Animal and Plant Health Inspection Service

Veterinary Services

Swine Enteric Coronavirus Disease (SECD) Situation Report – Dec 18, 2014

Information current as of 12:00 pm MDT, 12/17/14

This report provides information on confirmed SECD-infected premises and SECD laboratory testing results data reported to USDA since the Federal Order was initiated on June 5, 2014. USDA-APHIS-VS veterinary officials confirm SECD-infected premises according to the official case definition. These reports are available on the USDA Web site at www.aphis.usda.gov/animal-health/secd. The Web site provides additional SECD information, including reports on SECD laboratory testing prior to the Federal Order.

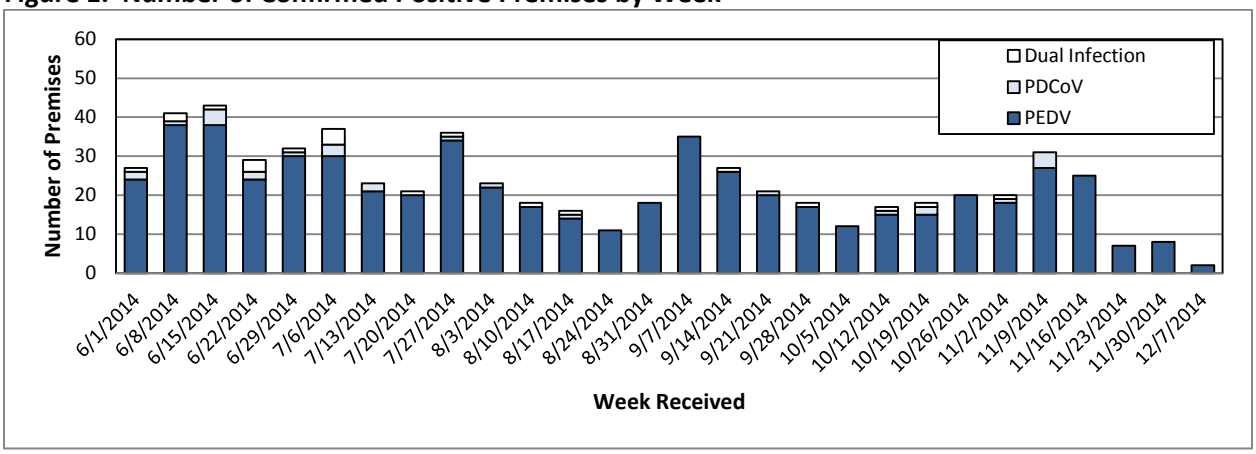
SECD Positive Premises

Table 1. SECD Positive Premises This Week and Cumulative since June 5, 2014

NEW THIS WEEK (DEC 7 – DEC 13, 2014)	PEDV	PDCOV	DUAL INFECTION[a]
New Confirmed Positive Premises This Week	23	0	1
New Presumptive Positive Premises This Week	6	1	0
CURRENT PREMISES WITH SECD POSITIVE STATUS	**PEDV**	**PDCOV**	**DUAL INFECTION[a]**
Total Premises with Confirmed Positive Status This Week	573	25	21
CUMULATIVE SINCE JUNE 5, 2014[b]	**PEDV**	**PDCOV**	**DUAL INFECTION[a]**
Confirmed Positive Premises	591	27	21
Presumptive Positive Premises	350	26	26
Confirmed Positive Premises that have Attained Negative Status (i.e., premises that changed from positive to negative status)[c]	14	2	1

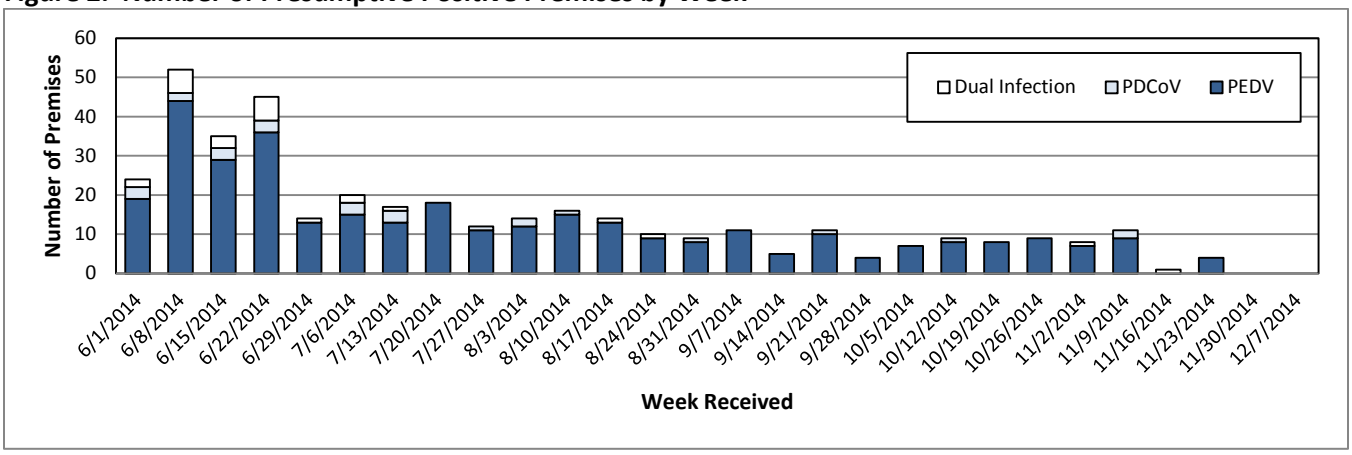
[a]Dual infection indicates premises with both PEDV and PDCoV
[b]Cumulative data includes current premises with positive status and premises that were positive but have acquired negative status
[c]See Notes section of this report for details about premises statuses

