TITLE 23, NEBRASKA ADMINISTRATIVE CODE, CHAPTER 19

NEBRAKSA DEPARTMENT OF AGRICULTURE

SCRAPIE CONTROL AND ERADICATION REGULATIONS

TITLE 23 - DEPARTMENT OF AGRICULTURE, BUREAU OF ANIMAL INDUSTRY

CHAPTER 19 - SCRAPIE CONTROL AND ERADICATION REGULATIONS

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- TITLE 23 DEPARTMENT OF AGRICULTURE, BUREAU OF ANIMAL INDUSTRY
- CHAPTER 19 SCRAPIE CONTROL AND ERADICATION REGULATIONS
- $\underline{001}$ Statement of Purpose. The purpose of these regulations is to aid in administering the Scrapic Control and Eradication Act, Neb. Rev. Stat. §§54-2701 to 54-2761.
- <u>002</u> Administration and Reporting. These regulations are administered by the Bureau of Animal Industry of the Department of Agriculture, fourth floor, State Office Building, 301 Centennial Mall South, Lincoln, Nebraska 68509. The telephone number is (402) 471-2351, FAX: (402) 471-6893.
- <u>003</u> <u>Definitions</u>. Definitions contained in <u>Neb</u>. <u>Rev</u>. <u>Stat</u>. §§54-2703 to 54-2747, shall apply to such terms when used in these regulations.
 - $\underline{003.01}$ ACT means the Scrapie Control and Eradication Act, \underline{Neb} . Rev. Stat. §§54-2701 to 54-2761.
 - $\underline{003.02}$ BREEDING SHEEP OR GOATS means any sexually intact sheep or goat that is not moving directly to slaughter, through slaughter channels to slaughter, or to a feedlot to enhance its condition for movement to slaughter.
 - $\underline{003.03}$ GENETICALLY LESS SUSCEPTIBLE means any QR sheep or embryo.
 - $\underline{003.04}$ GENETICALLY RESISTANT means any RR sheep or embryo.
 - 003.05 GENETICALLY SUSCEPTIBLE ANIMAL means any QQ genotype sheep or a sheep or embryo of undeterminable genotype.
 - 003.06 GENETICALLY SUSCEPTIBLE EXPOSED ANIMAL means any exposed animal or embryo that is a goat, a QQ sheep, a sheep of undeterminable genotype, a QR sheep that was designated exposed because of exposure to a scrapie-positive RR or QR sheep, or an RR sheep that was designated exposed because of exposure to a scrapie positive RR sheep.

- 003.07 GENOTYPES OF SHEEP means which amino acids are coded for on codons 136 and 171 in sheep. Two locations on sheep DNA that code for prion protein are particularly important for scrapie susceptibility: Codons 136 and 171. Codon 136 may code for either of the amino acids alanine (A) or valine (V). Codon 171 may code for the amino acids arginine (R), glutamine (Q), histidine (H), or lysine (K). For the purposes of these regulations, H, K, or any other amino acid other than R at codon 171 will be treated as equivalent to Q at codon 171.
- $\underline{003.08}$ GENOTYPING means official genetic tests of sheep to determine genotype.
- 003.09 INDIVIDUAL ANIMAL IDENTIFICATION means an official eartag or backtag approved for use by the USDA.
- $\underline{003.10}$ INFECTED ANIMAL means any animal that tests positive to an official test for scrapie.
- $\underline{003.11}$ INTRASTATE MOVEMENT means a change of the ownership of an animal, movement to an animal exhibition, movement to a different premises in the same state, or commingling animals.
- $\underline{003.12}$ LOW-RISK COMMERCIAL GOAT means a goat from a herd in which animals are moved directly to slaughter or through slaughter channels or any goat raised only for meat or fiber production and not registered with a goat registry, not used for exhibition, and not raised in contact with sheep.
- 003.13 OFFICIAL EARTAG means an identification eartag approved by APHIS as being sufficiently tamper-resistant for the intended use and providing unique identification for each animal. An official eartag may bear a premises identification number that either contains or is used in conjunction with the producer's livestock production numbering system to provide a unique identification number.
- 003.14 POST-EXPOSURE PLAN means a post-exposure management and monitoring plan.
- $\underline{003.15}$ PREMISES IDENTIFICATION NUMBER means a unique number used on official eartags and tattoos to identify the premises of origin of an animal and that is recorded in the Scrapie National Generic Database.
- $\underline{003.16}$ QQ SHEEP means any sheep that has tested QQ, QK, QH, HK, KK, or HH at codon 171 on an official genotype test.
- $\underline{003.17}$ QR SHEEP means any sheep that has tested QR, KR, or HR at codon 171 on an official genotype test.

