# **Provincial Abattoir Handbook**



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## Preface

Provincial abattoir operators and meat inspectors (health officers) play a critical role in the food supply chain. They help ensure the safe and hygienic handling of meat and meat products, minimize the risk of foodborne illness, and ensure animals are handled and harvested humanely.

This handbook for provincial abattoir operators and meat inspectors is designed to provide information on operational practices within provincial abattoirs. It covers the following topics:

- Dressing Procedures: Proper techniques for dressing of carcasses
- **Organ Harvesting:** Best practices for the hygienic removal and handling of organs for human consumption or further processing
- Specified Risk Material (SRM) Management: Guidelines for identifying, segregating, and disposing of SRM
- Use of Inedible Material Generated at an Abattoir For Animal Food: Operational guidelines for provincial abattoir operators for harvesting and handling inedible material to be used as animal food

## CHAPTER 1 Dressing Procedures



## CHAPTER 1 Dressing Procedures

Faecal or ingesta contamination of carcasses is a common cause of contamination by foodborne pathogens that may be present in the gastrointestinal tract and on the exterior of the carcass. It is important to use dressing procedures that minimize bacterial contamination on the edible portions of the carcass.

This chapter sets out hygienic dressing procedures for all food animal species. An abattoir operator must meet these requirements to ensure that carcasses and their parts are prepared hygienically and are ready for inspection.

Dressing is defined as all actions taken after a food animal is stunned and bled. It is important to prevent meat contamination at all stages of dressing including these steps:

- moving and hoisting
- skinning, dehiding or defeathering
- evisceration
- splitting and trimming
- cleaning and washing
- chilling
- further processing

## General Hygienic Dressing Procedures for all Species

Conduct dressing procedures in a hygienic manner with measures to avoid contamination.

Follow these practices:

- Remove stick wound.
- Ensure skin is cut from the inside-out.
- Use filtered air when dehiding or separating tissues with forced air.
- Ensure that carcasses do not touch other carcasses throughout the dressing process.
- Avoid carcass with a visible pathological defect or visible contamination touching other carcasses.
- Avoid carcass contamination from dirty hands, knives, hair and pelts during dressing.
- Avoid letting the carcass contact the floor or unhygienic structures.
- Prevent splashing from the floor or other unhygienic structures.
- Avoid the transfer of heads over unprotected edible meat products unless effective controls (e.g., trays, pans) are in place to protect from cross-contamination.
- Immediately trim fecal, ingesta or milk contamination that occurs during dressing in a manner avoiding contamination of carcass(es); washing is not permitted to remove the contamination.
- Remove any residual bone dust and blood clots prior to cooling.
- Conduct a final inside and outside carcass wash to improve microbiological quality prior to cooling.
- Ensure that instruments and equipment used in dressing are clean and sanitized. Immediately clean them if they are contaminated (e.g., touch inedible materials, pathological defects or any biological, chemical or physical hazard).
  - <sup>o</sup> Particular care should be taken for the following:
    - sticking knives
    - knives for splitting the brisket or opening the abdomen
    - gutting presentation equipment (e.g., hooks, trays, tables)
    - utensils used to prevent the clotting of blood

• Have dedicated equipment and tools to avoid cross contamination (e.g., boots and aprons for workers, dedicated tools for contact with specific risk material, separate aprons for workers in barns).

## Specific Dressing Procedures for Red Meat Species

## **Full Carcass Dressing**

## **Bovine and Cervid**

- Remove the lactating mammary glands and the mammary lymph nodes.
- Remove the penis and the prepuce.
- Remove the feet prior to skinning the carcass; skin the area above and below where the leg will be cut.
- Remove the horns as applicable, avoiding opening the skull.
- Remove the hide, proceeding from shackle downward and pulling away from the carcass.
- Open the brisket and midline of the abdomen after contamination has been removed along the incision line.
- Perform a circular cut around the anus to drop the bung (rectum), followed by ligation (by tie or clip) of the rectum and neck of bladder and then inserting into a plastic bag for dropping into the pelvic cavity.
- Remove the skinned head. Ensure the head is thoroughly washed, including nasal and oral cavities, prior to any cuts.
- Drop the tongue and remove the palatine tonsils to expose the retropharyngeal lymph nodes.
- Separate the oesophagus from the trachea and surrounding tissues (i.e., rodding) and ensure it is tied-off before evisceration.
- Eviscerate the carcass.
- Split the carcass, after contamination has been removed from the split line, except in the case of calves.
- Remove the spinal cord completely from carcasses of over 30 month (OTM) cattle before the final carcass wash, paying particular attention to the extremities. Refer to Chapter 3 on handling specified risk material (SRM) in provincial abattoirs for additional information.

## **Ovine and Caprine**

- Remove the lactating mammary glands and the mammary lymph nodes.
- Remove the penis and the prepuce.
- Remove the feet prior to skinning the carcass; skin the area above and below where the leg will be cut.
- Remove the horns, as applicable, avoiding opening the skull.
- Remove the hide, proceeding from shackle downward and pulling away from the carcass.
- Open the brisket and midline of the abdomen after contamination has been removed along the incision line.
- Perform a circular cut around the anus to drop the bung (rectum), followed by a step to mitigate any leaking from the rectum (e.g., tying off, use of a clip, plugging) before dropping into pelvic cavity.
- Remove the skinned head. Ensure the head is thoroughly washed, including nasal and oral cavities, prior to any cuts.
- Drop the tongue and remove the palatine tonsils to expose retropharyngeal lymph nodes.
- Separate the oesophagus from the trachea and surrounding tissues (i.e., rodding) and ensure it is tied-off before evisceration.
- Eviscerate the carcass.

### Equine

- Remove the lactating mammary glands and the mammary lymph nodes.
- Remove the penis and the prepuce.
- Remove the feet prior to skinning the carcass; skin the area above and below where the leg will be cut.
- Remove the hide, proceeding from shackle downward and away from the carcass.
- Open the brisket and midline of the abdomen after contamination has been removed along the incision line.
- Perform a circular cut around the anus to drop the bung (rectum), followed by ligation (by tie or clip) of the rectum and neck of bladder and then inserting into a plastic bag for dropping into pelvic cavity.
- Remove the skinned head. Ensure the head is thoroughly washed, including nasal and oral cavities, prior to any cuts.
- Drop the tongue and remove the palatine tonsils to expose the retropharyngeal lymph nodes.
- Eviscerate the carcass.
- Split the carcass after any contamination has been removed along the split line.

## Ostrich, Rheas, Emus

- Remove the feet.
- Remove the skin, including from the neck, after defeathering the incision lines, proceeding from shackle downward and pulling away from the carcass.
- Vent the carcass by incising around cloaca and inserting the vent into a plastic bag for dropping into the pelvic cavity.
- Open the carcass after all feathers and contamination have been removed by:
  - in the case of ostriches: cutting the side ribs and pulling down on the breastplate
  - in the case of rheas and emus: splitting the breastplate along the midline extending the opening toward the vent by an incision along the midline of the abdomen
- Remove red offal before intestine to avoid contamination of organs from accidental rupture of fragile intestine.

