



Humane Farm Animal Care  
Animal Care Standards  
January 2012

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## YOUNG DAIRY BEEF\*

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\*The title for these standards does not include the word “veal”, since this term may be interpreted in a variety of different ways. USDA has a specific definition of “veal” based on the two criteria of slaughter weight and meat color. Consumers tend to equate the term “veal” with young calves housed in crates and fed an all-liquid milk replacer diet. Restaurants use the term “veal” to describe a range of products depending on the restaurant quality and customer base. Humane Farm Animal Care has chosen the title “Young Dairy Beef” as the most inclusive and descriptive terminology to avoid possible confusion arising from the several different meanings of the term “veal.” We prohibit the rearing of calves in crates and require forage or grain to be fed to calves.

**Although the product will be called “veal” on the label or menu, if the Certified Humane logo is on the packaging, the animals were raised and handled according to these standards.**

## ***HUMANE FARM ANIMAL CARE***

Humane Farm Animal Care is a non-profit charity whose mission is to improve the lives of farm animals by providing viable, credible, duly monitored standards for humane food production and assuring consumers that certified products meet these standards.

Humane Farm Animal Care is approved by a consortium of Animal Protection Organizations, Individuals, and Foundations, such as the American Society for the Prevention of Cruelty to Animals and the Humane Society of the United States.

The Humane Farm Animal Care Standards have been developed to provide the only approved standards for the rearing, handling, transport and slaughter of Laying Hens for use in the Certified Humane® program. These standards incorporate scientific research, veterinary advice, and the practical experience of farmers. The standards are based on the Royal Society for the Prevention of Cruelty to Animals (RSPCA) guidelines, current scientific information and other practical standards and guidelines recognized for the proper care of animals.

Animal welfare is improved when livestock managers adhere to the following:

- Access to wholesome and nutritious feed
- Appropriate environmental design
- Caring and responsible planning and management
- Skilled, knowledgeable, and conscientious animal care
- Considerate handling, transport, and slaughter

**HUMANE FARM ANIMAL CARE'S SCIENTIFIC COMMITTEE**

Leading animal scientists, veterinarians, and producers work with Humane Farm Animal Care to develop the *Animal Care Standards* for humane farming and continue to work with Humane Farm Animal Care to continually review new information pertaining to improving the lives of farm animals.

***Kenneth E. Anderson, PhD*** North Carolina State University

***Michael Appleby, PhD*** World Animal Protection

***Richard Blatchford, PhD*** Asst. Coop Extension Specialist, UC Davis

***Elisabetta Canali, PhD*** Università degli Studi, Milan, Italy

***Sylvie Cloutier PhD*** Associate Director of Assurance, Canadian Council  
of Animal Care, Ottawa, Canada

***Brenda Coe, PhD*** Pennsylvania State University

***Hans Coetzee, PhD*** Iowa State University

***Luiz Dematte, DVM, PhD*** Industrial Director of Korin Ltd, and General  
Coordinator Of Mokichi Okada Research Institute

***Inma Estéves, PhD*** Research Professor, Neiker-Tecnalia University, Spain

***Anne Fanatico, PhD*** Appalachian State University, Boone, NC

***Valentina Ferrante, DVM, PhD,  
DIPL ECAWBM-AWSEL*** University of Milan, Italy

***Trent Gilbery, MS*** North Dakota State University

***Alan Goldberg, PhD*** The Johns Hopkins University

***Temple Grandin, PhD*** Colorado State University

***Thomas G. Hartsock, PhD*** University of Maryland

***Jörg Hartung, DVM*** Institute of Animal Hygiene, Welfare and Farm  
Animal Behavior, University of Veterinary Medicine,  
Hanover, Germany

***Brittany Howell, PhD*** Fort Hays State University

<b><i>Pam Hullinger, DVM, MPVM</i></b>	University of California Lawrence Livermore National Laboratory
<b><i>Joy Mench, PhD</i></b>	University of California, Davis
<b><i>Suzanne Millman, PhD</i></b>	Iowa State University College of Veterinary Medicine
<b><i>Malcolm Mitchell, PhD</i></b>	SRUC, Scotland's Rural College
<b><i>Priya Moutupalli, PhD</i></b>	IKEA Food Global Sustainable Sourcing Specialist, Sweden
<b><i>Ruth Newberry, PhD</i></b>	Associate Professor, Norwegian University of Life Sciences; Adjunct Professor, Washington State University
<b><i>Abdullah Ozen, PhD</i></b>	Professor, Firat University, Elazig, Turkey
<b><i>Edmond Pajor, PhD</i></b>	University of Calgary, Alberta, Canada
<b><i>Jose Peralta, PhD, DVM</i></b>	Western University of Health Science, College of Veterinary Medicine, Pomona, CA
<b><i>Rosangela Poletto, DVM, PhD</i></b>	Professor, Instituto Federal do Rio Grande do Sul, Brazil
<b><i>Martin Potter, PhD</i></b>	Animal Welfare Consultant, Member of FAWT, UK and Advising Member of EIG
<b><i>Mohan Raj, PhD</i></b>	Honorary Visiting Fellow, School of Veterinary Sciences, Bristol University, Bristol, UK
<b><i>Jean-Loup Rault, PhD</i></b>	Research Fellow, The University of Melbourne, AU
<b><i>J.K. Shearer, PhD</i></b>	Iowa State University
<b><i>Marilyn M. Simunich, DVM</i></b>	Director, Animal Health Laboratory, Division of Animal Industries, Idaho State Dept. of Agriculture
<b><i>Carolyn Stull, PhD</i></b>	Chairman, Scientific Committee University of California, Davis
<b><i>Janice Swanson, PhD</i></b>	Michigan State University

