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INTRODUCTION

The Association of Food and Drug Officials (AFDO) has developed this guidance document for State and Local Jurisdictions on the inspection of Exempt Slaughter and Processing operations for amenable species (cattle, swine, sheep, goats, chickens, turkeys, ducks, geese, etc.), game animals and exotic species. Current regulations where they exist, inspector preparation and industry directives are absent and/or non-uniform to explain and guide commercial practice and regulatory surveillance. These guidelines are intended to address these concerns.

These guidelines are intended to evidence a national standard for exempt slaughter and exempt processing operations. Accordingly, these guidelines have sought to fit with the construct of the Federal Meat Inspection Act (21 U.S.C. 601, et. seq.) and the Federal Poultry Products Inspection Act (21 U.S.C. 451, et. seq.). Individual states may want to vary the guidelines to meet local situations.

This document was produced through AFDO in coordination with a Task Force of experts from the United States Department of Agriculture, Food Safety and Inspection Services (USDA/FSIS) and representatives of state meat or food safety inspection programs. AFDO wishes to thank the following State representatives from the Task Force:

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Larry Decker, New York
Dr. John Fruin, Florida
Dr. Douglas Hepper, California
Dr. Lee Jan, Texas

Dr. John Fruin and Larry Decker are from state food safety programs and Dr. Hepper, Terry Burkhardt and Dr. Jan are from state meat inspection programs. In addition, technical experts from USDA/FSIS served as advisors. AFDO staff also participated.
DEFINITIONS

(For the purposes of this guideline document, the following definitions apply:)

1. “Custom slaughter” or “custom processing” means slaughter or processing services provided to an individual who already owns the affected food animal or meat and who uses the resulting meat products solely for his or her personal or household consumption, employees and non-paying guests. The service provider does not act as the purchasing agent of the live animal and does not sell meat, but merely provides a service for hire.

2. “Exempt slaughter” or “exempt processing” include custom slaughter or custom processing as well as those exempt slaughter and processing activities that are exempt under the federal Meat Inspection Act and Poultry Processing Inspection Act.

3. “Food animals” means all the following:
   - “Domesticated food animals.” This includes cattle, swine, sheep, goats, rabbits, farm-raised deer, poultry (chickens, ducks, geese, turkeys, guineas, squab) and ratites.
   - “Captive game animals.” This includes bison, whitetail deer and other animals of a normally wild type that are produced in captivity for slaughter and consumption.
   - “Captive game birds.” This includes farm-raised game birds, such as pheasants, quail, wild turkeys, waterfowl and exotic birds, which are produced in captivity for slaughter and consumption.

4. “Meat” means the edible muscle and other edible parts of a food animal.
5. “Meat establishment” means an establishment used to slaughter food animals for human consumption, or to process the meat of food animals for human consumption.

6. “Mobile custom slaughter” or “mobile custom processing” means custom slaughter or processing services provided at the recipient’s premises (typically a farm), rather than at a meat establishment.

7. “Person” includes any individual, partnership, corporation, limited liability company, association or other business unit and any officer, agent or employee thereof.

8. “Sanitary” means free from dirt, filth and contamination and free from any other substance or organisms which are known to be injurious to human health or which would render the product adulterated.

9. “Wild game” means an animal, the products of which are food that is not classified as a domesticated food animal captive game animal or captive game bird. This includes wild deer, elk, antelope, moose, bison, bear, rabbit, squirrel, raccoon and wild birds such as pheasants, quail and turkey.

REGISTRATION AND AUTHORITY

1. No person, firm, partnership or corporation not granted inspection pursuant to the Federal Meat Inspection Act or the Federal Poultry Products Inspection Act shall operate any place or establishment where food animals are exempt slaughtered or exempt processed for food unless such person, firm, partnership or corporation be registered or licensed by the state or local regulatory agency. An application for registration or license shall be made upon a form prescribed by the regulatory agency.
2. In performance of their registration and inspection duties, authorized representatives of the regulatory agency shall have access to, and may enter at all reasonable hours, all places where food animals are exempt slaughtered or exempt processed.