- $\underline{003.18}$ RR SHEEP means any sheep that has tested RR at codon 171 on an official genotype test.
- <u>003.19</u> SCRAPIE NATIONAL GENERIC DATABASE (SNGD) means a database designated by the Administrator of APHIS in which APHIS and State animal health agencies cooperatively enter data concerning scrapie outbreaks, individual animal identification and premises identification information data, and other data to support the Scrapie Eradication Program and the Scrapie Flock Certification Program.
- <u>003.20</u> SLAUGHTER CHANNELS means selling, transferring, or moving any sheep or goat directly to a slaughter facility, to an individual for custom slaughter, or for feeding for the express purpose of improving the animals' condition for slaughter. Any sexually intact animal that is commingled with breeding animals or that has been bred is not in slaughter channels. The bill of sale for such animals must indicate that the animals are sold only for slaughter.
- 003.21 TERMINAL FEEDLOT means a dry lot approved by the Department from which animals are moved only to another terminal feedlot or directly to slaughter. Terminal feedlots must keep slaughter animals separated from all other animals by at least 30 feet at all times or separated by a solid wall through, over, or under which fluids cannot pass and contact cannot occur.
- $\underline{003.22}$ UNIFORM METHODS means the Scrapie Eradication Uniform Methods and Rules adopted by reference in 23 NAC 19, Section 004.
- 003.23 VETERINARY MEDICAL OFFICER (VMO) means a veterinarian employed by or acting at the direction of, the State or APHIS.

004 Adoption by Reference.

- $\underline{004.01}$ These regulations adopt by reference 9 CFR 54 and 9 CFR 79.
- $\underline{004.02}$ These regulations adopt by reference the "Scrapie Eradication Uniform Methods and Rules" published by the United States Department of Agriculture, Animal and Plant Health Inspection Service, effective October 1, 2003. This publication is attached as an appendix and shall be made available upon request at the Department.
- $\underline{004.03}$ These regulations adopt by reference the Voluntary Scrapie Flock Certification Program (1999), developed and administered by the United States Department of Agriculture. This publication is attached as an appendix and shall be made available upon request at the Department.

 $\underline{004.04}$ If there is an inconsistency between the publications adopted by reference in this section and the Act or these regulations, the Act and these regulations shall control.

005 Animal Identification.

- $\underline{005.01}$ All animals shall be identified in a manner approved by this section prior to being moved intrastate, except for the following:
 - 005.01A Identification is not required for wethers, low-risk commercial goats, and lambs nursing their dams.
 - 005.01B Identification is not required for animals moved from a premises owned or leased by the owner of the animals to another premises owned or leased by the same owner of the animals.
 - <u>005.01C</u> Identification is not required for animals less than 18 months of age which are:
 - $\underline{005.01C(1)}$ Not scrapie-positive, suspect, high-risk, exposed, or from a scrapie infected or source flock; and,
 - $\underline{005.01C(2)}$ Moving directly to slaughter, to a terminal feedlot, or through slaughter channels and then to slaughter or a terminal feedlot.
- $\underline{005.02}$ The owner of a flock of origin, or his or her agent, is primarily responsible for applying official identification to any animal that is required to be identified.
- $\underline{005.03}$ A person who delivers or receives an animal that is required to be identified shall also ensure the animal is identified to its premises of origin.
- $\underline{005.04}$ Animals that are required to be identified shall be tagged or marked with official identification. The approved forms of identification are as follows:
 - $\underline{005.04A}$ Electronic identification, when accompanied by a certificate or owner statement, that includes the numbers indicated by the devices and the name of the manufacturer;
 - $\underline{005.04B}$ Official eartags, including tags approved for use in APHIS-approved premises identification number eartags, when combined with a unique animal identification number;
 - $\underline{005.04C}$ USDA backtags or official premises identification backtags that include a unique animal identification

number, when used on sheep or goats moving directly to slaughter and when applied within three (3) inches of the poll on the dorsal surface of the head or neck; and

<u>005.04D</u> Legible official registry tattoos that have been recorded in the book of record of a sheep or goat registry association when the animal is accompanied by either a registration certificate or a certificate of veterinary inspection, and may also be used as premises identification if they contain a unique premises prefix that has been linked in the National Scrapie Database with the assigned premises identification number of the flock of origin.