Figure 1. Number of Confirmed Positive Premises by Week [a]



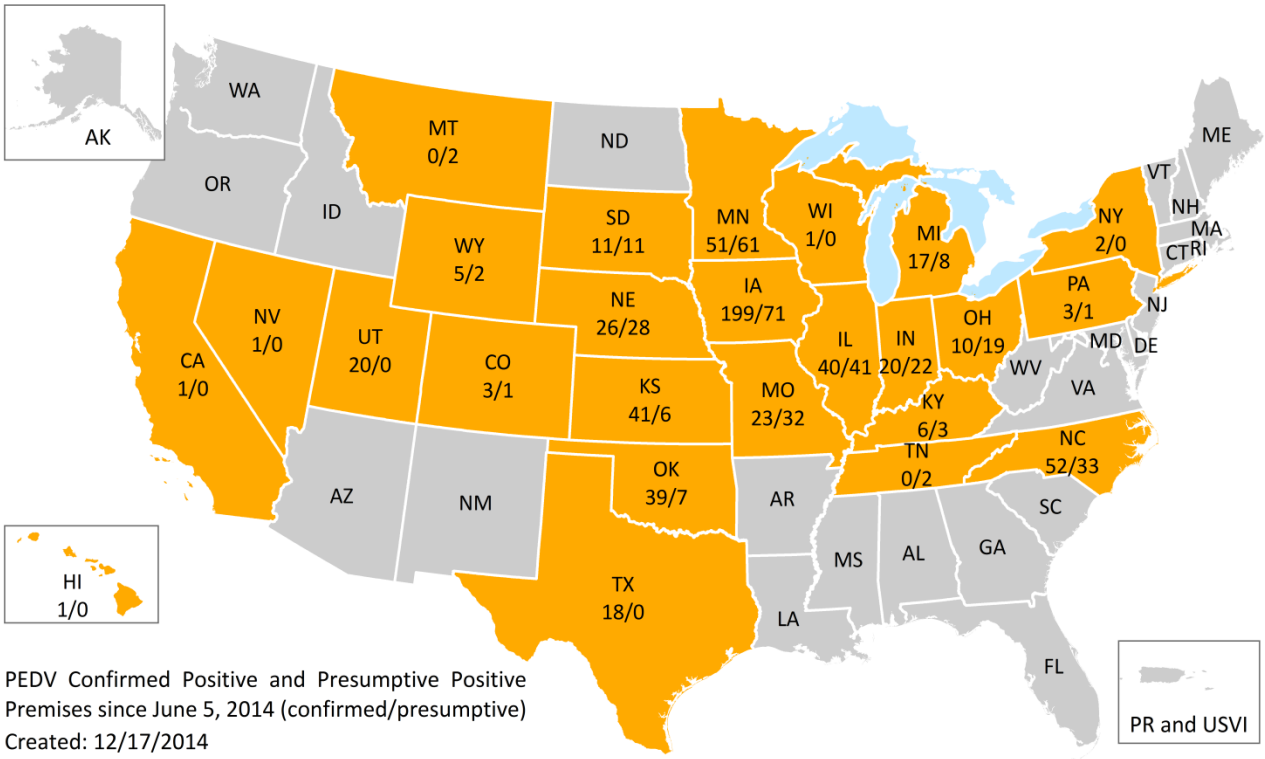
[a]Week the sample was received at the laboratory for testing

Figure 2. Number of Presumptive Positive Premises by Week [a]

