mix or premix (from list 1).

	Name of feed mill	Date last shipment was received from this feed mill	Inclusion rate of the supplement, base mix, or premix (lbs per ton of feed)	Source of supplement, base mix or premix (enter code from list 1 below)	Trade name of supplement, base mix, or premix
1	0620	0625	0630	0635	0640
2	0621	0626	0631	0636	0641
3	0622	0627	0632	0637	0642
4	0623	0628	0633	0638	0643
5	0624	0629	0634	0639	0644

List 1

Source of supplement, base mix, or premix	Code
ADM	1
Akey	2
BASF	3
Cargill	4
DSM	5
Hubbard	6
JBS-United	7
Nutra Blend	8
Purina-Land O'Lakes	9
Other (specify: _____) 0644oth	10

[If question 21 = 1 or 2, SKIP to question 25.]

23. Does the premix for the most recent finisher diet consist of: 0645

1 – Vitamins and trace minerals in separate premixes?

2 – Vitamin and trace mineral premix in the same premix? _____ code (1 or 2)

24. Does the premix for the most recent finisher diet consist of: 0646

1 – A commercial premix?

2 – A custom premix? _____ code (1 or 2)

25. Is there an additional source of amino acids not listed above?.....0647 ₁ Yes ₃ No ₄ DK

If Yes, please list manufacturer, product and lot number (if available):

_____ 0648

IF POSSIBLE, PLEASE ATTACH SCANNED COPIES OF ALL FEED TAGS TO THE QUESTIONNAIRE.

Section 6 –PEDv Illness (complete only for case herds)

1. Since **April 22**, have any of the following clinical signs been present in pigs on this site?
- | | |
|--|---|
| a. Watery diarrhea (no blood or mucus)..... 0701 | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No <input type="checkbox"/> ₄ DK |
| b. Vomiting..... 0702 | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No <input type="checkbox"/> ₄ DK |
| c. Anorexia 0703 | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No <input type="checkbox"/> ₄ DK |
| d. Depression..... 0704 | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No <input type="checkbox"/> ₄ DK |

[If all responses in question 1 = No or Don't Know, skip to Section 7.]

2. What was the date the clinical signs first appeared in pigs on this farm?..... 0705 _____ date of onset
3. Have all the swine remaining on this site recovered? 0706 ₁ Yes ₃ No
 If Yes, what was the date the PEDv illness stopped in this herd? 0707 _____ date
4. Since the (question 2) **date of onset**, how many of the following types of pigs showed signs of PEDv illness?
- | | |
|---|------------|
| a. Sows and gilts for breeding? 0708 | _____ head |
| b. Pigs between 1–21 days of age (suckling pigs)?..... 0709 | _____ head |
| c. Starter pigs between 21–65 days of age? 0710 | _____ head |
| d. Grower pigs between 65–120 days of age?..... 0711 | _____ head |
| e. Finisher hogs over 120 days of age? 0712 | _____ head |
| f. Other types of pigs? 0713 | _____ head |
5. Since the (question 2) **date of onset**, how many of the following types of pigs died with PEDv illness?
- | | |
|---|------------|
| a. Sows and gilts for breeding? 0714 | _____ head |
| b. Pigs between 1–21 days of age (suckling pigs)?..... 0715 | _____ head |
| c. Starter pigs between 21–65 days of age? 0716 | _____ head |
| d. Grower pigs between 65–120 days of age?..... 0717 | _____ head |
| e. Finisher hogs over 120 days of age? 0718 | _____ head |
| f. Other types of pigs? 0719 | _____ head |
6. Since the (question 2) **date of onset**, how many pigs with PEDv-like illness were sampled for laboratory testing? 0720 _____ head

[If question 6 = 0, SKIP to section 7.]

7. Which of the following specimens were submitted to the veterinary diagnostic laboratory?
- | | |
|------------------------------------|--|
| a. Fresh feces?..... 0721 | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No |
| b. Fecal swabs?..... 0722 | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No |
| c. Intestinal contents? 0723 | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No |
| d. Ileum? 0724 | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No |
| e. Jejunum? 0725 | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No |
| f. Colon and cecum? 0726 | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No |
| g. Blood/serum? 0727 | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No |
| h. Whole piglets 0728 | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No |
| i. Other? 0729 | <input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₃ No |

8. To which veterinary diagnostic laboratory were the specimens submitted?
- a. Iowa State University? 0730 ₁ Yes ₃ No
- b. University of Minnesota? 0731 ₁ Yes ₃ No
- c. Another veterinary diagnostic laboratory? (specify: _____) 0732oth 0732 ₁ Yes ₃ No
9. What date were the specimens submitted? 0733 _____ date

Section 7

1. How was this survey conducted? (Check one only.) 0801
- ₁ In person
- ₂ By telephone
- ₃ By mail or email
2. Can the veterinary diagnostic laboratory be contacted to obtain results or information about virus isolates? 0802 ₁ Yes ₃ No
3. If necessary, can feed or other input samples be collected from this site? 0803 ₁ Yes ₃ No

Comments (Please add any comments regarding this site or operation that you believe may be of interest to this survey, such as any changes in vaccine protocols, feed suppliers or other changes.)

Signature:

By signing I am granting permission to AASV to access PEDv isolate data for this site from the diagnostic laboratory

Date: _____

DATA COLLECTOR: Retain a copy of this form for your records.

Send the original to:

Fax to: (515) 465-3832

Or scan and email to: AASV@asv.org