### Swine: Hide-Off

- Wash the carcass prior to hide removal.
- Remove the lactating mammary glands and the mammary lymph nodes.
- Remove the penis and the prepuce.
- Remove the feet prior to skinning the carcass; skin the area above and below where the leg will be cut.
- Remove the hide, proceeding from shackle downward and pulling away from the carcass.
- Open the brisket and midline of the abdomen after contamination has been removed along the incision line.
- Perform a circular cut around the anus and tie the rectum before dropping the bung (rectum) into the pelvic cavity.
- Wash the head thoroughly, including the nasal and oral cavities, prior to fully or partially severing (drop) the skinned head.
- Drop the tongue and expose the mandibular lymph nodes.
- Eviscerate the carcass.
- Split the carcass up to the neck, at the limit of the head.

### Swine: Hide-On

- Remove all bristle, scurf and dirt (including on the feet) by scalding, dehairing, singeing, resin-dipping, polishing, or shaving and remove the interdigital spaces if necessary to meet this requirement.
- Remove any toenails.
- Wash the carcass prior to opening.
- Skin/trim any bristle, scurf or dirt that remains after washing immediately prior to opening.
- Open the brisket and midline of the abdomen after contamination has been removed along the incision line.
- Perform a circular cut around the anus and tie the rectum before dropping the bung (rectum) into the pelvic cavity.
- Wash the head thoroughly, including the nasal and oral cavities, prior to fully or partially severing (drop) the skinned head.
- Drop the tongue and expose the mandibular lymph nodes.
- Eviscerate the carcass.
- Split the carcass from tail up to neck-head junction.

## **Partial Carcass Dressing**

Partial carcass dressing refers to the process of preparing a carcass for consumption by removing certain internal organs and tissues but leaving some intact. This is often done for specific cuts.

Partial dressing must be approved by Manitoba Agriculture. It is always subject to the practicality of conducting the post-mortem evaluation as intended, according to the Canadian Food inspection Agency (CFIA) **Postmortem evaluation procedures.** For instance, some partial dressing procedures may not be allowed (e.g., hide-on for veal).

Because of the special nature of partial dressing, additional inspection is required to ensure that the outcomes described in this section are met.

The procedures indicated below describe the best practices that are recognized by CFIA and Manitoba Agriculture, but do not exclude any routine procedures that are otherwise described in the full dressing section.

### **BBQ Hogs (Market Hogs or Younger)**

• All dressing procedures for hogs apply, except for head dropping and carcass splitting.

### Hide-On Hair-Off Goat

- Remove all hair and dirt (including on the feet) by scalding, dehairing, singeing or shaving and remove the interdigital spaces if necessary to meet this outcome.
- · Remove any toenails.
- Wash the carcass prior to opening.
- Skin/trim any hair or dirt that remains after washing immediately prior to opening.
- Open the brisket and midline of the abdomen, after contamination has been removed along the incision line.
- Perform a circular cut around the anus to drop the bung (rectum), followed by a step to mitigate any leaking from the rectum (such as tying off, use of a clip, plugging) before dropping into pelvic cavity.
- Wash the head thoroughly, including the nasal and oral cavities, prior to any cuts.
- Drop the tongue and remove the palatine tonsils to expose the retropharyngeal lymph nodes.
- Separate the oesophagus from the trachea and surrounding tissues (i.e., rodding) and ensure it is tied-off before evisceration.
- Eviscerate the carcass partially or fully (as authorized by Manitoba Agriculture).

### Hide-On Hair-On Sheep and Goat

Only clean animals or carcasses are eligible to proceed to hide-on hair-on dressing. Follow these steps:

- Remove all hair along incision lines by shaving and keep the hair as short as possible.
- Remove all dirt from feet.
- Wash the carcass. Any moisture retention in the hair should be minimized prior to opening.
- Skin/trim any remaining bristle, scurf or dirt after washing immediately prior to opening.
- Open the brisket and midline of the abdomen, after contamination has been removed along the incision line.
- Perform a circular cut around the anus to drop the bung (rectum), followed by a step to mitigate any leaking from the rectum (such as tying off, use of a clip, plugging) before dropping into pelvic cavity.
- Wash the head thoroughly, including nasal and oral cavities, prior to any cuts.
- Drop the tongue and remove the palatine tonsils to expose retropharyngeal lymph nodes.
- Separate the oesophagus from trachea and surrounding tissues (i.e., rodding) and ensure it is tied-off before evisceration.
- Eviscerate the carcass partially or fully (as authorized by Manitoba Agriculture).

# Specific Dressing Procedures for Poultry and Rabbits

## **Full Dressing for Poultry**

- Remove all feathers, hair, dirt and scurf from the carcass.
- Wash the entire carcass thoroughly after defeathering, to remove all visible foreign material and prior to any incision being made.
- Remove the heads, oil glands, and feet at the tarsal joint.
- Vent the carcass by incising around cloaca, followed by an incision that is no longer than that required to eviscerate, whilst ensuring that gastro-intestinal integrity is maintained.
- Eviscerate the carcass, with or without the kidneys.

## Partial Dressing for Poultry - Head and Feet-On Poultry Carcasses

- Remove all feathers, hair, dirt and scurf from the carcass.
- Wash the entire carcass thoroughly after defeathering to remove all visible foreign material and prior to any incision being made.
- Ensure the feet and heads (with special attention to oral cavity and nostrils) are free from disease and visible contamination prior to venting.
- Vent the carcass by incising around cloaca, followed by an incision that is no longer than that required to eviscerate, whilst ensuring that gastro-intestinal integrity is maintained.
- Eviscerate the carcass, with or without the kidneys.
- Remove the outer skin layer and the toenails from the feet prior to chilling.
- Label carcasses with oil glands accordingly.

## **Full Dressing for Rabbits**

- Remove the head after stunning.
- Sever the free leg at the tibiotarsal joint.
- Create a shallow cut in the skin between the hind legs in inguinal area.
- Remove any overlaying/hanging skin on the tibiotarsal joint.
- Remove the skin on the carcass by pulling down from the free leg, away from the carcass towards front feet.
- Remove the feet.
- Ensure the carcass is free of all types of visible contamination before the final wash which will need to remove any residual hair.
- Eviscerate the carcass.

### Partial Dressing for Rabbits - Head-On Rabbit Carcasses

- Sever the free leg at the tibiotarsal joint.
- Create a shallow cut in the skin between the hind legs in inguinal area.
- Remove any overlaying/hanging skin on tibiotarsal joint.
- Remove the skin on the carcass by pulling down from the free leg, pulling away from the carcass towards front feet.
- Remove the feet.
- Remove all skin and hair completely from the head. Head, oral and nasal cavities must be free of disease, discharge and visible contamination.
- Ensure carcass is free of all types of visible contamination before the final wash which will need to remove any residual hair.
- Eviscerate the carcass.