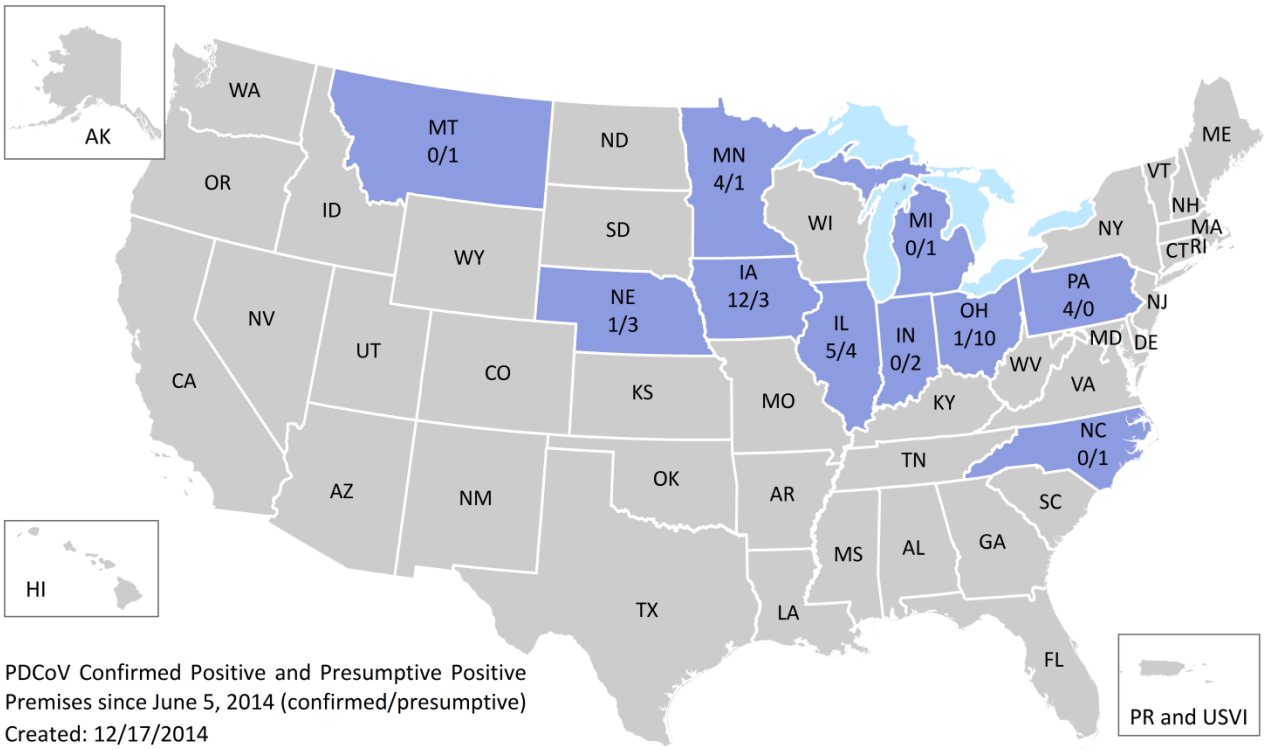


[a]Week the sample was received at the laboratory for testing

Map 1. PEDV: Cumulative Confirmed and Presumptive PEDV Positive Premises since June 5, 2014

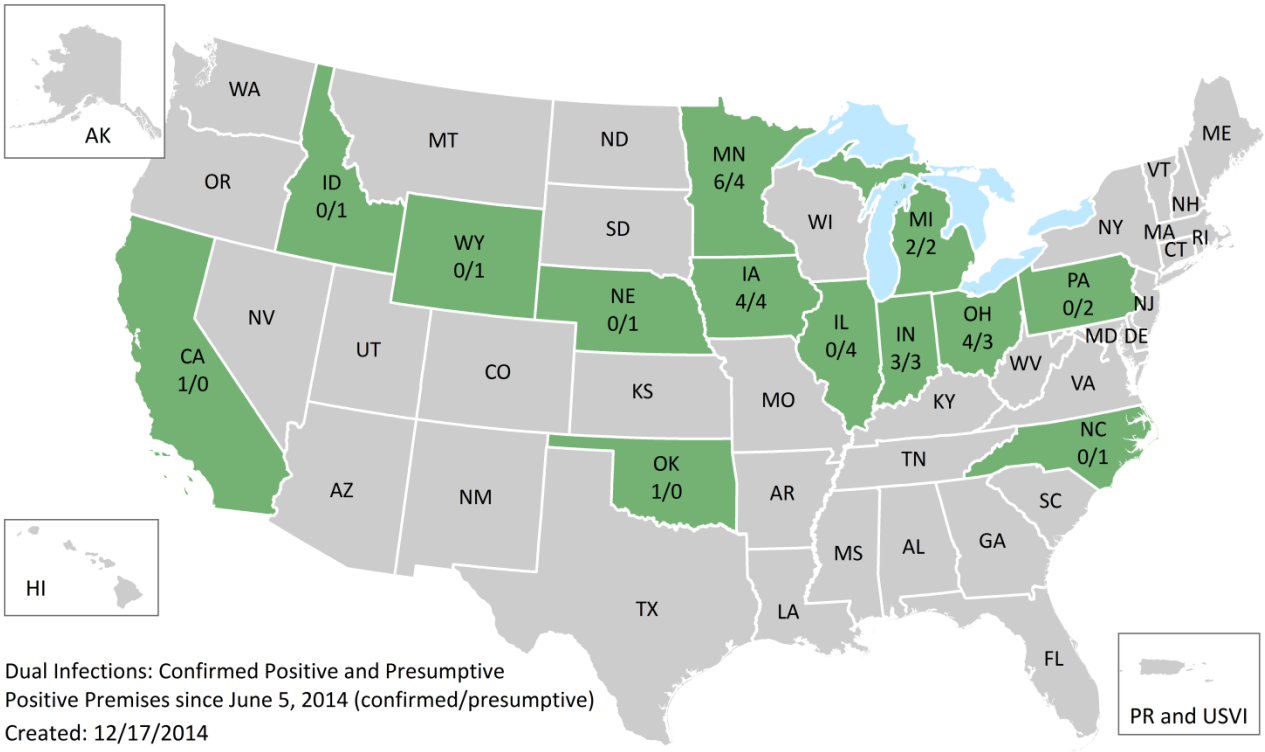


Map 2. PDCoV: Cumulative Confirmed and Presumptive PDCoV Positive Premises since June 5, 2014



PDCoV Confirmed Positive and Presumptive Positive Premises since June 5, 2014 (confirmed/presumptive)
Created: 12/17/2014

Map 3. Dual Infection: Cumulative Confirmed and Presumptive Positive Premises with Both PEDV and PDCOV since June 5, 2014



Dual Infections: Confirmed Positive and Presumptive Positive Premises since June 5, 2014 (confirmed/presumptive)
Created: 12/17/2014

Table 2. Number of SECD Confirmed and Presumptive Positive Premises in Each Production Class, by Month[a] (includes PEDV, PDCoV, and Dual Infections) (confirmed / presumptive)

MONTH TESTED	NURSERY	WEAN TO FINISH	FARROW TO FINISH	FINISHER	SOW/BREEDING	UNKNOWN
Jun 2014	18 / 10	29 / 16	15 / 8	22 / 29	46 / 43	14 / 51
Jul 2014	25 / 9	36 / 7	6 / 5	20 / 12	33 / 11	15 / 33
Aug 2014	15 / 8	17 / 6	2 / 5	25 / 10	10 / 6	10 / 22
Sep 2014	17 / 3	21 / 5	2 / 2	30 / 8	31 / 7	6 / 13
Oct 2014	2 / 4	24 / 5	2 /	33 / 15	6 / 2	11 / 8
Nov 2014	5 / 1	8 / 3	1 /	39 / 5	11 / 8	19 / 8
Dec 2014	/ 3	1 / 2	/	4 / 1	2 / 4	3 / 3
Missing	/ 3	1 / 2	/	1 / 1	1 / 4	/ 3
TOTAL	82 / 38	137 / 44	28 / 20	174 / 80	140 / 81	78 / 139