**CONSTRUCTION**

1. Establishment buildings, including their structures, rooms and compartments must be of sound construction, be kept in good repair and be of sufficient size to allow for processing, handling and storage of product in a manner that does not result in product adulteration or creation of insanitary conditions.

2. Walls, floors and ceilings within establishments must be built of durable materials impervious to moisture and be cleaned and sanitized as necessary to prevent adulteration of product or creation of insanitary conditions.

3. Walls, floors, ceilings, doors, windows and other outside openings must be constructed and maintained to prevent the entrance of vermin, such as flies, rats and mice.

4. Rooms or compartments in which edible product is processed, handled or stored must be separate and distinct from rooms or compartments in which inedible product is processed, handled or stored, to the extent necessary to prevent product adulteration and creation of insanitary conditions.

**SANITARY FACILITIES**

1. Rooms, compartments, equipment and utensils used for preparing, processing, storing or otherwise handling any product shall be kept in a clean and sanitary condition.
2. Ventilation adequate to control odors, vapors and condensation to the extent necessary to prevent adulteration of product and creation of insanitary conditions must be provided.

3. The exempt slaughter or exempt processing establishment shall maintain well-distributed and sufficient light of good quality.

4. The exempt slaughter or exempt processing establishment shall maintain an efficient drainage and plumbing system for the establishment and premises and all drains and gutters shall be properly installed with appropriate traps and vents. The establishment shall obtain a letter or certificate from the responsible local authority or an accredited third party that the sewer system meets all local environmental standards.

5. The water supply shall be ample, clean and potable, with adequate facilities for its distribution in the plant and its protection against contamination and pollution. Every establishment shall make known the source of its water supply and shall afford the opportunity for inspection by a department representative of the water and storage facilities and the distribution system. Establishments using a public water supply shall obtain a letter from the servicing agent stating that the water is tested periodically to determine its potability and that the establishment is supplied water by said agency or company. Plant owners shall have the plant water supply tested semiannually if using a private water supply and make the test reports available to the inspector. If the plant uses ice, the ice must be made with potable water meeting the requirements of this subparagraph for the water supply, including testing.

6. One or more dressing rooms and toilet rooms shall be provided, which shall be conveniently located, have self-closing doors and be properly ventilated and lighted. They shall be separate from the rooms
and compartments in which products are prepared, stored or handled.

7. Hand-washing facilities shall be placed in or near toilet, killing and processing rooms. It is recommended that these are pedal or knee operated.

8. Hand-washing facilities shall be provided with hot water of at least 105°F and cold water tempered by means of a mixing valve or combination faucet, liquid or powdered soap dispensed from sanitary containers and individual towels or hand drying devices.

9. Establishment toilet soil lines shall be separate from other drainage lines to a point outside the building and drainage from toilet bowls and urinals shall not be discharged into a grease catchbasin.

10. Products shall not be processed, prepared or stored directly beneath sewer lines, drain pipes or other system carrying sewage or waste unless such pipe lines are leak proof or properly protected by insulating materials or other means.

11. Washing and sanitizing of transportation cages shall be conducted in a separate room or designated area with appropriate drainage. Street cleaning or storage of transportation cages shall be prohibited in public thoroughfares.

**HUMANE TREATMENT OF ANIMALS**

Food animal pens, driveways and ramps shall be maintained in good repair and free from sharp or protruding objects which may cause injury or pain to the animals. Loose boards, splintered or broken planking and unnecessary openings where the head, feet or legs of an animal may be injured shall be repaired. Floors of food animal pens, ramps and driveways shall be constructed and maintained so as to provide good footing for livestock.
A covered pen sufficient to protect livestock from the adverse climatic conditions of the locale shall be required at those establishments that hold animals overnight or through the day.

Food animals shall have access to water in all holding pens and, if held longer than 24 hours, access to feed. There shall be sufficient room in the holding pen for food animals held overnight to lie down.

Food animals are to be humanely slaughtered, according to established or recognized standards for the particular species.