## CHAPTER 2 Harvesting Organs in Provincial Abattoirs



# Harvesting Organs in Provincial Abattoirs

Many organs, like livers, kidneys, hearts and tongues are considered delicacies in various cultures and are consumed as food products.

Proper harvesting allows these organs to be utilized as food sources, maximizing the nutritional and economical value obtained from a food animal.

Contaminated organs can harbor harmful bacteria that can spread through the food chain if not handled properly. Hygienic practices minimize this risk, helping to protect consumers from foodborne illnesses. Hygienic harvesting also preserves organ quality and freshness, leading to a more desirable product for consumers.

This chapter sets out the general procedures for organ harvesting in provincial abattoirs. It also lists the organs that are eligible to be sold in Manitoba.

## **Abattoir Operator Procedure**

Organs harvested from an approved carcass and collected in a hygienic manner are eligible for sale as human food when following this approach:

- Present the harvested organs to your meat inspector for inspection. Only the ones harvested sanitarily and free of contamination and pathology will be approved.
- Continue to hygienically handle harvested organs or blood. Chill them immediately to 4°C to prevent food safety risks.
- Harvested organs must have an internal temperature of 4°C or lower prior to sale.
- You could salvage approved organs in a bulk container. However, if unapproved organs were inadvertently collected in it, the whole container will be condemned.
- Complete and submit a written standard operating procedure (SOP) and receive the meat inspector's approval before harvesting organs that require an additional cleaning procedure, such as, gastrointestinal tracts, urinary bladders, gizzards, feet/paws, brains (if applicable).
  - Templates for SOPs are available in the appendix or here: www.manitoba.ca/agriculture/food-safety/inspection/abattoirhandbook

# Meat Inspector Procedure

• Your meat inspector will review and approve the SOP as applicable.

# Organs Eligible for Harvesting and Harvesting Method

The following harvested organs are eligible for sale in Manitoba:

## **Gastrointestinal Tract**

### **General Requirements**

- Before harvest, notify the inspector that the gastrointestinal tract (GIT) will be harvested for human consumption.
- Any portion of the GIT can be harvested as casing, except the distal ileum of bovines (cattle of all ages).
- Open, empty and clean all portions of GIT in a manner that does not pose a risk of cross-contamination (for example at an area separated from the evisceration floor).
- Inspector examines the whole GIT and approves only the healthy parts for harvesting.
- Accumulation of GIT for later preparation is not allowed.

#### Procedure

Steps one to three below must be performed in a dedicated area on the slaughter floor (separated from the area where dressed eviscerated carcasses and other approved organs are handled).

- 1. Empty and rinse GIT or any portion of it until the dripping water is clear.
- 2. Trim off any contamination or abnormality (inflammation, lump, foreign body, parasitic lesion).
- 3. Collect GIT in a clean container.
- 4. Present the collected GIT to the on-site inspector for inspection and approval.
- 5. Transfer the approved portions to a cooler.

### **Urinary Bladder**

#### **General Requirements**

- Before harvest, notify the inspector that urinary bladder will be harvested for human consumption.
- Urinary bladder of all species is eligible for use as casing.

#### Procedure

- 1. Empty and rinse the urinary bladder until clean.
- 2. Present collected bladders to on-site inspector for inspection and approval.
- 3. Transfer approved portions to a cooler.

### Gizzard

#### **General Requirements**

- Before harvest, notify the inspector that the gizzard will be harvested for human consumption.
- Gizzard of all birds is eligible for harvesting.
- Accumulation of gizzard for later preparation is not allowed.

- 1. Separate gizzard from the viscera.
- 2. Open it and remove the content and lining.
- 3. Remove contaminated fat on the outer surface.
- 4. Rinse well.
- 5. Present collected gizzard to on-site inspector for inspection and approval.
- 6. Transfer the approved portions to a cooler.

### Feet

### **General Requirements**

- Feet of all species are eligible for harvesting.
- Before harvest, notify the inspector that feet will be harvested for human consumption.
- Feet cannot be harvested from a condemned animal or carcass.
- Accumulation of feet for later preparation is not allowed.
- Place the feet scalder in a compatible (hygienic) area of the scalding room, slaughter room or in a room physically isolated from the surrounding inedible area or any other edible processing area.

### Mammals

- Remove feet at the knee or hock joint.
- Rinse and scald to remove contamination (e.g., feces and dirt).
- Singe, dehair or shave to remove hair.
- · Remove hooves.
- Trim the joint/bone exposed to any contamination during scalding and cleaning.
- Present collected feet to your on-site inspector for inspection and approval.
- Chill approved portions to 4°C or lower within four hours after scalding operations.

### Poultry/Rabbit Feet or Paws

- Before harvest, notify the inspector that feet will be harvested for human consumption.
- Feet must remain attached to the carcass until after post-mortem inspection.
- Feet of condemned birds or rabbits cannot be saved for human consumption. If the feet are severely contaminated or in poor condition, they must be removed from the carcass.
- Place the feet scalder in a compatible (hygienic) area of the scalding/defeathering room, slaughter room or in a room physically isolated from the surrounding inedible area or any other edible processing area.

#### Procedure

- 1. Clean feet or paws of any contamination before carcass hanging.
- 2. Ensure feet or paws are clean before venting or opening the abdominal cavity.
- 3. Remove the feet or paws at the hock joint from the approved carcasses.
- 4. Remove outer layer of the skin and toenails.
- 5. Present collected feet or paws to on-site inspector for final inspection and approval.
- 6. Chill approved portions to 4°C or lower within four hours after scalding operations.

## Brains/Whole Heads

### **General Requirements**

- The brain/whole head of a species except bovines older than thirty months of age is eligible.
- Penetrating stunning methods (firearm, penetrating captive bolt) are avoided due to contamination and potential physical hazards.
- Intact head must be skinned and visibly clean.

### Mammals

- All species except bovines older than 30 months of age are eligible.
- Before harvest, notify the inspector that brains/whole heads will be harvested for human consumption.
- Do not use firearm stunning due to potential contamination and physical hazards (i.e., bullet and bone fragments).
- If you use a penetrating captive bolt, indicate the procedure that demonstrates control of food safety risk from contamination/bone fragments in the brain/whole head.
- Harvested brains must be free of contamination and physical hazards.
- Intact heads must be skinned and visibly clean.