[a]Month the sample was received at the laboratory for testing

Table 3. PEDV: Number of Confirmed and Presumptive Positive Premises by Week[a] (confirmed / presumptive)

WEEK[a]	TOTAL	AZ	CA	CO	HI	IL	IN	IA	KS	KY	MI	MN	MO	MT	NE	NV	NY	NC	OH	OK	PA	SD	TN	TX	UT	WI	WY
Unknown	3 / 12							1 / 3		1 / 0	0 / 2	0 / 4	0 / 1					0 / 1		1 / 0							0 / 1
<6/1/2014	0 / 1											0 / 1															
6/1/2014	24 / 19					0 / 3	0 / 2	9 / 4			5 / 1	1 / 1	3 / 5		0 / 1			3 / 1	0 / 1	1 / 0	2 / 0						
6/8/2014	38 / 44					1 / 8	1 / 2	12 / 6	2 / 0		1 / 1	4 / 5	0 / 7		1 / 9			6 / 3	1 / 0	4 / 2	1 / 0	2 / 1		2 / 0			
6/15/2014	38 / 29					9 / 5	3 / 2	8 / 2	1 / 0		2 / 0	4 / 6	1 / 5	0 / 1	1 / 0			4 / 3	2 / 5	1 / 0		2 / 0					
6/22/2014	24 / 36					2 / 4	2 / 1	6 / 13	4 / 0		1 / 0	5 / 5	0 / 3		1 / 6			0 / 1	0 / 1			2 / 2		1 / 0			
6/29/2014	30 / 13			0 / 1		3 / 2	3 / 1	9 / 2		1 / 0		4 / 4	1 / 1		1 / 1			4 / 0	2 / 1	2 / 0							
7/6/2014	30 / 15					5 / 2	2 / 0	11 / 2		2 / 0		3 / 5	0 / 2		0 / 1			2 / 2	1 / 0	1 / 0		1 / 1					2 / 0
7/13/2014	21 / 13					3 / 1	0 / 1	5 / 2			1 / 0	2 / 2	0 / 1		4 / 0			3 / 0	1 / 4	2 / 0		0 / 1					0 / 1
7/20/2014	20 / 18					1 / 0	0 / 2	6 / 5			1 / 0	2 / 1	1 / 1		1 / 1			2 / 2	3 / 2	1 / 1		0 / 3		1 / 0			1 / 0
7/27/2014	34 / 11	1 / 0		2 / 0		6 / 1	2 / 0	14 / 3				1 / 3	3 / 0		1 / 0		1 / 0	2 / 3			0 / 1						1 / 0
8/3/2014	22 / 12			1 / 0		1 / 1	2 / 1	9 / 1	1 / 0	1 / 1	2 / 2	0 / 2	1 / 1		1 / 2		1 / 0	0 / 1		1 / 0							1 / 0
8/10/2014	17 / 15					1 / 1	1 / 2	5 / 4				3 / 4	0 / 1		2 / 1			3 / 1				0 / 1		2 / 0			
8/17/2014	14 / 13						0 / 2	6 / 6				4 / 1	1 / 1		1 / 0			1 / 1	0 / 1				0 / 1	1 / 0			
8/24/2014	11 / 9						0 / 1	2 / 1	1 / 0	0 / 1	1 / 0	2 / 2	2 / 0					3 / 2	0 / 1				0 / 1				
8/31/2014	18 / 8					1 / 2		7 / 1			1 / 0	2 / 1	1 / 1		1 / 2			2 / 1		1 / 0					2 / 0		
9/7/2014	35 / 11					0 / 1		10 / 0				4 / 5	0 / 1		2 / 1			4 / 1	0 / 1	1 / 1					14 / 0		
9/14/2014	26 / 5					0 / 1	1 / 2	11 / 0				0 / 1	2 / 0					4 / 0		1 / 0		3 / 1			4 / 0		
9/21/2014	20 / 10		1 / 0			0 / 4		10 / 1	0 / 1			1 / 0	3 / 0	0 / 1	3 / 0			1 / 1		1 / 2							
9/28/2014	17 / 4					2 / 0	1 / 0	10 / 2				1 / 0			0 / 1			1 / 0		2 / 0		0 / 1					
10/5/2014	12 / 7					0 / 2	2 / 0	5 / 1		1 / 0		0 / 1			1 / 0			3 / 2		0 / 1							
10/12/2014	15 / 8					1 / 0	0 / 1	6 / 2			1 / 1	1 / 1	2 / 0		0 / 1	1 / 0		1 / 1	0 / 1	2 / 0							
10/19/2014	15 / 8							7 / 4	4 / 0			3 / 0			1 / 0			0 / 4									
10/26/2014	20 / 9					0 / 1	0 / 2	10 / 3	6 / 1			2 / 1	0 / 1							1 / 0		1 / 0					
11/2/2014	18 / 7					0 / 1		5 / 0	2 / 4			0 / 2	1 / 0					1 / 0		1 / 0				7 / 0		1 / 0	
11/9/2014	27 / 9					3 / 1		7 / 3	9 / 0		0 / 1	1 / 2	1 / 0		1 / 1				0 / 1	3 / 0				2 / 0			
11/16/2014	25 / 0				1 / 0			4 / 0	8 / 0						1 / 0			2 / 0		7 / 0				2 / 0			
11/23/2014	7 / 4					1 / 0			3 / 0	0 / 1		0 / 1			1 / 0			0 / 2		2 / 0							
11/30/2014	8 / 0							2 / 0			1 / 0	1 / 0			1 / 0					3 / 0							
12/7/2014	2 / 0							2 / 0																			
TOTAL	591/350	1/ 0	1/0	3/1	1/0	40/ 41	20/ 22	199/71	41 / 6	6/3	17/8	51/ 61	23/32	0/2	26/ 28	1/ 0	2 / 0	52/ 33	10/ 19	39 / 7	3 / 1	11/ 11	0 / 2	18/0	20/0	1/0	5/2

[a]Week the sample was received at the laboratory for testing; weeks are not shown if there were no confirmed or presumptive positive premises for that week.