1. Stunning of food animals shall be accomplished in a manner that will create a minimum of excitement or discomfort.

2. The driving of food animals to the slaughtering area shall be done with a minimum of excitement and discomfort. Pipes, sharp or pointed objects and other items, which would cause injury or unnecessary pain, shall not be used.

3. Immediately after stunning, the food animals shall be in a state of complete unconsciousness and remain in this condition throughout shackling, sticking and bleeding.

4. Stunning instruments must be maintained in good repair and available for inspection.

Humane slaughter methods may include, but are not necessarily limited to, the following:

- Captive bolt devices
- Electrical stunning
- Gun shot
Approved ritualistic slaughter procedure (Kosher, Halal, etc.)

**EQUIPMENT AND UTENSILS**

1. Equipment and utensils used for slaughtering and dressing livestock or otherwise handling any edible product in any exempt slaughter or exempt processing establishment shall be of such smooth and impervious material and construction as will facilitate their thorough cleaning and ensure cleanliness in the preparation and handling of all edible products to avoid adulteration of such products.

2. Scabbards and similar devices for the temporary retention of knives, steels, triers, etc. by workers and others at exempt slaughter establishments shall be constructed of rust-resistant metal or other impervious material, that may be readily cleaned and shall be kept clean at all times.

3. Receptacles used for handling inedible material shall be of such smooth and impervious material and construction that allows them to be easily cleaned, shall be maintained in a clean condition and they shall be conspicuously and distinctively marked “inedible” and shall not be used for handling any edible product.

4. New or replacement equipment or machinery (including any replacement parts) brought onto the premises of any custom slaughter establishment shall not contain liquid polychlorinated biphenyls (PCBs) in concentrations above 50 parts per million by weight of the liquid medium. This provision applies to any and all equipment and machinery, and any replacement parts for such equipment and machinery. Totally enclosed capacitors containing less than three pounds of PCBs are exempted from this prohibition.
5. Live animal and poultry holding and transportation cages shall be thoroughly cleaned and sanitized after use. The holding or storage of unclean transportation cages is prohibited unless these cages are returned to the distributor on the same date received. Establishment live animal and poultry holding cages shall be equipped with waste material catch pans at the bottom of each cage.

6. Tools, equipment and utensils used for preparing, processing and otherwise handling of any product shall be made of nontoxic material and shall be thoroughly cleaned and sanitized immediately after a change in processing between species, after any interruption of operations during which time contamination may have occurred and after each day's use. The equipment shall be properly stored and protected when not in use. All shroud cloths shall be acceptably clean at time of use.

**PRODUCT PROTECTION**

1. Products shall be protected from contamination at all times during production, preparation, storage and transportation.

2. Refrigerated storage of adequate capacity shall be provided and maintained at a temperature not to exceed 41ºF for carcasses and parts thereof, processed meats and poultry, meat and poultry by-products and meat and poultry food products. For the purposes of this Section, refrigerated storage of product at a temperature not to exceed 41ºF shall include the transportation vehicle used by the exempt operator to deliver product.

3. Vehicles in which products are transported shall be so constructed as to prevent dust, dirt, flies, insects and other contamination from coming in contact with products and shall be maintained in a clean and sanitary manner. Satisfactory protective covering for products shall be provided when necessary.
4. Carcasses and parts shall be protected from contamination from any source such as dust, dirt or insects during storage, loading or unloading at, and transportation to and from exempt slaughter establishments. “To protect carcasses and parts from contamination during transport, the product must be enclosed in appropriate packaging material and transported in vehicle compartments with secured, tight fitting doors.”

5. An exempt slaughterer may not slaughter a food animal for human consumption that appears either diseased or injured. This prohibition does not apply to either of the following:

- The animal owner certifies that the animal was injured within 24 hours prior to slaughter and is otherwise healthy.

- The exempt slaughter of an animal injured more than 24 hours prior to slaughter where:
  - The animal owner certifies that the animal is injured, is otherwise healthy and
  - A qualified veterinarian performs an ante-mortem and post-mortem examination on the animal and verifies that the animal is healthy at the time of slaughter.

