



Animal and Plant  
Health  
Inspection Service

Veterinary  
Services

# NAHMS Swine 2021

## Oral Fluids Instructions

National Animal Health  
Monitoring System

2150 Centre Ave, Bldg B  
Fort Collins, CO 80526

### Kit Contents

- 32 Feet of 5/8" 3 strand cotton rope
- 10 Quart Ziploc® bags
- 8 pairs of gloves
- 1 Gallon Ziploc® bag
- 8, 50 ml Centrifuge tubes with a box
- Insulated cooler and shipping box
- Rope Cutters
- 3 Ice packs (freeze prior to farm visit)
- 1 Absorbent sheet
- 2 Linear bags (one used as trash bag, one used to line the cooler)
- Paperwork packet: Oral Fluids Collection Record, 10 centrifuge tubes labels, shipping airbill

### Collection Instructions

Collect samples on a **Sunday-Wednesday**. **The site must house 1 or more finishing pigs (20 weeks or older) housed in a barn or enclosure (i.e. a hoop barn) in pens.** Hang ropes in a maximum of **8 pens in a barn(s) or room within a barn** in pens populated by these pigs. If one barn or room contains the site's oldest finishing pigs, pick that one. The ropes should be hung in pens that are roughly equidistant from one another.

Ropes are hung by taking one end of the cotton rope (5/8" 3 Strand Cotton) and tying one end to the top bar of each pen or the gate. Tie the rope knot on the gate and cut the end in the pen so that that this end hangs approximately at shoulder height for most of the animals in the pen. Unravel the part of the rope that hangs in the pen rope into its strands. Shake the end of the rope in the pen so that pigs are attracted to it.

Wait 30-45 minutes while they chew on the ropes. While the rope is still hanging, insert the lower, wet portion of each rope into a quart sized Ziploc® bag and cut the part that's inside the bag from the remainder of the hanging rope. Manually squeeze the rope pieces while inside the Ziploc® bag to release the oral fluid. Cut the corner of the Ziploc® bag and let the fluid drip into a 50 ml centrifuge tube. **You only need to collect 25ml of fluid, so only fill the tube half full.** Close each centrifuge tube, checking that the lid is tight. Place the used Ziploc® bags and the rope ends in the trash bag. Untie and place excess hanging rope in the trash bag. Write the **6-digit Farm ID** (operation-site), **Facility, and Pen IDs on a sample label**, peel off and place securely on the appropriate centrifuge tubes. Place the centrifuge tubes in a centrifuge tube box.

Place boxed centrifuge tubes in the gallon sized Ziploc® plastic bag and seal. Place the Ziploc® bag inside the liner bag with 3 frozen ice packs and the absorbent sheet. Place the liner bag inside the insulated shipment container and close the shipping container lid.

### Collection Record Instructions

Complete the Oral Fluids Collection Record Form (attached below). Skip the first row that is labeled "lab use only." **Place the original (white) collection record on top of the insulated cooler box lid.** Leave the yellow copy of the collection record with the producer. Secure the shipping box.

### Shipping and Results

Keep samples cool in a refrigerator, attach shipping airbill (addressed to ISU) to the shipping box, and ship **within 24 hours of collection on Sunday-Thursday**. The samples will be tested for the nucleic acid of Seneca Valley virus and results will be returned to the Producer in approximately 90 days after collection.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0315. The time required to complete this information collection is estimated to average 2 hour per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collected.

**OMB Approved**  
0579-0315  
EXP: 01/2023

# Swine 2021: Oral Fluids Collection Record

State Coordinator Name: \_\_\_\_\_

<b>Submitter:</b> NAHMS <small>(lab use only)</small>		<b>Owner:</b> Swine 2021 <small>(lab use only)</small>		<b>Site:</b> Use Farm ID <small>(lab use only)</small>		<b>Reference:</b> Use Kit Number <small>(lab use only)</small>		<b>Animal ID:</b> Use Barn ID <small>(lab use only)</small>	
<b>Farm ID</b>	<b># of People Involved</b> ___ Fed VMO    ___ Fed AHT ___ Producer    ___ State VMO ___ St AHT    ___ Priv Vet ___ Others-specify: _____			<b>Key Collector Initials</b>	<b>Collection Date</b>	<b>Hours to Take and Prep Samples</b>	<b>Hours of Overall Travel Time</b>	<b>Kit Number</b>	
6-digits: Op, Site	Enter number for each category				MM/DD/YY	In quarter hours	In quarter hours	Must match labels	

