

DEPARTMENT OF AGRICULTURE

ANIMAL INDUSTRY DIVISION

REGULATION NO. 146. HUMANE SLAUGHTER METHODS

(By authority conferred on the department of agriculture by Act No. 163 of the Public Acts of 1962, being S287.551 et seq. of the Michigan Compiled Laws)

R 285.146.1 Humane slaughter methods.

Rule 1. (1) For the purpose of this rule the following terms shall be construed, respectively, to mean:

- (a) "The act." Act No. 163 of the Public Acts of 1962.
- (b) "Director." The director of the Michigan department of agriculture.
- (c) "Division." Livestock disease control division of the Michigan department of agriculture.
- (d) "Inspectors." Inspectors of the division.
- (e) "Carbon dioxide." A gaseous form of the chemical formula CO₂.
- (f) "Carbon dioxide concentration." Ratio of carbon dioxide gas and atmospheric air.
- (g) "Exposure time." The period of time an animal is exposed to an anesthesia-producing carbon dioxide concentration.
- (h) "Anesthesia." Loss of sensation or feeling.
- (i) "Surgical anesthesia." A state of unconsciousness measured in conformity with accepted surgical practices.
- (j) "Consciousness." Responsiveness of the brain to the impressions made by the senses.
- (k) "Captive bolt." A stunning instrument which when activated drives a bolt out of a barrel for a limited distance.

(2) No person engaged in, or in charge of, slaughter or preparation of animals for slaughter shall obstruct, hinder, or interfere with the director of agriculture or his authorized representatives in performing such inspections as the director of agriculture or his authorized representatives shall deem to be necessary to determine if humane methods of slaughtering and preparation for slaughter are being practiced in any meat processing establishment, slaughterhouse or stock yard. Such inspection may be performed without prior notice to the operator or owner of the establishment.

(3) Designation of methods:

(a) Chemical: Carbon dioxide. The slaughtering of sheep and swine with the use of carbon dioxide gas and the handling in connection therewith, in compliance with the provisions contained in this subrule, are hereby designated and approved as humane methods of slaughtering and handling such animals under the act. The carbon dioxide gas shall be administered in a chamber in accordance with this subrule so as to produce surgical anesthesia in the animals before they are shackled, hoisted, thrown, cast, or cut. The animals shall be exposed to the carbon dioxide gas in a way that will

accomplish the anesthesia quickly and calmly, with a minimum of excitement and discomfort to the animals.

(b) Mechanical:

(i) Captive bolt. The slaughtering of sheep, swine, goats, calves, cattle, horses, and mules by using captive bolt stunners and the handling in connection therewith, in compliance with the provisions contained in this subrule, are hereby designated and approved as humane methods of slaughtering and handling of such animals under the act. The captive bolt stunners shall be applied to the livestock in accordance with this section so as to produce immediate unconsciousness in the animals before they are shackled, hoisted, thrown, cast, or cut. The animals shall be stunned in such a manner that they will be rendered unconscious with a minimum of excitement and discomfort. Immediately after the stunning blow is delivered, the animals shall be in a state of complete unconsciousness and remain in this condition throughout shackling, sticking, and bleeding.

(ii) Gunshot. The slaughtering of cattle, calves, sheep, swine, goats, horses, and mules by shooting with firearm is hereby designated and approved as humane method of slaughter. The firearm shall be employed in the delivery of a bullet or a projectile from a barrel containing rifling into the animal so as to produce immediate unconsciousness in the animal by a single shot before it is shackled, hoisted, thrown, cast, or cut. The caliber and choice of firearm shall be such as to render the animal unconscious with a single shot, but caliber shall not exceed .25 caliber.

(c) Electrical. Stunning with electric current. The slaughtering of swine, sheep, calves, and cattle with the use of electric current and the handling in connection therewith, in compliance with the provisions contained in this subrule, are hereby designated and approved as humane methods of slaughtering and handling of such animals under the act.

(i) The electric current shall be administered so as to produce surgical anesthesia in the animals before they are shackled, hoisted, thrown, cast, or cut. The animals shall be exposed to the electric current in away that will accomplish the anesthesia quickly and calmly, with a minimum of excitement and discomfort to the animals.

(ii) Each animal shall be given a sufficient application of electric current to insure unconsciousness immediately and through the bleeding operation.

History: 1979 AC.