006 Movement of Animals.

<u>006.01</u> A person shall not engage in the intrastate movement of an animal without certification from the seller that:

<u>006.01A</u> The animal originates from a flock not under quarantine;

 $\underline{006.01B}$ The animal is not showing clinical signs of scrapie; and

 $\underline{006.01C}$ The animal is properly identified as set forth in 23 NAC 2, Section 005 and such identification is provided to the buyer.

 $\underline{006.02}$ A person shall not move an animal into the state without meeting the requirements of:

006.02A The Act;

006.02B These regulations;

006.02C 9 CFR 54 and 9 CFR 79; and,

 $\underline{006.02D}$ The Animal Importation Act, $\underline{\text{Neb}}$. $\underline{\text{Rev}}$. $\underline{\text{Stat}}$. $\underline{\text{S$54-784.01}}$ to 54-796.

007 Record Keeping Procedures. All persons who purchase, deal in, acquire, sell, dispose of, identify, own or control animals subject to the Act or persons who act as commission representatives or brokers of such animals; or persons who operate or conduct an auction where such animals are sold shall comply with the record keeping requirements of this section. Persons required to maintain records under this subsection shall agree to have the necessary facilities and personnel available to assist the Department in inspecting the records. Records must be kept for a period of five years.

- $\underline{007.01}$ Persons moving the animals through interstate commerce shall comply with the record keeping requirements of 9 CFR 79 and 23 NAC 2.
- <u>007.02</u> Persons involved in intrastate movement of the animals shall maintain records in accordance with the following:
 - 007.02A Business records, such as yarding receipts, sale tickets, and invoices, shall be kept regardless of whether or not the animals are required to be identified. Records for all animals not required to be identified shall include the name and address of the person from which the animals were acquired and if the animal is slaughtered, the slaughtering facility in which they were slaughtered.
 - <u>007.02B</u> Persons who apply official identification assigned directly to the owner of the premises of origin shall maintain the following records:
 - $\underline{007.02B(1)}$ The premises number or serial numbers applied; and
 - $\underline{007.02B(2)}$ For animals born after January 1, 2002, in another flock and not already identified to the flock of birth, the name and address of the owner of the flock of birth, if known.
 - <u>007.02C</u> Veterinarians, dealers, or market personnel who apply official identification that is not assigned to the owner of the premises of origin of the animal in the Scrapie National Generic Database shall maintain the following records for animals without official identification:
 - 007.02C(1) The date tagged;
 - $\underline{007.02C(2)}$ The number of sheep and the number of goats identified;
 - <u>007.02C(3)</u> The serial numbers applied;
 - $\underline{007.02C(4)}$ The name and address of the owner of the flock of origin;
 - $\underline{007.02C(5)}$ If the person who currently owns the animals is different from the owner of the flock of origin or birth, the current owner's name and address; and
 - $\underline{007.02C(6)}$ If the owner of the flock of birth is different from the owner of the flock of origin, and if the animals were born after January 1, 2002, the

name and address of the owner of the flock of birth, if known.

- <u>008</u> Infected, Source, and Exposed Flocks. When a live animal tests positive for scrapie, the investigation and the flock plan will be carried out according to the procedures found in the Uniform Methods.
 - $\underline{008.01}$ APHIS and the Department shall be notified by the laboratory that conducted the test.
 - <u>008.02</u> Whenever a flock is determined to be an infected flock, or a source flock, a flock plan shall be filed, which shall include a post-exposure plan, if required.
 - <u>008.03</u> Whenever a flock is determined to be an exposed flock, a post-exposure plan shall be filed.
 - <u>008.03A</u> Any high-risk animal, when present in the flock, will be restricted by the Department until the status of the high-risk animal is determined. The owner shall immediately report to the Department if the animal dies or is in danger of dying.
 - 008.03B Exposed flock status may be released if:
 - $\underline{\text{008.03B(1)}}$ All female traced exposed animals can be positively identified and are present in the flock, and
 - <u>008.03B(2)</u> All the female sheep that cannot be redesignated as genetically resistant exposed sheep or genetically less susceptible exposed sheep, all female offspring of a scrapie-positive female animal, and all the exposed female goats are tested by immunohistochemistry at necropsy and found negative.
 - <u>008.03C</u> If a genetically susceptible exposed female sheep is retained, exposed flock status cannot be released and a full post-exposure plan must be done. The post-exposure plan shall require:
 - 008.03C(1) The testing of all the genetically susceptible exposed female animals and any restricted genetically less susceptible exposed sheep by third-eyelid, immediately, and by immunohistochemistry when they die or are culled, and any genetically susceptible female animals born after the high-risk animal was introduced that die at over fourteen (14) months of age, and