Table 4. PDCoV: Number of Confirmed and Presumptive Positive Premises by Week[a] (confirmed / presumptive)

WEEK [a]	TOTAL	IL	IN	IA	MI	MN	MT	NE	NC	OH	PA
6/1/2014	2 / 3	0 / 1				1 / 1	0 / 1	1 / 0			
6/8/2014	1 / 2									0 / 2	1 / 0
6/15/2014	4 / 3	0 / 1		2 / 0						1 / 2	1 / 0
6/22/2014	2 / 3			1 / 1						0 / 2	1 / 0
6/29/2014	1 / 0										1 / 0
7/6/2014	3 / 3	0 / 1		3 / 2							
7/13/2014	2 / 3	1 / 0		1 / 0						0 / 3	
7/27/2014	1 / 1					1 / 0				0 / 1	
8/3/2014	1 / 2					1 / 0		0 / 2			
8/10/2014	0 / 1		0 / 1								
8/17/2014	1 / 0			1 / 0							
8/31/14	0 / 1							0 / 1			
9/21/2014	1 / 1			1 / 0	0 / 1						
10/12/2014	1 / 1	1 / 0	0 / 1								
10/19/2014	2 / 0	1 / 0				1 / 0					
11/2/2014	1 / 0			1 / 0							
11/9/2014	4 / 2	2 / 1		2 / 0					0 / 1		
TOTAL	27 / 26	5 / 4	0 / 2	12 / 3	0 / 1	4 / 1	0 / 1	1 / 3	0 / 1	1 / 10	4 / 0

[a]Week the sample was received at the laboratory for testing; weeks are not shown if there were no confirmed or presumptive positive premises for that week.

Table 5. Dual Infection: Number of Confirmed and Presumptive Positive Premises by Week[a] (confirmed / presumptive)

WEEK[a]	TOTAL	CA	ID	IL	IN	IA	MI	MN	NE	NC	OH	OK	PA	WY
Unknown	0 / 1													0 / 1
6/1/2014	1 / 2							0 / 1		0 / 1	1 / 0			
6/8/2014	2 / 6			0 / 1	1 / 1	0 / 1	0 / 1	1 / 1	0 / 1					
6/15/2014	1 / 3			0 / 1	1 / 0	0 / 1		0 / 1						
6/22/2014	3 / 6		0 / 1	0 / 1	0 / 1			2 / 1			1 / 1		0 / 1	
6/29/2014	1 / 1					1 / 1								
7/6/2014	4 / 2	1 / 0				1 / 1	1 / 0	1 / 0					0 / 1	
7/13/2014	0 / 1				0 / 1									
7/20/2014	1 / 0					1 / 0								
7/27/2014	1 / 0							1 / 0						
8/10/2014	1 / 0							1 / 0						
8/17/2014	1 / 1						1 / 1							
8/24/2014	0 / 1										0 / 1			
9/14/2014	1 / 0					1 / 0								
9/28/2014	1 / 0				1 / 0									
10/12/2014	1 / 0										1 / 0			
10/19/2014	1 / 0										1 / 0			
11/2/2014	1 / 1			0 / 1								1 / 0		
11/16/2014	0 / 1										0 / 1			
TOTAL	21 / 26	1 / 0	0 / 1	0 / 4	3 / 3	4 / 4	2 / 2	6 / 4	0 / 1	0 / 1	4 / 3	1 / 0	0 / 2	0 / 1

[a]Week the sample was received at the laboratory for testing; weeks are not shown if there were no confirmed or presumptive positive premises for that week.

SECD Laboratory Testing

Table 6. Biological Laboratory Accessions This Week and Cumulative since June 5, 2014