6. An exempt processor may not process any meat from a carcass that appears diseased or injured unless one of the following applies:

- The animal's owner certifies that the animal was injured within 24 hours prior to slaughter and was otherwise healthy.

- A qualified veterinarian performed an ante-mortem and post-mortem examination on the animal and verifies that the animal was healthy at the time of slaughter.
7. An exempt slaughterer shall immediately notify the state veterinarian of the names and addresses of any individuals that have presented animals for slaughter that exhibit central nervous system abnormalities, signs of Foot and Mouth Disease or other reportable animal health diseases. If such symptoms are encountered, the exempt slaughterer should hold the animal until the state veterinarian has evaluated the animal.

SANITARY OPERATIONS

1. Exempt slaughter and exempt processing establishments shall be maintained in sanitary condition. Each exempt slaughter and exempt processing establishment shall implement and maintain written standard operating procedures for sanitation (SSOPs) in accordance with the following requirements:

- The SSOP shall describe all procedures an exempt slaughter or exempt processing establishment will conduct daily, before and during operations, sufficient to prevent direct contamination or adulteration of product(s).

- The SSOP shall be signed and dated by the person with overall authority on site. This signature shall signify that the establishment will implement the SSOP as specified and will maintain the SSOP in accordance with the requirements of this part. The SSOP shall be signed and dated upon initially implementing the SSOP and upon any modifications to the SSOP.

- Procedures in the SSOP that are to be conducted prior to operations shall be identified as such and shall address, at a minimum, the daily cleaning of food contact surfaces of facilities, equipment and utensils.
• The SSOP shall specify the frequency with which each procedure in the SSOP is to be conducted by the exempt processor and identify the employee(s) responsible for the implementation and maintenance of such procedure(s).

• Each exempt slaughter and exempt processing establishment shall conduct the pre-operational procedures in the SSOP before the start of operations and shall conduct all other procedures as specified in the SSOP.

• The owner or operator of the exempt slaughter or exempt processing establishment shall monitor the daily implementation of the SSOP.

• The operator of the exempt slaughter or exempt processing establishment shall evaluate the procedures contained in the SSOP to prevent direct contamination or adulteration of product(s) and shall revise the SSOP as necessary to keep the procedures effective and current with respect to changes in facilities, equipment, utensils, operations or personnel.

• The operator of the exempt slaughter or exempt processing establishment shall take appropriate corrective action(s) when either the establishment or department representative determines that the establishment’s SSOP failed to prevent direct contamination or adulteration of product(s). Corrective actions include procedures to ensure appropriate disposition of product(s) that may be contaminated, restore sanitary conditions and prevent the recurrence of direct contamination or adulteration of product(s), including appropriate reevaluation and modification of the SSOP.

• Each exempt slaughter and exempt processing establishment shall maintain daily records sufficient to document the implementation and monitoring of the SSOP and any corrective
actions taken. The establishment employee(s) specified in the SSOP shall authenticate the record with his or her initials and the date. These records shall be maintained for at least six months and made available to a department representative upon request. All such records shall be maintained at the exempt slaughter or exempt processing establishment.

2. Operations and procedures involving the dressing, storing or handling of any livestock carcass or parts thereof shall be strictly in accord with clean and sanitary methods.

3. All tools, utensils and equipment which become contaminated in dressing carcasses shall be thoroughly cleaned and dipped in hot water having a minimum temperature of 180 degrees Fahrenheit or in a disinfectant solution used and prepared according to a written procedure developed by the exempt slaughterer specifying mixing methods, concentrations, contact time, the need to rinse with clean water and storage of mixed solutions. Documentation substantiating the safety of a chemical’s use in a meat processing environment must be available for review.

4. In establishments where poultry is processed chilling tanks or vats shall be of smooth construction. They shall have a continuous water overflow and be emptied, cleaned and sanitized after each use. Poultry carcasses and parts thereof not immediately given to the consumer shall be chilled after evisceration to an internal temperature not to exceed 41°F prior to shipment.