- 1. Skin the intact head ensuring meat underneath stays visibly clean.
- 2. If the brain is salvaged from the head, ensure it is free of contamination, bone fragments and blood clots.
- 3. If the whole head is salvaged and the animal was stunned using a penetrative captive bolt, ensure the part of the brain exposed by the stun hole is free of contamination.
- 4. Trim visible contamination (e.g., fecal, hair, wool, etc.) on the skinned head.
- 5. Rinse to remove extraneous material from the oral cavity and nostrils.
- 6. Present for inspection.

### **Poultry Heads**

- Before harvest, notify the inspector that heads will be harvested for human consumption.
- Use electrical stunning methods only.
- The intact head must be defeathered and visibly clean.

### Procedure

- 1. Remove feathers from the head.
- 2. Rinse the oral cavity and external surface of extraneous material.
- 3. Present intact head-on-carcass for inspection.
- 4. Remove all defects as instructed by the inspector before chilling.

### **Head Meats**

#### **General Requirements**

- The tongue, cheek meat, head meat, snout or lips of all species are eligible if meats are not contaminated by specified risk material (SRM) and are free of defects.
- If firearms are used for stunning, only the harvesting of undamaged and non-contaminated tongue, cheek meat and neck meat is permitted.
- Deboning on a hook or rack is recommended.

- 1. Completely skin out the head with the tongue dropped.
- 2. Trim off the contamination, damaged muscles and blood clots.

### Blood

#### **General Requirements**

- All species, except birds and rabbits, are eligible.
- Blood must be collected and stored in a hygienic manner.

#### Procedure

- 1. Harvest blood in a closed container directly connected to a cannula or a hollow knife.
- Defibrinate blood by using sanitary mechanical means or using an anti-coagulant approved to prevent clot formation. The use of hands is unacceptable.

### Heart

#### **General Requirements**

- The heart of all species is eligible.
- Completely remove the blood clots and blood to avoid bacterial growth.
- These steps are applicable to all, except rabbits and birds.
- Remove the outer layer on the heart (pericardium).

- 1. Cut open or invert the heart to remove all blood clots.
- Cut the major blood vessels attached to the heart (including the aorta) leaving, at most, two centimeters from their origin on the external surface.
- 3. Remove bone in the heart (os cordis), if applicable.
- 4. Rinse.

## Lungs/Trachea

#### **General Requirements**

• Lungs of all species are eligible except poultry.

### Procedure

- 1. Split trachea and main bronchi, ensuring no presence of parasites or contamination (stomach contents or aspirated scald water).
- 2. Trim lung lobes or condemn fully if pathological defects (e.g., pneumonia, tumours, abscesses) are found.
- 3. Rinse.

### Liver

#### **General Requirements**

• All species are eligible except equine, ostriches, rheas and emus and wild game animals (because of heavy metal content).

- 1. Remove gall bladder without releasing bile.
- 2. Incise hepatic ducts longitudinally and check for parasites.
- 3. Trim partially if dry adhesions or minor scar lesions are found. Condemn fully if pathological defects (tumours, abscesses, parasites) are found.

## **Gall Bladder**

#### **General Requirements**

- All species are eligible.
- Condemn if gall bladder has defects or associated liver is condemned.

#### Procedure

- 1. Separate gall bladder from liver without releasing bile.
- 2. Release bile and rinse until clean.

## Weasand/Oesophagus Meat

#### **General Requirements**

• All species are eligible.

#### Procedure

- 1. Cut the oesophagus through the muscles adjacent to the rumen without cutting into or damaging into the organs.
- 2. Pull the oesophagus from rumen.

The following organs do not require an additional harvesting procedure.

## Eyes/Spinal Cord

#### **General Requirements**

• All species except bovines older than thirty months of age are eligible.

## Mammary Glands/Udder

#### **General Requirements**

- All species are eligible, except wild game animals.
- Only mammary glands of animals that have never been pregnant are identified as edible.

## Uteri

#### **General Requirements**

- All species are eligible, except wild game animals due to the risk of Brucella.
- Only the uteri from mammals that have never been pregnant are identified as edible.

## **Testicles and Pizzle**

#### **General Requirements**

• All species are eligible, except wild game animals due to the risk of Brucella.

## Spleen

#### **General Requirements**

• All species are eligible.

## Tails

#### **General Requirements**

• All species are eligible.

## **Kidneys**

#### **General Requirements**

• All species are eligible, except equine, ostrich, emu, rhea and wild game animals due to the heavy metal content (e.g., Cadmium).

### Ova

#### **General Requirements**

• All bird species are eligible.

## Thymus

#### **General Requirements**

• All species are eligible.

### **Pancreas**

#### **General Requirements**

• All species are eligible.

## Fatty Tissue (including mesenteric fat)

#### **General Requirements**

• All species are eligible.

## Salivary Glands

#### **General Requirements**

• All species are eligible.

## Bile

#### **General Requirements**

• All species are eligible.

## CHAPTER 3 Handling of Specified Risk Material in Provincial Abattoirs



## Handling of Specified Risk Material in Abattoirs

This chapter sets out the procedures for the removal and disposal of Specified Risk Material (SRM) in provincial abattoirs.

SRM refers to all parts of cattle that could harbor mad cow infection, which may cause an incurable neurodegenerative disease in humans.

SRM handling regulations are designed to:

- Ensure the removal of all SRM from meat products likely to enter the human and animal food chains.
- Prevent cross-contamination of edible meat products with SRM during slaughter and cutting/deboning operations.
- Prohibit the sale of foods containing SRM.
- Prohibit the use of SRM in animal feeds and in fertilizers.
- Effectively control all processes related to SRM (e.g., collection, transport, processing, containment, destruction).

## Regulations for SRM Removal in Provincial Abattoirs

Requirements to remove SRM from cattle carcasses are outlined in the:

- Safe Food for Canadian Regulations
  - SRM must be removed from all cattle (*Bos taurus* and *Bos indicus*) slaughtered for human consumption.
  - Other ruminants such as bison, muskox, yak or water buffalo are excluded.
- Food and Drugs Regulations
  - Abattoir operators are responsible for removing, controlling and disposing of SRM to ensure the food product is not adulterated.
- Health of Animals Regulations
  - <sup>o</sup> Enables the Canadian Food Inspection Agency (CFIA) to:
    - verify or audit that SRM is removed, controlled and disposed of according to requirements
    - conduct inspections associated with the issuance of permits which are required for transporting, accepting and disposing of SRM
    - take enforcement action related to any non-compliance with these regulations

Manitoba Agriculture, on the behalf of CFIA, monitors the identification, marking and removal of SRM in provincially permitted abattoirs.

## **SRM Materials**

SRM materials include (See Figure 1):

- The skull, brain, trigeminal ganglia (nerves attached to the brain), eyes, tonsils, spinal cord and dorsal root ganglia (nerves attached to the spinal cord) of cattle aged 30 months or older.
- The distal ileum (portion of the small intestine) of cattle of all ages.
- Carcasses of condemned cattle and cattle deadstock, of any age, containing SRM.
- Any inedible material that is mixed with SRM, such as floor waste or recovered solids from wastewater.