- <u>008.03C(2)</u> A negative third-eyelid test before the sale of the female offspring, 14 months of age and older, of the high-risk sheep and any genetically susceptible female sheep born in the same or subsequent lambing season that the high-risk animal lambed unless sent direct to slaughter.
- $\underline{008.03C(3)}$ These flocks will remain in exposed flock status until the post-exposure plan is completed and may be subject to quarantine.
- <u>008.03D</u> Owners of exposed flocks who do not make animals available for testing, or do not comply with a post-exposure plan will have their flocks designated as noncompliant flocks, and may be subject to quarantine.
- <u>009</u> <u>Official Test</u>. The official tests recognized for the diagnosis of scrapie shall include, but not be limited to:
 - $\underline{009.01}$ Histopathological examination of central nervous system (CNS) tissues from the animal for characteristic microscopic lesions of scrapie;
 - <u>009.02</u> The use of proteinase-resistant protein analysis methods including but not limited to immunohistochemistry and/or western blot on CNS and/or peripheral tissue samples from a live or a dead animal for which a given method has been approved by the Bureau for use on that tissue;
 - 009.03 Bioassay;
 - <u>009.04</u> Scrapie associated fibrils (SAF) detected by electron microscopy; and
 - 009.05 Any other test for scrapie approved by APHIS.
- <u>Olo Scrapie Testing Procedures</u>. Sheep and goats tested shall be individually identified and such identification shall be recorded on the test chart.
 - <u>010.01</u> Testing a flock, pending designation as a source or infected flock.
 - 010.01A Testing of a flock that is pending designation as a source or infected flock to determine whether the flock is currently infected, other than by necropsy of all genetically susceptible exposed female animals, will be conducted only when the designated scrapie epidemiologist determines such testing is needed to properly designate a flock to be a source or infected flock. The designated scrapie epidemiologist should make such a determination

only when there is reasonable doubt that the flock is infected.

 $\underline{010.01B}$ Such testing will require genotyping of all sexually intact sheep fourteen (14) months of age and older. Only genetically susceptible exposed animals will be tested for scrapie. Only QQ sheep and goats are considered genetically susceptible unless a positive QR or RR sheep was identified in the flock of origin of the exposed animal.

 $\underline{\text{O10.01B(1)}}$ QQ sheep may be tested by third-eyelid biopsy. Goats and other genetically susceptible animals will only be tested at necropsy.

 $\underline{010.01B(2)}$ Goats and genetically susceptible animals that are not QQ should be tested at necropsy, or if there are less than 30 QQ sheep that are available for test or if the QQ sheep are not representative of the flock, they should be tested at necropsy.

<u>010.01C</u> When the potential exposure to a flock was the result of a purchased positive female animal possibly lambing in the flock, only animals born after the positive animal might have lambed and ewes present during the lambing season in which the positive female animal resided on the premises will be tested. Such ewes must be tested at least eighteen (18) months after the last possible lambing of the infected animal. If the exposure event occurred recently, and thus high-risk animals have not lambed in a subsequent lambing season, a flock plan that requires destruction of all female genetically susceptible exposed animals from that birth cohort should be strongly considered along with testing or removal of other female genetically susceptible exposed animals.

011 Quarantine Procedures.

<u>011.01</u> <u>Issuance of Quarantine.</u> Quarantine will be issued under the following conditions:

011.01A When any flock is identified as an infected or source flock;

 $\underline{\text{O11.01B}}$ When any flock is designated an exposed flock; or,

 $\underline{011.01C}$ When the owner of a flock or animal refuses to comply with the requirements of the Act or these regulations.