Rope Number	Facility/Barn ID <sup>1</sup>	Pen ID <sup>1</sup>	Facility Type <sup>2</sup>	Where was rope hung? <sup>3</sup>	Approximate # of pigs in pen	# of pigs share air space <sup>4</sup>	Average age of pigs in pen (weeks)	Gender of pigs in pen <sup>5</sup>	Vaccination codes <sup>6</sup>			
									1st	2nd	3rd	4th
1			<input type="checkbox"/> T <input type="checkbox"/> O	<input type="checkbox"/> B <input type="checkbox"/> G <input type="checkbox"/> O				<input type="checkbox"/> G <input type="checkbox"/> B <input type="checkbox"/> M				
2			<input type="checkbox"/> T <input type="checkbox"/> O	<input type="checkbox"/> B <input type="checkbox"/> G <input type="checkbox"/> O				<input type="checkbox"/> G <input type="checkbox"/> B <input type="checkbox"/> M				
3			<input type="checkbox"/> T <input type="checkbox"/> O	<input type="checkbox"/> B <input type="checkbox"/> G <input type="checkbox"/> O				<input type="checkbox"/> G <input type="checkbox"/> B <input type="checkbox"/> M				
4			<input type="checkbox"/> T <input type="checkbox"/> O	<input type="checkbox"/> B <input type="checkbox"/> G <input type="checkbox"/> O				<input type="checkbox"/> G <input type="checkbox"/> B <input type="checkbox"/> M				
5			<input type="checkbox"/> T <input type="checkbox"/> O	<input type="checkbox"/> B <input type="checkbox"/> G <input type="checkbox"/> O				<input type="checkbox"/> G <input type="checkbox"/> B <input type="checkbox"/> M				
6			<input type="checkbox"/> T <input type="checkbox"/> O	<input type="checkbox"/> B <input type="checkbox"/> G <input type="checkbox"/> O				<input type="checkbox"/> G <input type="checkbox"/> B <input type="checkbox"/> M				
7			<input type="checkbox"/> T <input type="checkbox"/> O	<input type="checkbox"/> B <input type="checkbox"/> G <input type="checkbox"/> O				<input type="checkbox"/> G <input type="checkbox"/> B <input type="checkbox"/> M				
8			<input type="checkbox"/> T <input type="checkbox"/> O	<input type="checkbox"/> B <input type="checkbox"/> G <input type="checkbox"/> O				<input type="checkbox"/> G <input type="checkbox"/> B <input type="checkbox"/> M				

<sup>1</sup>Any designation will do whether text or numeric as long as it differentiates between row entries.

<sup>2</sup>**T=Total Confinement, O=Open building.** Total confinement means solid exterior walls and mechanical ventilation. An open building generally has open sides or the potential for sides to be opened weather permitting.

<sup>3</sup>**B=Bar (e.g., top bar of pen enclosure), G=Gate, O=Other**

<sup>4</sup>This would be the number of pigs in the barn or room within a barn usually.

<sup>5</sup>**G=Gilts, B=Barrows and M=Mixed.**

<sup>6</sup>Up to 4 different vaccinations may be entered. The codes and what they stand for are listed below. These are vaccinations that may have been given at any time in the pigs' lives.

### Vaccination codes

- 1=APP (Actinobacillus pleuropneumoniae)
- 2=Actinobacillus suis (autogenous)
- 3=Atrophic rhinitis (Bordatella/Pasteurella)
- 4=Clostridium difficile (autogenous)
- 5=Clostridium perfringens Type A
- 6=Clostridium perfringens Types C and D
- 7=Erysipelas
- 8=E. coli (K88, K99, 987P, F41)
- 9=Glasser's disease (Haemophilus parasuis)
- 10=Ileitis (Lawsonia intracellularis)

- 11=Influenza
- 12=Leptospirosis
- 13=Mycoplasma hyopneumoniae
- 14=Porcine circovirus 2
- 15=PRRS
- 16=Porcine epidemic diarrhea
- 17=Rotavirus
- 18=Salmonella
- 19=Streptococcus suis
- 20=TGE (transmissible gastroenteritis)