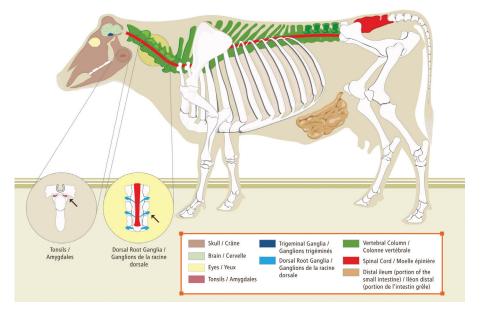


Figure 1: Diagram showing specified risk material (SRM) in cattle.

## **SRM Controls**

## Slaughter

#### 1. Stunning

- Air injecting penetrating percussion devices or pithing rods for stunning over 30 months of age (OTM) cattle are not permitted. These methods are only allowed for cattle that are euthanized or condemned at ante-mortem inspection and are discarded as inedible.
- All tissues, except hide derived from an OTM carcass exposed to these methods, are considered SRM.

#### 2. SRM cross-contamination of UTM heads after OTM stunning

- It is recommended to slaughter all OTM at the end of slaughter. However, if it is not possible, designate as SRM the first two heads under 30 months of age (UTM) immediately following the stunning of an OTM head. This will prevent SRM contamination of any salvaged by-products, (e.g., mechanically separated meat).
- An alternative procedure can be proposed to CFIA for review and assessment.

#### 3. Blood collection

- Blood collected for use in animal feed will be considered non-SRM when:
  - collected by open method from age verified UTM
  - a non-penetrating captive bolt, electrical stunning or ritual slaughter (Halal and Kosher) takes place
  - collected by a closed blood collection method (e.g., hollow knife or cannula)
  - application of edible grease, tampons or equivalent materials is used to close the stun hole
  - grossly visible brain material is removed from the face plate by trimming to prevent cross-contamination of collected blood with SRM

#### 4. Age determination

- The abattoir operator is responsible for determining the age of animal.
  - They must establish and implement procedures for identifying and separating UTM and OTM cattle at their arrival, throughout the slaughter process and during chilling, cutting and deboning procedures.
- The meat inspector will verify the effectiveness and accuracy of age determination performed by the operator. They will record errors and request corrective actions.

#### How to determine age

- Using reliable documentation
  - CFIA recognizes original copies of official birth date documents, issued by the Canadian Cattle Identification Agency, Attestra and Lactanet Canada, Bovitrace as reliable sources for age verification.
  - CFIA also accepts age determination documents signed by a private veterinarian.
- Examining the teeth
  - Visual examination of the incisor teeth of each carcass must occur at or before the head inspection station (Figure 2).
  - Cattle are considered to be OTM or older when they have more than two permanent incisor teeth erupted (the first pair of permanent incisors and at least one tooth from the second pair of permanent incisors, Figure 3).

• A permanent tooth is considered erupted when any part of the tooth is protruding through the gum. This includes teeth that have erupted behind or in front of the existing deciduous incisor. Cattle are considered UTM if the erupting third permanent incisor is not above the surface of the gum.

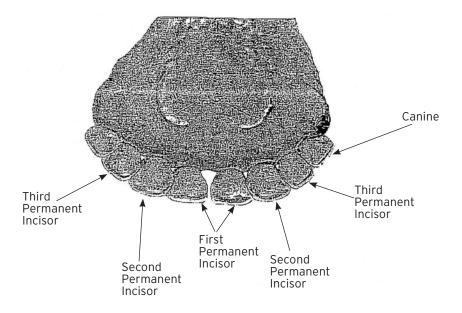


Figure 2: Diagram showing incisor teeth in cattle examined for age determination.

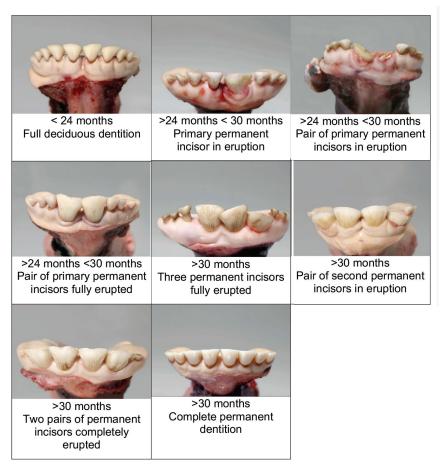


Figure 3: Pictures showing incisor teeth and corresponding age of cattle. Pictures have been reproduced with the permission of the Quebec Ministry of Agriculture, Fisheries and Food (MAPAQ).

#### 5. Tracking of OTM cattle

- The identification of the carcasses of OTM cattle by applying an SRM tag must be done as soon as possible after the age determination of the carcass.
- At the end of the slaughter shift, the total number of OTM carcasses identified on the slaughter floor must reconcile with:
  - ° the number of carcasses in the cooler
  - ° the number of carcasses entering the cutting/deboning room or
  - <sup>o</sup> the number of carcasses shipped from the abattoir

## **Carcass Dressing and Evisceration**

#### 6. Equipment and tools for dressing and evisceration

- The abattoir operator must use dedicated tools, such as knives for handling SRM tissues.
  - Use a SRM dedicated split saw or if using a common saw, it must be cleaned and sanitized before being used on a UTM cattle carcass or on carcasses and parts of carcasses of other food animal species.
  - The level of cleaning required is equivalent to what is required when the carcass splitting saw becomes contaminated i.e., all the organic material must be removed before sanitizing using water at 82°C or an approved chemical sanitizer.
  - If the carcass splitting saw is equipped with an automatic rinse system, the exhaust water must be directed away from carcasses and other edible and inedible products. The water-exhaust effluent should be adequately trapped or channeled to a SRM stream.

#### 7. OTM face plates (head hide)

- Head hide of OTM, if salvaged, must be free of SRM contamination before leaving the facility. Collect them immediately in a container after their removal.
- Remove contamination by trimming, washing, scraping or vacuuming.

#### 8. OTM palatine tonsils

• They are considered SRM and must be removed and collected in a SRM container labelled inedible.

#### 9. Distal ileum of all cattle

- Regardless of their age the distal ileum of all cattle is designated as SRM.
- To ensure the complete removal of the distal ileum, the ileo-cecal junction and at least 200 cm of the attached and uncoiled small intestine proximal to the ileo-cecal junction must be removed (Figure 4).
- Collected material is placed in a SRM container.

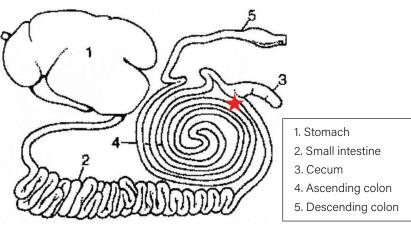


Figure 4: Schematic diagram of cattle gastrointestinal tract. lleocecal junction (red star) is a part where cecum (3) joins the small intestine (2).