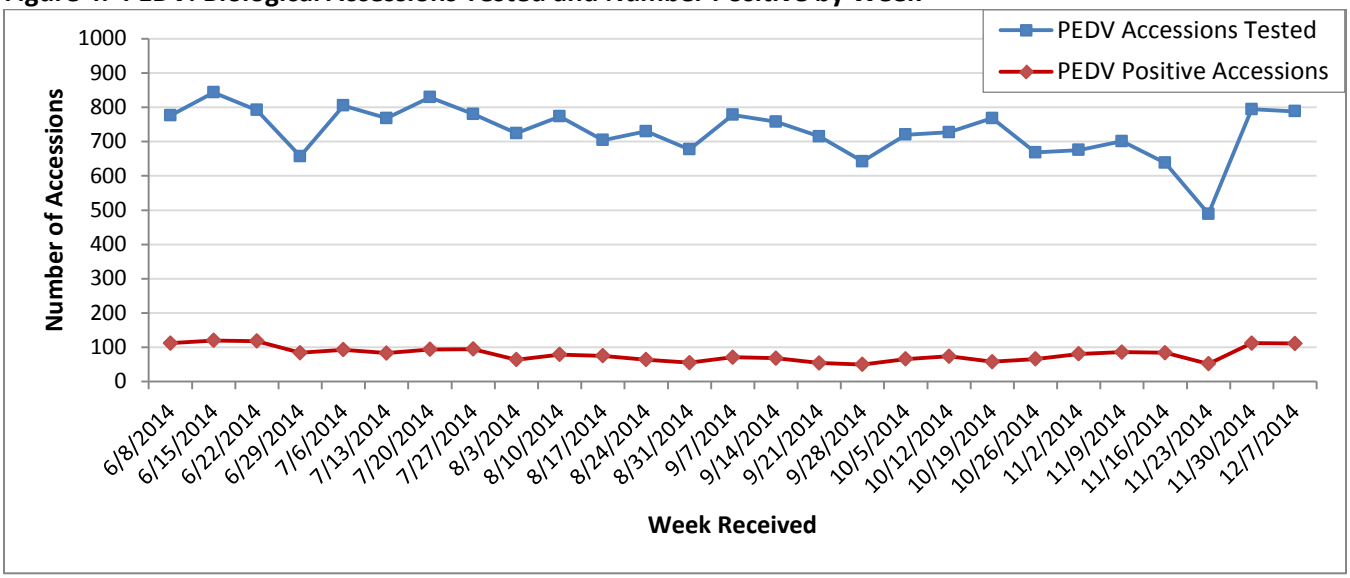
NEW THIS WEEK (DEC 7 – DEC 13, 2014)	PEDV	PDCOV
Positive Accessions	111	11
Accessions Tested	788	476
Percent Positive	14.1%	2.3%
No. of NAHLN Labs Reporting	10	
CUMULATIVE SINCE JUNE 5, 2014	**PEDV**	**PDCOV**
Positive Accessions	2,213	220
Accessions Tested	19,938	8,951
Percent Positive	11.1%	2.5%

Table 7. Biological Accessions Tested and Number Positive by Month

	PEDV			PDCOV[b]		
MONTH[c, d]	TESTED[a]	POSITIVE	% POS	TESTED	POSITIVE	% POS
Before the Federal Order (FO)						
April 2013	-	3	-	-	-	-
May 2013	-	112	-	-	-	-
June 2013	-	187	-	-	-	-
July 2013	-	113	-	-	-	-
Aug 2013	-	138	-	-	-	-
Sept 2013	-	134	-	-	-	-
Oct 2013	-	267	-	-	-	-
Nov 2013	1,064	414	38.9%	-	-	-
Dec 2013	2,294	630	27.5%	-	-	-
Jan 2014	2,774	953	34.4%	-	-	-
Feb 2014	3,650	1,228	33.6%	-	-	-
March 2014[c]	3,601	1,123	31.2%	45	7	15.6%
April 2014	3,775	1,053	27.9%	947	124	13.1%
May 2014	3,590	757	21.1%	1,042	112	10.7%
June 2014 (through 6/4/14)	489	84	17.2%	140	15	10.7%
Total Before FO	**21,128**	**6,976**	**33.0%**	**2,172**	**260**	**12.0%**
After the Federal Order (starting 6/5/2014)						
Jun 2014	2,768	407	14.7%	824	80	9.7%
Jul 2014	3,555	410	11.5%	1195	46	3.8%
Aug 2014	3,095	312	10.1%	1193	18	1.5%
Sep 2014	3,143	261	8.3%	1338	11	0.8%
Oct 2014	3,305	299	9.0%	1900	19	1.0%
Nov 2014	2,506	305	12.1%	1556	30	1.9%
Dec 2014 (month to date)	1,582	223	14.3%	947	16	1.1%
Total After FO	19,954	2,217	11.1%	8953	220	2.5%
Grand Total	**41,082**	**9,193**	**22.4%**	**11,125**	**480**	**4.3%**

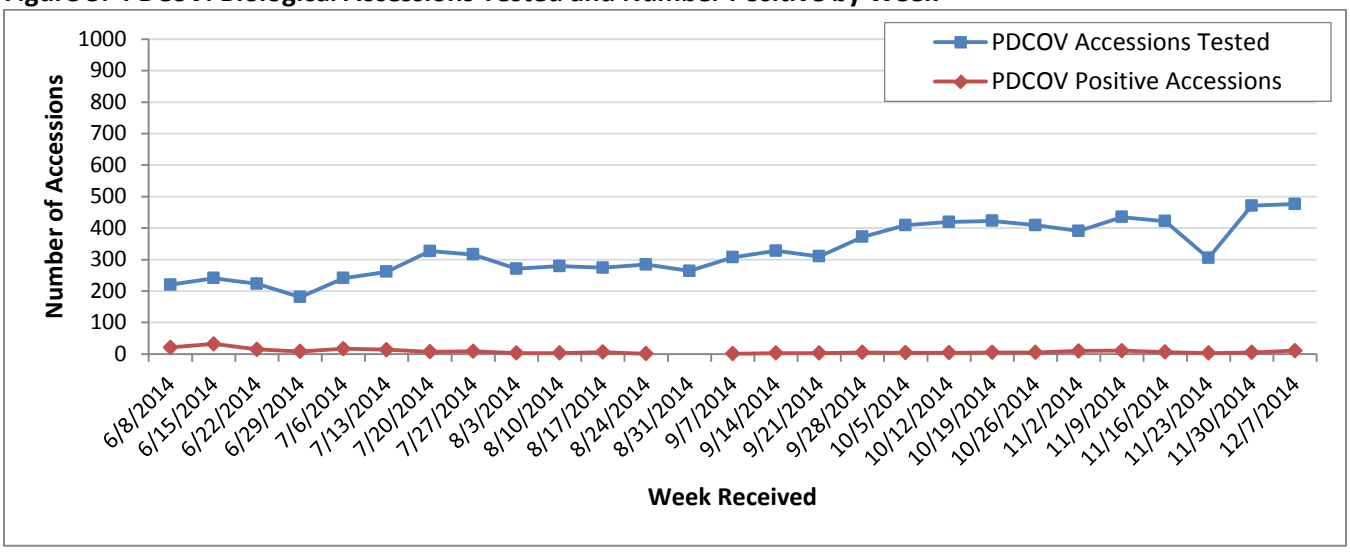
[a]From April through October 2013, number of cases tested was not reported and calculation of 'Percent Positive' was not possible.
[b]NAHLN Laboratories started sharing PDCoV testing results with VS on March 23, 2014.
[c]For pre-FO data, month refers to the month the sample was tested; after the FO, month refers to the month when the sample was received at the laboratory for testing
[d]Samples in an individual laboratory accession may be tested in subsequent months (e.g., at the start and end of the month), causing an individual accession to be counted in two months