5. Poultry scalders shall maintain acceptably clean water. Poultry scalders shall be emptied, cleaned and sanitized at least daily.

6. Eviscerating facilities and equipment must be sufficient at each workstation to insure that carcass
and product preparation can be accomplished without contamination.

7. Carcasses, parts thereof, meat and meat food products that are adulterated and/or not returned to the owner shall be adequately denatured or decharacterized to preclude their use as human food. Before the denaturing agents are applied, carcasses and carcass parts shall be freely slashed or sectioned. The denaturing agent must be mixed with all of the carcasses or carcass parts to be denatured and must be applied in such quantity and manner that washing or soaking cannot easily and readily remove it. A sufficient amount of the appropriate agent shall be used to give the material a distinctive color, odor or taste so that such material cannot be confused with an article of human food.

8. Animals dressed with hides on shall be thoroughly washed and cleaned before evisceration. Washing equipment of an acceptable type to thoroughly and efficiently wash carcasses inside and out shall be provided.

9. Singeing, where performed, shall be conducted in a sanitary manner to prevent contamination and adulteration of product and in compliance with all applicable fire and environmental codes.

10. Hides shall not be stored on the killing floor, nor stored exposed in rooms or compartments used for edible products.

11. Carcasses with hides on and hunter-killed wild game shall not be stored in contact with skinned and dressed carcasses or parts thereof or other edible products.

PERSONNEL

1. All persons working in contact with product, food contact surfaces and product packaging materials
must adhere to hygienic practices while on duty to prevent adulteration of product and the creation of insanitary conditions.

2. Aprons, frocks and other outer clothing worn by persons who handle product must be of material that is disposable or readily cleaned. Clean garments must be worn at the start of each working day and garments must be changed during the day as often as necessary to prevent adulteration of product and the creation of insanitary conditions.

3. Any person who has, or appears to have, an infectious disease, open lesion, including boils, sores or infected wounds or any other abnormal source of microbial contamination, must be excluded from any operations which could result in product adulteration and the creation of insanitary conditions until the condition is corrected.

4. Personnel responsible for identifying sanitation failure or food contamination should have a background of education or experience or a combination thereof to provide a level of competency necessary for production of clean and safe food. Personnel and supervisors responsible for slaughter or processing should receive appropriate training in proper food protection principles.

**MEAT ESTABLISHMENTS PROCESSING WILD GAME**

A meat establishment may custom process legally harvested wild game for the game owner if all the following apply:

- The meat establishment operator notifies the regulatory agency, which may restrict wild game processing that is incompatible with the exempt slaughter or exempt processing of food animals at the same establishment.
• The operator accepts only clean and apparently wholesome wild game carcasses for custom processing.

• The operator, when custom processing wild game, complies with processing, labeling and recordkeeping requirements applicable to the custom processing of food animals. The operator must label all of the resulting wild game products, “NOT FOR SALE.”

• The operator processes wild game only at times when the operator is not slaughtering or processing food animals.

• The operator cleans and sanitizes equipment used to process wild game before using that equipment to slaughter or process food animals.

• The operator keeps wild game and wild game products separate from all other meat and meat food products in the establishment.

• The operator clearly labels wild game products, so they cannot be confused with other meat or meat food products. Wild game products must be clearly identified by species.

**RECORDS AND CONTROLS**

1. The operator or owner of the exempt slaughter or exempt processing establishment shall take appropriate corrective action(s) when either the establishment or regulatory agency determines that the establishment’s SSOP failed to prevent direct contamination or adulteration of product(s). Corrective actions include procedures to ensure appropriate disposition of product(s) that may be
contaminated, restore sanitary conditions and prevent the recurrence of direct contamination or adulteration of product(s), including appropriate reevaluation and modification of the SSOP.

2. Each exempt slaughter and exempt processing establishment shall maintain daily records sufficient to document the implementation and monitoring of the SSOP and any corrective actions taken. The establishment employee(s) specified in the SSOP shall authenticate these records with his or her initials and the date. These records shall be maintained for at least six months and made available to a regulatory agency representative upon request. All such records shall be maintained at the exempt slaughter or exempt processing establishment.