#### 10. Spinal cord removal and staining of vertebral column

- The spinal cord of OTM cattle is considered SRM.
  - It must be removed in its entirety prior to stamping of the carcass sides. Lifting the spinal cord out of the vertebral canal can be achieved using a knife.
  - Other specialized tools can be used, but chain link gloves are not recommended unless covered with intact rubber/latex gloves to minimize the risk of cross-contamination.
  - Apply food grade blue ink to exposed surfaces of the vertebral canal (excluding the vertebrae of the tail, the dorsal and transverse processes of the thoracic and lumbar vertebrae and the wings of the sacrum) of each OTM carcass side following removal of the spinal cord and before chilling (Figure 5). Proper application of edible dye prevents the risk of introduction of the dorsal root ganglia (DRG) into the food and feed chains. The DRG are nodular extensions of spinal cord lying in close proximity to foramen between vertebrae (Figure 6).



Figure 5: Staining of vertebral canal,: edible blue ink applied to vertebral column excluding spinous processes of thoracic and lumbar vertebrae.

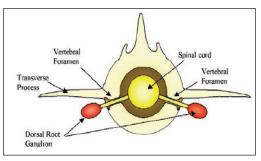


Figure 6: Schematic diagram showing dorsal root ganglia (DRG) picture adapted from, guide to removal of vertebral column of Specified Risk Material (SRM) from primal cuts. Photo provided by University of Bristol.

## Carcass Processing - Cutting/Deboning

## 11. OTM vertebral columns and dorsal root ganglia (DRG) removal and disposal

- Each abattoir that processes bone-in carcasses or parts from OTM cattle must develop procedures to ensure the removal and disposal of the vertebral column and DRG as SRM. Key points to consider include:
  - OTM and UTM carcasses must be segregated while being stored at the establishment.
  - There is a negligible likelihood that the saw dust resulting from two to three transverse cuts made through the OTM vertebral column would contain SRM (DRG), however, it is highly recommended to make the transverse cuts through the body of the vertebral column avoiding the intervertebral foramen to handle beef quarters.
  - Traditional T-bone or porterhouse steaks and bone-in rib roasts must not be produced from OTM cattle.
  - The DRG is difficult to visually identify during processing therefore it has been determined that the best practice is to remove the meat between the ribs using a U-shaped cut rather than the traditional V-shaped cut at approximately 2.5 cm (1 inch) from the vertebral arch to ensure no DRG is inadvertently included with the edible meat.
  - The use of vertebral column of OTM cattle as raw material in the preparation of mechanically separated meat (MSM) or finely textured meat (FTM) is prohibited.
  - While it is not acceptable to harvest tenderloin from OTM cattle carcasses by scraping the ventral surface of the vertebral column, the number of cuts performed should be minimised to prevent accidental cross contamination with the DRG.
  - The risk of floor waste or wastewater contamination with SRM dust generated is negligible. The floor waste or wastewater mixed with the saw dust from OTM vertebral column transverse cuts is treated as non-SRM waste, since the DRG are contained within the vertebral column they do not pose any risk of cross contamination through direct exposure.

As a best practice, the cut separating the edible muscle from the vertebral column should be made approximately 2.5 cm (1 inch) from the vertebral arch to ensure no DRG is inadvertently included with the edible meat.

#### 12. Retention and rework of carcasses harbouring residual SRM

- The abattoir operator must verify the complete removal of all SRM.
- Any carcass or part that is found with remaining SRM (for example, spinal cord) must be immediately reworked by the operator.
- The abattoir operator must demonstrate control of the process at all times.

### SRM Collection, Staining and Disposal

#### How to collect SRM after removal

- · Promptly separate SRM from carcasses during dressing.
- Place SRM in dedicated containers and move it to designated area for staining.
- SRM containers must be cleaned and sanitized after being emptied prior to reuse.
- SRM containers must always be visibly clean.
- SRM container cleaning should not occur in an area where contamination of meat products may occur.
- SRM container cleaning and sanitizing must be part of the cleaning schedule of the premise and verified before each day of operation.
- Dedicated labeled inedible containers and equipment such as chutes, augers, etc. must be cleaned and sanitized using effective non-food chemical following accidental contamination with SRM and prior to reuse.
- The operator must ensure that appropriate systematic measures are taken during the handling and storage of SRM to discourage access by birds, rodents, insects, and other vermin.
- Contaminants such as hydraulic fluids, heavy metals and other chemicals must not be discarded into SRM containers since tallow extracted from rendered SRM is used in animal feeds, cosmetics, soap, etc. The inclusion of contaminants in SRM may pose as an animal and public health risk.

#### How to treat inedible mixed with SRM

- If other inedible tissues are mixed with SRM, they must all be handled and disposed of as SRM.
- The abattoir operator and staff directly involved should have knowledge of the SRM controls and related procedures. Emphasis should be given to preventing cross-contamination, including the treatment of inedible mixed with SRM.

#### How to mark SRM containers

• SRM and debris must be contained in dedicated leak-proof containers clearly marked on the outside with the words "Specified risk material/ Matériel à risque spécifié" or "SRM / MRS" in both official languages.

#### Where to store stained SRM

- The abattoir operator is responsible for the segregation and staining of SRM after its removal during slaughter or cutting/deboning.
- All SRM must be transferred to a dedicated leak-proof container/trailer in a designated area in the inedible products section for staining.

## What to do with any animal material and solid particles recovered from wastewater

- Washing of the SRM designated area must be performed in such a way that it does not pose a risk of SRM contaminating non-SRM tissues.
- Waste fluid and water generated in parts of the abattoir where the SRM is removed, must pass freely through a 4-mm screen or equivalent.
- Screened organic debris that is greater than 4-mm in size must be considered SRM. This requirement may not apply if:
  - all effluents are collected in a septic tank and output is kept out of the feed manufacturing system
  - all effluents are disposed of directly into the municipal sewer system according to the federal/provincial/municipal regulations
  - ° all effluents are treated at a SRM rendering plant
  - the removed SRM is contained within an intact anatomical structure such as distal ileum and OTM vertebral columns

# How to handle floor waste in all SRM designated areas

#### Control of SRM floor waste

- Where there are effective controls to prevent floor from contact with SRM, floor waste and debris collected from the corresponding drain covers and traps do not need to be disposed of as SRM.
- Acceptable methods to contain SRM is through physical barriers such as troughs, trays, raised floor curbings or barriers of equivalent effects.
- Plant employees must regularly clean areas where SRM is removed or handled.
- Systems for containing gross debris and operational cleaning of these areas are important.
- Carcass material and debris shovelled or squeegeed from the floor, in areas where SRM is removed or handled, and any debris collected from the channels and drain covers/traps derived from these areas must be treated as SRM and placed in dedicated SRM containers.
- Collect SRM from drain covers and traps every day.
- The floor waste from other areas that does not come in contact with SRM tissues, will not be considered SRM. This also applies in areas where the distal ileum and the OTM vertebral columns are removed because the SRM is effectively contained within these tissues. The operators should have a procedure in place to prevent tracking of SRM tissues to these specific areas.