011.02 Requirements of Quarantine.

- $\underline{011.02A}$ The owner of all livestock under quarantine shall be responsible to control livestock in such a way as to prevent contact with other livestock.
- <u>011.02B</u> Sheep and goats under quarantine shall be tested according to the requirements of the Department.
- <u>011.02C</u> The owner of any property on which a flock under quarantine has resided shall be responsible to clean and disinfect the premises. Such cleaning shall meet the requirements of the Department and shall be verified by an accredited veterinarian. Such cleaning shall be completed as part of the requirements of a flock plan.
- $\overline{011.02D}$ The owner of any vehicle which has transported animals under quarantine shall be responsible for cleaning and disinfecting such vehicle before hauling feed or other animals other than to slaughter. Such cleaning shall meet the requirements of the Department and shall be verified by an accredited veterinarian.
- $\underline{011.02E}$ The owner of a flock under quarantine shall, upon request, furnish a list to the Department of all sales, purchases, and other movements of breeding and feeding sheep and goats made to or from such flock up to five (5) years prior to being placed under quarantine.
- $\underline{011.03}$ Animals under quarantine may not be moved except as permitted by their flock plan or post-exposure plan, directly to slaughter, for destruction, or to a research or diagnostic facility.
- <u>011.04</u> Flocks designated as infected or source flocks will be released from quarantine after completing a flock plan and signing an approved post-exposure plan. Flocks designated as exposed flocks will be released from quarantine after completing a flock plan, if all genetically susceptible animals were removed as part of the flock plan. If the flock plan allowed some genetically susceptible animals to be retained, then those animals would remain under quarantine until the completion of the post-exposure plan.
- Ol2 Flock Plans. Each owner or authorized representative of the owner of a flock under quarantine shall file a flock plan with the department within a maximum of thirty (30) days after the date of issuance of quarantine. The flock plan shall include follow-up inspections. In certain cases, a post-exposure plan may be required, as described in subsection 008.03. There are three types of flock plans as follows:

- <u>012.01</u> Genetics based flock plans. Genetics based flock plans require the removal of all:
 - <u>012.01A</u> Genetically susceptible exposed female animals, unless the flock plan allows some genetically susceptible animals to be retained and these animals remain under quarantine.
 - 012.01B All scrapie-positive and suspect animals, and
 - 012.01C The female offspring of positive female animals.
- <u>012.02</u> Exposure based flock plans. These plans require the depopulation of high-risk animals and any other animals that are required to be removed under a genotype plan for the flock.
- <u>012.03</u> Whole-Flock Depopulation Flock Plan. Whole-flock depopulation may be used when recommended by the designated scrapie epidemiologist and with the concurrence of the flock owner, Area Veterinarian-in-charge, and the Department. Such concurrence will be based on whether the depopulation will enhance scrapie eradication. Examples of when whole-flock depopulation should be recommended include:
 - <u>012.03A</u> Flocks for which the cost of depopulation is less than the cost of conducting another type of flock plan;
 - $\underline{012.03B}$ Any flock in which an RR sheep is determined to be infected;
 - 012.03C Goat herds;
 - $\underline{012.03D}$ Flocks where infection has recurred after a flock plan was completed in animals born on the premises and where the owner agrees not to restock with sheep or goats on the premises for at least five (5) years;
 - $\underline{\text{O12.03E}}$ Flocks in states that have been classified as free of scrapie; or,
 - $\underline{012.03F}$ When requested by the owner, when the owner agrees not to restock with sheep or goats on the premises for at least five (5) years.
- O13 Scrapie Surveillance. The state may use live animal surveillance, market surveillance, or slaughter surveillance to detect scrapie in the sheep and goat population to aid in the administration of the Scrapie Control and Eradication Program.

014 Exhibition of Sheep and Goats.

- $\underline{014.01}$ Only sheep and goats from flocks not quarantined and not showing signs of infections, contagious or communicable diseases, nor any signs of scrapie will be allowed into exhibition.
- $\underline{014.02}$ Sheep and goats moving to, or at an exhibition, shall be identified according to the requirements of section 005 of this chapter.
- $\underline{014.03}$ Sheep or goats entering the state for exhibit in Nebraska shall meet the animal import requirements under $\underline{\text{Neb}}$. $\underline{\text{Rev}}$. $\underline{\text{Stat}}$. §§54-784.01 to 54-796, the regulations found in 23 NAC 2, and the exhibition requirements of this section.
- O15 Certification Program. The Department recommends, but does not require, sheep and goat producers enroll their flocks in the Voluntary Scrapie Flock Certification Program (1999), developed and administered by the United States Department of Agriculture. A copy of the program standards is included in Appendix B.
- 016 Publications Adopted. See Appendix A and B.
- $\underline{017}$ Annotation. $\underline{\text{Neb}}$. $\underline{\text{Rev}}$. $\underline{\text{Stat}}$. §§54-784.01 to 54-796 and $\underline{\text{Neb}}$. $\underline{\text{Rev}}$. $\underline{\text{Stat}}$. §§54-2701 to 54-2761 (Reissue 2004).

APPENDIX

- A. "Scrapie Eradication Uniform Methods and Rules" Effective October 1, 2003
- B. Voluntary Scrapie Flock Certification Program (1999)

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