Figure 4. PEDV: Biological Accessions Tested and Number Positive by Week[a]



[a]Week the sample was received at the laboratory for testing

Figure 5. PDCoV: Biological Accessions Tested and Number Positive by Week[a]



[a]Week the sample was received at the laboratory for testing

Table 8. PEDV Positive Laboratory Accessions by Week[a] and State[b]

WEEK	TOTAL POSITIVE ACCES-SIONS	AR	AZ	CA	CO	HI	IA	ID	IL	IN	KS	KY	MI	MN	MO	MT	NC	ND	NE	NV	NY	OH	OK	PA	SD	TN	TX	UT	WI	WY	UNK
6/1/2014	46						5		2				4	16	10		2					4	1		1		1				
6/8/2014	112						26		14	3	1	1	3	21	9		10		10			1	5		4		3				1
6/15/2014	121						20		16	5	1		7	33	11		9		4			3	1		6	1	2		1		1
6/22/2014	118						20	1	21	6	3			18	11		7		10			8	4	1	7						1
6/29/2014	84				1		22		14	3	1	2	1	12	6	1	7		4			4	4		2						
7/6/2014	93		1		3		23		11	3		1	3	16	7		9		4				3		4		3			2	
7/13/2014	83			1			10		12	2	1		4	15	9		5		6			6	5		3		1			2	1
7/20/2014	94			1			18	2	11	2			4	14	4		8		2			7	5	1	7		4			3	1
7/27/2014	95		1		3		17		20	2			1	18	6		7		4		1	2	3	1	2		4			3	
8/3/2014	64				2		11		8	3	1	1	5	8	5		5		4		1		3		3	1	1			2	
8/10/2014	79			2	2		16		16	2				16	3		6		3			1	1		4		3		3	1	
8/17/2014	75			2	1		13		10	3	1		4	17	7		6		3			1	3		2	1				1	
8/24/2014	64			2			11		7	1	1		4	9	5		6					4	1	1	3	2	3		1	3	
8/31/2014	55		1	1			8		11	2			2	8	5		3		1			2	2		2		3	2		2	
9/7/2014	71		1	1			12	1	10	1	1		2	18	5		8		2			1	2				1	1	2	2	
9/14/2014	68		1	2			18	1	5	2			1	7	8		7	1				1	1	1	5		2	3		1	1
9/21/2014	54		2	2			14		11	1	1		1	3	9	1	2		3				1		1		1			1	
9/28/2014	50		1	1			13		5	4			2	7	4		3		1				3	1	3		1			1	
10/5/2014	66	1	1	1	1		10		13	4		1	2	9	5		7	1	2			1	2		1		3			1	
10/12/2014	74		1	1			19		7	3		1	3	11	8		2		1	1		2	3		5		2	2	1	1	
10/19/2014	58		1	1			15		6	1	5			10	4		6		2			1			1		4			1	
10/26/2014	67			1	2		13		10	4	9			4	3			2				2	3		4		4	3		2	1
11/2/2014	81			1			11		2	3	5	1	2	3	9		4						10				14	2	1	2	11
11/9/2014	86						9		10	1	12		1	9	5		2		2			1	5		1		7	1		3	17
11/16/2014	84			1	1	2	6	1	5		14		2	3	4	1	4		3			1	14				8			2	12
11/23/2014	52						7		7		6	1	1	4	5		6		1				2								12
11/30/2014	112			1	2		18		7	2	13		2	11	3		12		1			1	8		1		6	1		3	20
12/7/2014	111			1	1		15		8	3	3	1	1	19	8		9		2		1		4				4	2		2	27
TOTAL [c]	**2,217**	**1**	**11**	**23**	**19**	**2**	**400**	**6**	**279**	**66**	**79**	**10**	**62**	**339**	**178**	**3**	**162**	**4**	**75**	**1**	**3**	**54**	**99**	**6**	**72**	**5**	**85**	**17**	**9**	**41**	**106**

[a]Week the sample was received at the laboratory for testing; weeks are not listed if there were no positive accessions for that week.

[b]For SECD laboratory testing data, the State is the collection site State that was reported by the laboratory to USDA.

[c]Samples in an individual laboratory accession may be tested in subsequent weeks (at the start and end of the week), causing an individual accession to be counted in two weeks. For this reason, Totals in Table 8 may be slightly higher than Totals in Table 6.