## How to clean SRM designated areas of the kill floor before slaughtering animals other than OTM cattle

- Non-dedicated equipment and surfaces that come in contact with SRM from OTM cattle must be cleaned (washed to remove visible contamination) and then sanitized (82°C water) before they can be used on carcasses of parts of carcasses from other than OTM cattle.
- If edible or inedible material is dropped onto the floor, it would not be required to be treated as SRM in those areas.

#### How to stain SRM

- The abattoir operator is responsible for the segregation and staining of SRM after its removal during slaughter or cutting/deboning.
- All SRM must be transferred to a dedicated leak proof container/trailer in a designated area in the inedible products section for staining.
- Stain SRM with an indelible marking dye (e.g., denaturing agent) suitable for this use.
- Carcasses unfit for human consumption, containing SRM must also be stained with an indelible marking dye.
- The stain should be applied so that it is visible on all surfaces. In other words, every time the SRM is transferred to a common SRM staining container or trailer, it has to be stained by spraying.
- If the operator chooses not to segregate SRM from other inedible tissues, all inedible material mixed with the SRM will be considered to be SRM and will have to be stained.
- Staining requirements would not apply if all the inedible material whether mixed or not with SRM does not leave the premises (on-site disposal).

#### How to handle cattle dead stock and condemnations containing SRM

- Move cattle that are found dead on arrival or condemned at ante mortem or die of causes other than slaughter in the establishment to an inedible area designated for SRM.
- A fetus recovered from the uterus of a cow slaughtered in an inspected abattoir is non-SRM.
- Any term-fetus with body hair or newborn calf that is found on the ground inside the establishment is SRM, unless the distal ileum has been removed from such animals.

#### How to stain cattle dead stock containing SRM

- Carcasses of condemned or dead animals from which the SRM has not been removed must be stained with a wide stripe down the back of the head and length of the spine using a dye (contrasting with the animal's coat colour) that is conspicuous, indelible and safe for consumption by animals before shipping to another location under a CFIA permit.
- Cattle deadstock being collected by companies authorised to salvage hides for leather production may stain just the head.
- Above requirement does not apply, if all of the abattoir waste does not leave the premises (on-site disposal).



#### How to stain all SRM waste disposed of on site

- Abattoirs are allowed to dispose of SRM on the premises where the animals are slaughtered or found dead without the need for staining. However, in this case all inedible materials from all species, including SRM, carcasses considered SRM and composted SRM, must permanently remain on the establishment's premises.
- Staining of all SRM is mandatory if non-SRM inedible material is segregated for offsite treatment, use or disposal.
- Containment options, such as burial, must comply with provincial and municipal requirements.
- Where allowed provincially and municipally, inedible materials (SRM and non-SRM) may be composted to reduce waste volume. However, while no composted material may leave the premises without a CFIA permit to transport SRM, the SRM compost must be stained and remain identifiable until it is spread on a contiguous land.

#### How to transport SRM off site

- SRM, including carcasses containing SRM, may only be transported by a person or company possessing the required CFIA permit.
- SRM may be sent only to a person or company possessing the required CFIA permit.
- The abattoir operator may obtain an annual CFIA permit to transport limited quantity of SRM to a non-contiguous piece of land owned by the operator. This permit allows CFIA to track the records of the weights and final disposal site information of the SRM.
- The receiving site requires an annual permit to receive SRM and is required to meet defined minimal conditions as outlined on the permit.
- CFIA will evaluate permit applications for non-contiguous sites on a case-bycase basis.

#### **References:**

- Health of Animals Regulations, Part 6.1 Specified Risk Material
- Canadian Food Inspection Agency, Guidance on Specified Risk Material
- Canadian Food Inspection Agency, Bovine Spongiform Encephalopathy
- Canadian Food Inspection Agency, Enhanced Animal Health Protection from BSE, Requirements for Slaughtering Cattle and processing Beef
- Enhanced Animal Health Protection from BSE-Specified Risk Material (SRM)
- Guide to Removal of Vertebral Column Specified Risk Material (SRM) from Primal Cuts

## CHAPTER 4 Guidelines for Use of Inedible Material Generated at Abattoirs for Animal Food



## Guidelines for Use of Inedible Material Generated at Abattoirs for Animal Food

Inedible material refers to a condemned carcass, a part of a condemned carcass or a material that is, by its nature, considered inedible for human consumption (e.g., hair, hide, feet, bones).

An abattoir operator may harvest or salvage for animal food, with the **consent of a meat inspector**, the following:

- non-Specified Risk Material (SRM)
- a condemned carcass or part of a carcass
- an edible carcass or part of a carcass

This chapter sets out the guidelines for provincial abattoir operators for harvesting and handling inedible material for use as animal food.

#### **Operators Guidelines**

- Use only carcasses that have received both an ante-mortem and a postmortem inspection at the abattoir by a meat inspector.
- Carcass approved for human consumption can also be used. However, after such carcass is considered for animal food use, properly label and separate it from edible meat products in a timely manner.
- SRM cannot be harvested for animal food purposes.
- Handling of products marked for animal food must not:
  - ° contaminate carcasses approved for human consumption
  - ° contaminate carcasses waiting inspection
  - <sup>o</sup> pose any sanitary risk in an abattoir
- Place the carcass or part collected for animal food in a clean container labelled "for animal food use only." These containers can be stored in a designated area in the cooler used for cooling carcasses approved for human consumption.

- These containers may be frozen and stored in a freezer used for freezing and storing products for human consumption.
- Animal food products may also be shipped from the edible shipping area.

Allowing a carcass or part of a carcass for animal food use is at the discretion of the meat inspector.