3. Custom slaughter records shall contain the name, address and telephone number of the owner of each food animal slaughtered, the date the food animal was slaughtered, the species and brief description of the food animal.

4. Additional records that must be kept include records such as bills of sale, invoices, bills of lading and receiving and shipping papers for transactions in which any food animal or carcass, meat or meat food product is purchased, sold, shipped, received, transported or otherwise handled by the exempt slaughter or exempt processing establishment.

5. Operators of facilities conducting exempt slaughter and exempt processing shall keep slaughter and processing records for a period of two years, beginning on January 1 of the previous year plus the current year to date.

6. All records shall be available to regulatory agency representatives on request.
7. A regulatory agency representative may attach a “Reject Tag” to any equipment, utensil, room or compartment at an exempt slaughter or exempt processing establishment that he or she determines is insanitary and presents a health hazard. No equipment, utensil, room or compartment so tagged shall again be used until untagged or released by a regulatory agency representative. Such tag so attached shall not be removed by anyone other than a regulatory agency representative.

8. A regulatory agency representative that determines any meat is adulterated, unfit for human food, from an unhealthy or unsound animal or may be a health hazard, may attach a “Retain Tag” to the meat and document the reason for attaching the tag on a form specified by the regulatory agency and deliver the form to the operator of the meat establishment. The owner of the meat shall be notified by the plant operator and advised of the potential health risk.
The custom processor shall ensure that the owner of the meat either authorizes the voluntary destruction and denaturing of the meat or agrees to remove the meat from the custom-processing establishment. Under no circumstances may the meat be further processed at the establishment.

9. Safe handling labeling or instructions shall accompany every customer's raw or not fully cooked products.

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### Safe Handling Instructions

*Some food products may contain bacteria that could cause illness if the product is mishandled or cooked improperly. For your protection, follow these safe-handling instructions.*

- Keep refrigerated or frozen. Thaw in refrigerator or microwave.
- Keep raw meat and poultry separate from other foods. Wash working surfaces (including cutting boards), utensils and hands after touching raw meat or poultry.
- Cook thoroughly.
- Keep hot foods hot. Refrigerate leftovers immediately or discard.
10. A person who slaughters any food animal for human consumption or who processes the meat of any food animal for human consumption, must keep records including:

- The date and time of slaughter or processing.
- The number and type of animals slaughtered and the disposition of the carcasses.
- The type and amount of meat processed and the disposition of that meat.
- Certificates signed by persons submitting injured animals for slaughter. (See Section “Product Protection” #5 and #6).

The person must keep the records for at least two years and make the records available for inspection and copying by the regulatory agency upon request.

11. Meat that is prepared on a custom basis shall be marked at the time of preparation with the term, “Not for Sale” in letters at least three-eighths inch in height and shall also be identified with the owner’s name or a code that allows identification of the carcass or carcass part to its owner. Only approved ink shall be used for marking such products.

12. Exempt slaughtered or exempt processed poultry prepared for further distribution for sale must be labeled to include the producer’s name and address and the statement, “Exempted – P.L. 90-492” or other regulatory agency requirement.
13. A person performing a mobile custom slaughter must return the resulting meat to the service recipient at the slaughter site, except that the service provider may transport carcasses, other than poultry carcasses, to a licensed or registered meat establishment for custom processing. Carcasses must be transported in a sanitary manner and must be conspicuously marked “Not for Sale.”

A person providing mobile custom slaughter or processing services must keep records including:

- The name and address of each service recipient.
- The number and type of animals slaughtered for each service recipient.
- The date of each slaughter.
- The disposition of each carcass. If a carcass is transported to another location for further processing, the report must identify that location.

**PRESCRIBED TREATMENT OF HEAT-TREATED, EXEMPT PROCESSED MEAT**

1. All forms of exempt processed fresh meat, including fresh unsmoked sausage and pork such as bacon and jowls are classified as products that are customarily well cooked in the home before being consumed. Therefore the treatment of such products for the destruction of pathogens is not required.

