

	Washington State University Institutional Animal Care and Use Committee	Standard Operating Procedure #17
	Title: Minimum Standards for Swine Husbandry (AWA covered)	
Effective Date: 2/5/2026		Page 1 of 4

Standard Operating Procedures for Minimum Standards for Swine Husbandry (AWA-covered)

1.0 Purpose:

1.1 The purpose of this SOP is to outline the minimum standards of care for swine covered by the Animal Welfare Act (biomedical or medical educational use).

2.0 Policy:

2.1 Swine used in biomedical research and medical instruction must meet the requirements in the USDA Animal Welfare Regulations (AWR), and the Guide for the Care and Use of Laboratory Animals (*Guide*). Deviations or exceptions must be approved by the IACUC.

3.0 Procedures:

3.1 Daily (365 days a year without exception):

- 3.1.1 Observe each animal and check for health concerns (*Guide* pg. 112, AWR 2.33).
- 3.1.2 Ensure adequate feed is provided and potable water is available (*Guide* pg. 65-68). Swine may be limit-fed to prevent obesity.
- 3.1.3 Record minimum and maximum temperatures and humidity on the daily log.
 - 3.1.3.1 Humidity range is 30% to 70% (*Guide* pg. 44).
 - 3.1.3.2 Local heat sources may be used to achieve temperatures at floor level in a portion of the pen/room so long as animals do not have direct access to heat source and electrical cords.

TABLE 1. Temperature Recommendations

Age/Live Weight	Recommended Temperature Range (Ag Guide pg. 144, <i>Guide</i> pg. 44))
0-4 weeks or <3 kg	85°F to 90°F at floor level
4-8 weeks or 3-15 kg	79°F to 90°F at floor level
> 8 weeks or 15 to 35 kg	64°F to 79°F
> 3 months or 35-70 kg	59°F to 81°F
> 4 months or > 70 kg	50°F to 81°F

- 3.1.4 Monitor equipment in primary housing including feeders, waterers & enrichment devices. Remove and replace as needed (*Guide* pg. 72).
- 3.1.5 Clean and organize room, anterooms, and surrounding premises (*Guide* pg. 72). Report on the OCV [Health Database](#) Monday through Friday.
- 3.1.6 Report any abnormal, ill or injured animals to the Office of the Campus Veterinarian via the Health Database, if an emergency call 509-335-6246 or 509-330-1871.

	Washington State University Institutional Animal Care and Use Committee	Standard Operating Procedure #17
	Title: Minimum Standards for Swine Husbandry (AWA covered)	
Effective Date: 2/5/2026		Page 2 of 4

3.2 Sanitation:

3.2.1 Pen cleaning:

3.2.1.1 Standard pens will be spot cleaned at least every 3 days and stripped at least weekly to maintain dry resting and feeding areas.

3.2.1.2 Standard pens will be stripped, washed and disinfected at least monthly

3.2.1.3 Farrowing crate and pens: Sows/gilts may be housed in a crate or individual pen (e.g., approximately one week prior to farrowing until weaning at 21-30 days post farrowing). Manure will be removed at the above frequency, but the crate/pen will not be disinfected until after weaning to minimize disturbance of the sow and litter.

3.2.1.4 The decision to increase the frequency of pen sanitation will be based on bedding condition, appearance of the pen and animals and pen density (*Guide* pg. 73)

3.2.2 Protect animals confined in enclosures cleaned by hosing or flushing from being directly sprayed with water or involuntarily being wetted (AWR 3.131).

3.2.3 Sweep and mop floors at least weekly. Disinfect the walls, floors, and ceilings (if possible) (*Guide* pg. 72) at least quarterly or between cohorts.

3.2.4 Discard chow after 6 months of the milling date unless manufacturer guidelines recommend a shorter or longer expiration date (*Guide* pg. 66).