#### Meat Inspector Guidelines

A carcass condemned for the following conditions cannot be used for animal food:

- a zoonotic condition (diseases transferable to humans or other animals)
- animals from a farm euthanized to eradicate a reportable disease
- animal or carcass condemned for toxemia or septicemia
- animal or carcass condemned for chemical contamination

#### Use of Non-Condemned Carcass or its Parts for Animal Food

- meat rejected by an abattoir operator for human consumption (due to practical reason), but that did not show any signs of disease communicable to humans or animals (e.g., carcass or its part requiring trimming before it can be approved for human consumption and such trimming is impractical to do by the operator)
- part of a carcass not showing signs of abnormalities at the time of inspection but are not saved for human consumption as they do not meet quality standards (e.g., blood engorged spleen, liver, lungs)
- blood of animals which, at inspection, did not show any signs of disease communicable to humans or animals
- whole carcass or part of a carcass which has passed ante-mortem and postmortem inspection, but for commercial reasons are not intended for human consumption (e.g., pig offal, spleen, stomachs, feet, poultry necks/feet, intestines, testicles, rind, bones)

#### Use of Condemned Carcass or its Parts for Animal Food

- parts not approved for human consumption, but that are no risk to human or to animal health (e.g., liver with fluke lesions or milk spot lesions)
- parts not stored or transported in accordance with provincial food safety regulations, but are no risk to human or to animal health (e.g., meat stored or found above required temperature of 4°C)
- poultry offal harvested after delayed evisceration but that is no risk to human or animal health
- part(s) that have fallen on the floor
- parts collected for animal food that do not need to be trimmed to remove contamination, hide, bone splinters, blood clots, or minor pathologies of aesthetic nature (e.g., dry adhesions, scar tissue)

## CHAPTER 5 Appendix Templates for Standard Operating Procedures for Organ Harvesting



## Harvesting Gastrointestinal Tract

#### **General Requirements**

- Before harvest, notify the inspector that the gastrointestinal tract (GIT) will be harvested for human consumption.
- Any portion of the GIT can be harvested as casing, except the distal ileum of bovines (cattle of all ages).
- Open, empty and clean all portions of GIT in a manner that does not pose a risk of cross-contamination (for example at an area separated from the evisceration floor).
- Inspector examines the whole GIT and approves only the healthy parts for harvesting.
- Accumulation of GIT for later preparation is not allowed.

#### Procedure

Steps one to three below must be performed in a dedicated area on the slaughter floor (separated from the area where dressed eviscerated carcasses and other approved organs are handled).

- 1. Empty and rinse GIT or any portion of it until the dripping water is clear.
- 2. Trim off any contamination or abnormality (inflammation, lump, foreign body, parasitic lesion).
- 3. Collect GIT in a clean container.
- 4. Present the collected GIT to the on-site inspector for inspection and approval.
- 5. Transfer the approved portions to a cooler.
- Operator will follow the above procedure or propose a new process outlined below:

Date prepared [date the procedure was prepared/revised]

### **Harvesting Gizzard**

#### **General Requirements**

- Before harvest, notify the inspector that the gizzard will be harvested for human consumption.
- Gizzard of all birds is eligible for harvesting.
- Accumulation of gizzard for later preparation is not allowed.

#### Procedure

- 1. Separate gizzard from the viscera.
- 2. Open it and remove the content and lining.
- 3. Remove contaminated fat on the outer surface.
- 4. Rinse well.
- 5. Present collected gizzard to on-site inspector for inspection and approval.
- 6. Transfer the approved portions to a cooler or chill them to 4°C or lower within four hours.
- Operator will follow the above procedure or propose a new process outlined below:

Date prepared [date the procedure was prepared/revised]

### Harvesting Feet-Mammals

#### **General Requirements**

- Feet of all species are eligible for harvesting.
- Before harvest, notify the inspector that feet will be harvested for human consumption.
- Feet cannot be harvested from a condemned animal or carcass.
- Accumulation of feet for later preparation is not allowed.
- Place the feet scalder in a compatible (hygienic) area of the scalding room, slaughter room or in a room physically isolated from the surrounding inedible area or any other edible processing area.

#### Procedure

- 1. Remove feet at the knee or hock joint.
- 2. Rinse and scald to remove contamination (e.g., feces and dirt).
- 3. Singe, dehair or shave to remove hair.
- 4. Remove hooves.
- 5. Trim the joint/bone exposed to any contamination during scalding and cleaning.
- 6. Present collected feet to your on-site inspector for inspection and approval.
- 7. Chill approved portions to 4°C or lower within four hours after scalding operations.
- Operator will follow the above procedure or propose a new process outlined below:

Date prepared [date the procedure was prepared/revised]

### Harvesting Feet or Paws-Poultry or Rabbits

#### **General Requirements**

- Before harvest, notify the inspector that feet will be harvested for human consumption.
- Feet must remain attached to the carcass until after post-mortem inspection.
- Feet of condemned birds or rabbits cannot be saved for human consumption. If the feet are severely contaminated or in poor condition, they must be removed from the carcass.
- Place the feet scalder in a compatible (hygienic) area of the scalding/ de-feathering room, slaughter room or in a room physically isolated from the surrounding inedible area or any other edible processing area.

#### Procedure

- 1. Clean feet or paws of any contamination before carcass hanging.
- 2. Ensure feet or paws are clean before venting or opening the abdominal cavity.
- 3. Remove the feet or paws at the hock joint from the approved carcasses.
- 4. Remove outer layer of the skin and toenails.
- 5. Present collected feet or paws to on-site inspector for final inspection and approval.
- 6. Chill approved portions to 4°C or lower within four hours after scalding operations.
- Operator will follow the above procedure or propose a new process outlined below:

Date prepared [date the procedure was prepared/revised]

## Harvesting Brains/Whole Heads-Mammals

#### **General Requirements**

- All species except bovines older than 30 months of age are eligible.
- Before harvest, notify the inspector that brains/whole heads will be harvested for human consumption.
- Do not use firearm stunning due to potential contamination and physical hazards (i.e., bullet and bone fragments).
- If you use a penetrating captive bolt, indicate below the procedure that demonstrates control of food safety risk from contamination/ bone fragments in the brain/whole head.
- Harvested brains must be free of contamination and physical hazards.
- Intact heads must be skinned and visibly clean.

#### Procedure

- 1. Skin the intact head ensuring meat underneath stays visibly clean.
- 2. If the brain is salvaged from the head, ensure it is free of contamination, bone fragments and blood clots.
- 3. If the whole head is salvaged and the animal was stunned using a penetrative captive bolt, ensure the part of the brain exposed by the stun hole is free of contamination.
- 4. Trim visible contamination (e.g., fecal, hair, wool, etc.) on the skinned head.
- 5. Rinse to remove extraneous material from the oral cavity and nostrils.
- 6. Present for inspection.
- Operator will follow the above procedure or propose a new process outlined below:

Date prepared [date the procedure was prepared/revised]



### Harvesting Head on Poultry Carcasses

#### **General Requirements**

- Before harvest, notify the inspector that heads will be harvested for human consumption.
- Use electrical stunning methods only.
- The intact head must be defeathered and visibly clean.

#### Procedure

- 1. Remove feathers from the head.
- 2. Rinse the oral cavity and external surface of extraneous material.
- 3. Present intact head-on-carcass for inspection.
- 4. Remove all defects as instructed by the inspector before chilling.
- Operator will follow the above procedure or propose a new process outlined below:

Date prepared [date the procedure was prepared/revised]



## **Contact us**

Manitoba Agriculture www.manitoba.ca/agriculture/foodsafety foodsafety@gov.mb.ca