2. Exempt processed meat that is not customarily cooked or may not be cooked before consumption because it has the appearance of being fully cooked, must not contain pathogens.
a. Heat-treated products and dry, semi-dry and fermented sausages that are less than three inches in diameter are required to be heated to an internal temperature according to the following chart:

<table>
<thead>
<tr>
<th>Internal Temperature (in degrees F)</th>
<th>Time</th>
<th>Internal Temperature (in degrees F)</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>157 and up</td>
<td>10 seconds</td>
<td>141</td>
<td>10 minutes</td>
</tr>
<tr>
<td>156</td>
<td>13 seconds</td>
<td>140</td>
<td>12 minutes</td>
</tr>
<tr>
<td>155</td>
<td>16 seconds</td>
<td>139</td>
<td>15 minutes</td>
</tr>
<tr>
<td>154</td>
<td>20 seconds</td>
<td>138</td>
<td>19 minutes</td>
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<tr>
<td>153</td>
<td>26 seconds</td>
<td>137</td>
<td>24 minutes</td>
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<tr>
<td>152</td>
<td>32 seconds</td>
<td>136</td>
<td>32 minutes</td>
</tr>
<tr>
<td>151</td>
<td>41 seconds</td>
<td>135</td>
<td>37 minutes</td>
</tr>
<tr>
<td>150</td>
<td>1 minute</td>
<td>134</td>
<td>47 minutes</td>
</tr>
<tr>
<td>145</td>
<td>4 minutes</td>
<td>133</td>
<td>62 minutes</td>
</tr>
<tr>
<td>144</td>
<td>5 minutes</td>
<td>132</td>
<td>77 minutes</td>
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<tr>
<td>143</td>
<td>6 minutes</td>
<td>131</td>
<td>97 minutes</td>
</tr>
<tr>
<td>142</td>
<td>8 minutes</td>
<td>130</td>
<td>121 minutes</td>
</tr>
</tbody>
</table>

b. Heat treated products and dry, semi-dry and fermented sausages that are more than
three inches in diameter are required to be heated to an internal temperature according to the following chart:

<table>
<thead>
<tr>
<th>Internal Temperature (in degrees F)</th>
<th>Time</th>
<th>Internal Temperature (in degrees F)</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>145 and up</td>
<td>instantly</td>
<td>141</td>
<td>10 minutes</td>
</tr>
<tr>
<td>144</td>
<td>5 minutes</td>
<td>140</td>
<td>12 minutes</td>
</tr>
<tr>
<td>143</td>
<td>6 minutes</td>
<td>139</td>
<td>15 minutes</td>
</tr>
</tbody>
</table>

c. Heat-treated products that must be stored under refrigerated temperatures must be cooled quickly to prevent bacterial growth. During cooling, the product's maximum internal temperature should not remain between 130 degrees Fahrenheit and 80 degrees Fahrenheit for more than 1-1/2 hours nor between 80 degrees Fahrenheit and 41 degrees Fahrenheit for more than 5 hours. Exempt processors may slowly cool cured products in accordance with Food Safety and Inspection Services (FSIS) Directive 7110.3, Time/Temperature Guidelines for Cooling Heated Products.

d. Exempt processors not utilizing a heating step as described in (a), (b) or (c) above must submit an alternate procedure, describing the method utilized in determining safety to the state regulatory agency.

3. When necessary to comply with the heat treatment requirements of this section, the smokehouses,
drying rooms and other compartments used in the treatment of exempt processed meat products to destroy pathogens shall be suitably equipped by the operator of the exempt processing establishment with accurate automatic recording thermometers.

4. All ready-to-eat exempt processed pork products shall have undergone a formulation, temperature or curing process designed to eliminate trichinae. This may include freezing as prescribed in FSIS 318.10, heating to 144°F minimum or through a process which includes controlling the size of the chopped meat in the product, ensuring a specific salt content and specifying the length of time in a drying room at a specific temperature.