3.2.5 Clean and sanitize feed storage containers at least every 6 months (*Guide* pg. 67).

4.0 Environmental Enrichment & Social Behavior:

4.1 Refer to the [IACUC Policy #30: Environmental Enrichment](#).

5.0 Facilities:

5.1 Temperature alarms should be used in all climate-controlled rooms housing biomedical swine (*Guide* pg. 143).

5.2 Adequate ventilation must be provided for the health and comfort of the animal at all times.

5.3 A minimum of 10-15 fresh room air exchanges per hour shall be provided in animal housing areas (*Guide* pg. 46). The pressure differential should be negative to common spaces.

5.4 Floors shall be moisture-resistant, non-absorbent, impact-resistant, and relatively smooth (*Guide* pg. 137).

6.0 Housing:

6.1 Whenever possible, swine should be socially housed in compatible groups (*Guide* pg. 51).

	Washington State University Institutional Animal Care and Use Committee	Standard Operating Procedure #17
	Title: Minimum Standards for Swine Husbandry (AWA covered)	
Effective Date: 2/5/2026	Page 3 of 4	

6.2 Floor space taken up by devices that block access to floor space (e.g., large feeders, , foraging devices) should not be considered part of the floor space (*Guide* pg. 56).

Resting boxes may be considered part of the floor space.

6.3 Minimum Space: Pen size will follow the minimum space recommendations set in the *Guide* (pg. 62) with the following exceptions. Animals will be provided adequate space to move and turn around except for possible intermittent use of the farrow crate described below:

6.3.1 Pigs may be temporarily restrained in a transport crate or temporary pen to allow individual meal feeding for group housed animals, veterinary procedures or for cleaning and/or disinfection of the home pen. Animals will be monitored, and confinement will be limited to a maximum of 2 hours.

6.3.2 Farrowing crates for standard domestic swine: Sows/gilts may be housed in a farrowing crate (e.g., approximately one week prior to farrowing until weaning at 21-30 days post farrowing). The farrowing crate dimensions meet the 2020 Ag Guide space requirements (see table).

6.3.3 The *Guide* does not indicate the minimum space for swine <15 kg nor does it address sows and litters. The European standard ETS # 123 Appendix A provides recommendations for minimum space allowances for up to 5-, 10-, and 15-kg animals. The minimum space allocation is below with the listed reference.

TABLE 2. Minimum space allocation with reference sources

Live Weight	Minimum floor space per animal for individual housing (ft ²)	Minimum floor space per animal for group housing (2-5 pigs) (ft ²)	Minimum floor space per animal for group housing (>5 pigs) (ft ²)	Reference
Up to 5 kg	8	2.15	2.15	ETS Appendix A
Up to 10 kg	8	2.7	2.7	ETS Appendix A
Up to 15 kg	8	3.8	3.8	ETS Appendix A
Up to 25 kg	12	6	6	<i>Guide</i> pg. 62
Up to 50 kg	15	10	9	<i>Guide</i> pg. 62
Up to 100 kg	24	20	18	<i>Guide</i> pg. 62
Up to 200 kg	48	40	36	<i>Guide</i> pg. 62
>200 kg	≥60	≥52	≥48	<i>Guide</i> pg. 62
Crate: Sow & litter	N/A	35 sow & litter	35 sow & litter	Ag Guide pg. 132
Crate: Sow section	14	N/A	N/A	Ag Guide pg. 132

	Washington State University Institutional Animal Care and Use Committee	Standard Operating Procedure #17
	Title: Minimum Standards for Swine Husbandry (AWA covered)	
Effective Date: 2/5/2026		Page 4 of 4

References:

1. United States Department of Agriculture, Animal and Plant Health Inspection Service, [Animal Welfare Act and Animal Welfare Regulations](#)
2. National Research Council, 2011. [Guide for the Care and Use of Laboratory Animals](#). 8th Edition. The National Academies Press, Washington, DC.
3. Federation of Animal Science Societies, 2020. [Guide for the Care and Use of Agricultural Animals in Research and Teaching](#). 4th Edition. Champaign, IL.
4. [APPENDIX A of the European Convention for the Protection of Vertebrate Animals Used for Experimental and Other Scientific Purposes](#) (ETS NO. 123).