Table 9. PDCoV Positive Laboratory Accessions by Week[a] and State[b]

WEEK TESTED	TOTAL POSITIVE ACCES-SIONS	CA	IA	ID	IL	IN	MI	MN	MO	MT	NC	NE	OH	OK	PA	SD	TX	WY	UNK
6/1/2014	8				1			4		1			2						
6/8/2014	21				2	1	1	5	2		1	2	1		2	3			1
6/15/2014	32		3		1	2		17	1				5		1	1			1
6/22/2014	15		1			2		3					5		1	2			1
6/29/2014	8		2				1	1	1		1				1				1
7/6/2014	17		7		1	1	1	5					1		1				
7/13/2014	14	1	2		1	2		1					5			1		1	
7/20/2014	7	1	1	2	1			2											
7/27/2014	9		2					2					3				2		
8/3/2014	3								1			2							
8/10/2014	3	1			1								1						
8/17/2014	6		1			1	1		1			2							
8/24/2014	1												1						
9/7/2014	1			1															
9/14/2014	3		1			1		1											
9/21/2014	3		1		1	1													
9/28/2014	5		3			1		1											
10/5/2014	4		1			1	1	1											
10/12/2014	4		1			1		1					1						
10/19/2014	5				3			1					1						
10/26/2014	5				4	1													
11/2/2014	10	1	1	1			1	2						1					3
11/9/2014	11		1		4	2					1								3
11/16/2014	6			2	1			2					1						
11/23/2014	3				2			1											
11/30/2014	5		2		2			1											
12/7/2014	11		3		1			6											1
TOTAL[b]	**220**	**4**	**33**	**6**	**26**	**17**	**6**	**57**	**6**	**1**	**3**	**6**	**27**	**1**	**6**	**7**	**2**	**1**	**11**

[a]Week the sample was received at the laboratory for testing; weeks are not listed if there positive accessions for that week.

[b]For SECD laboratory testing data, the State is the collection site State that was reported by the laboratory to USDA.

[c]Samples in an individual laboratory accession may be tested in subsequent weeks (at the start and end of the week), causing an individual accession to be counted in two weeks. For this reason, Totals in Table 8 may be slightly higher than Totals in Table 6.

Notes About Data Used in This Report

- This report is posted on the USDA SECD Web site (www.aphis.usda.gov/animal-health/secd). This Web site also provides information on SECD laboratory testing prior to the Federal Order (April 2013 - June 2014), and information on SECD reporting, case definitions, herd plans, vaccines, and the Federal response.

- Dual infection indicates a premises that is positive for both PEDV and PDCoV.

- Premises statuses are assigned in accordance with the Novel Swine Enteric Coronavirus Disease Case Definition (available online at www.aphis.usda.gov/animal-health/secd). A confirmed positive premises is a premises where pigs tested positive and have clinical signs. A presumptive positive premises is a premises where pigs tested positive but have non-specific, unknown, or no clinical signs consistent with SECD. Please see the official SECD Case Definition for more information (www.aphis.usda.gov/animal-health/secd)

- Some positive premises may have a change in their type of positive status over time. For example, with the onset of clinical signs, a presumptive positive premises may be reclassified to a confirmed positive premises. Or PEDV positive premises may be re-classified to a dual infection status with the laboratory diagnosis of PDCoV. Therefore, the number of cumulative positive statuses will be slightly more than the sum of the number of current positive statuses and positive statuses reclassified as negative (see Table 1).

- Table 1 describes premises that are confirmed "this week"; this refers to premises that were investigated and determined to be presumptive or confirmed according to SECD case definition criteria during the current report week. Data presented in Tables 2-4 and Figures 1-2 provide epidemiologic trends, and data are presented based on the week the specimen was received by the testing laboratory.

- In general, a laboratory accession is a set of samples collected at a single premises on a single day and submitted to the laboratory. A single herd or premises may be tested multiple times, and the same herd or premises may be represented in a large number of laboratory accessions. Because a single premises may repeatedly be represented in subsequent lab accessions, fluctuations in the lab accession data in this report do not accurately depict epidemiologic trends. The number of confirmed or presumptive positive premises provided in the first section of this report are better epidemiologic indicators.

- Laboratory accession data in this report includes only PCR results from testing on biological samples; testing on environmental or feed samples is not included.

- In the laboratory accession section of this report, State is the Collection State that was reported by the testing laboratory to USDA; State of origin data provided by laboratories is not verified by USDA. However, the locations of premises associated with positive laboratory accessions are verified by USDA staff and reported in the premises section of this report.

- NAHLN laboratories that have reported SECD testing data to the USDA APHIS VS since June 5, 2014 include: Arkansas Livestock & Poultry Commission Laboratory; University of Georgia – Athens; University of Illinois Veterinary Diagnostic Laboratory; Illinois Department of Agriculture, Galesburg Animal Disease Laboratory; Iowa State University Veterinary Diagnostic Laboratory; Kansas State Veterinary Diagnostic Laboratory; Michigan State University-- Diagnostic Center for Population and Animal Health; University of Minnesota Veterinary Diagnostic Laboratory; Missouri Department of Agriculture Veterinary Diagnostic Laboratory; University of Nebraska Veterinary Diagnostic Center; Rollins Diagnostic Laboratory - North Carolina Department of Agriculture; North Dakota State University Veterinary Diagnostic Laboratory; Ohio Animal Disease Diagnostic Laboratory – Ohio Department of Agriculture; Oregon State University Veterinary Diagnostic Laboratory; Indiana Animal Disease Diagnostic Laboratory at Purdue University; Animal Disease Research & Diagnostic Laboratory - South Dakota State University; and Texas Veterinary Medical Diagnostic Laboratory. Data in this report does not include testing data from private diagnostic laboratories or testing data from for research projects.

- Data summaries provided in this report reflect the most current and complete data available at the time of report preparation; summaries in this report may differ from those provided in past reports.