***William VanDresser, DVM***

Retired Extension Veterinarian

***Andreia De Paula Vieira, DVM, PhD***

Animal Welfare Scientist, Universidade de São Paulo,  
Brazil

***Daniel M. Weary, PhD***

Professor and NSERC Industrial Research Chair,  
Animal Welfare Program, University of British  
Columbia

***Julia Wrathall, PhD***

Director, Farm Animals Division, RSPCA, West Sussex,  
UK

***Adroaldo Zanella, PhD***

Professor, Departamento de Medicina Veterinária  
Preventiva e Saúde Animal\Faculdade de Medicina  
Veterinária e Zootecnia Universidade de São Paulo,  
Pirassununga, SP, Brazil

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## **PART 1: INTRODUCTION**

### **A. The Certified Humane Label**

The Certified Humane® program was developed to certify products from animals of farms that adhere to these standards. Upon satisfactory application and inspection, farmers and ranchers will be certified and may use the Certified Humane Raised and Handled® logo. Program participants are inspected and monitored by *Humane Farm Animal Care* annually. Charges levied are to cover inspections and program costs which include promotional materials which help promote the products of the producers that are Certified Humane®.

### **B. Young Dairy Beef**

Dairy cows in North America are numbered in the millions. Each year in order to yield milk which is processed for human consumption, the dairy cow produces a calf. The heifer (female) calves are usually raised to maturity and serve as replacements in the dairy herd. The bull (male) calves have little economic value on the dairy, but can be utilized in humane livestock enterprises to produce young beef products for a niche market.

Calves, usually bull calves of the Holstein breed, are raised from birth, typically up to an approximate final weight of 450 pounds, utilizing diets consisting of grain, forage, and milk products. Calves must travel directly from the farm of birth to starter (where applicable) or finishing farms. The use of intermediate markets, such as auction barns, is prohibited.

### **C. Guide to the Use of the Welfare Standards**

- The broad objectives of the standard are described at the beginning of each section.
- The numbered requirements are the standards, all of which must be complied with.
- These standards are written to cover facilities in varying geographic and temperature regions, and facilities using different systems. Therefore, not all sections in these standards will apply to each facility.
- Boxed sections provide additional information or may highlight areas where the standards will be reviewed in the future as new information becomes available.
- Producers must also comply with any local, state or federal requirements for dairy cattle operations that affect the environment or safety of their product as well as their State Veterinary Practices Act.

## **PART 2: NUTRITION – FEED AND WATER**

**OBJECTIVES:** *Livestock must have access to fresh water and a diet formulated or assessed to maintain full health and promote a positive state of well-being. Feed and water must be distributed in such a way that livestock can eat and drink without undue competition.*

### **A. Feed**

#### **FW 1: Wholesome, nutritious feed**

- a. Calves must be fed a wholesome diet, which is:
  1. Appropriate for their species, age, weight, and behavioral and physiological needs;
  2. Fed to them in sufficient quantity to maintain them in good health; and
  3. Formulated or assessed to satisfy their nutritional needs, including iron and fiber, as established by the National Research Council (NRC) and as recommended for the geographic area.
- b. Calves must not be maintained in an environment that is likely to predispose them to nutrient deficiency.
- c. Managers must be aware of nutrient deficiencies and excesses on the farm and correct these as appropriate.

#### **FW 2: Colostrum**

Calves must travel directly from the farm of birth to starter or finishing farms, when applicable. The use of intermediate markets, such as auction barns, is prohibited. Calves must have received colostrum as set out below. Records attesting to this must be available.

- a. Every newborn calf must receive adequate, quality colostrum from its dam, from another fresh cow, or from a powdered or frozen colostrum source, as soon as possible after it is born and within the first 6 hours of its life.

*As a precaution to prevent the transmission of Johne's Disease, the pooling of fresh or frozen colostrum from multiple cows is strongly discouraged.*

- b. At least 6 quarts of colostrum must be administered by bottle or esophageal stomach tube during the first 12 hours.
- c. Over the next 48 hours, calves should receive at least an additional 6 quarts (6 liters) of colostrum/whole milk daily (3 quarts [3 liters] daily for Jersey calves) divided into at least two feedings.

*It is recommended to feed additional colostrum during the first 3-4 days of the newborn calf's life. This applies to bull calves as well as heifer calves.*

#### **FW 3: Feed records**

Producers must:

- a. Have a written record and/or labels of the feed constituents, the inclusion rate and constituents of compound feeds and feed supplements, including those records from the feed mill or supplier; and

- b. Make these records available to the Humane Farm Animal Care Inspector during the inspection and at other times upon request.

**FW 4: Substances prohibited in feed and treatment**

- a. No feedstuffs containing mammalian or avian-derived protein sources are permitted, with the exception of milk and milk products.
- b. Calves must not be given growth promoting hormones.
- c. Calves must not be fed antibiotics, including ionophores, coccidiostats, or other substances deliberately to boost growth or feed efficiency.
- d. Antibiotics can be used in individual calves only therapeutically (i.e. disease treatment) as directed by a licensed veterinarian

**FW 5: First feeds, fiber, and water**

- a. All calves must receive milk or milk replacer at least twice daily through the first five weeks of life.
- b. If calves are bucket fed, each calf must have access to an individual bucket.
- c. Unweaned calves must have access to palatable calf starter after 8 days of age.
- d. Milk replacer must be mixed according to the manufacturer's instructions.
- e. Calves must not be weaned until they are eating adequate quantities of calf starter (at least 1.5 pounds/calf/day of a calf starter ration).
- f. All calves must have access to palatable calf starter feed or appropriate grain by 5 weeks of age to provide fiber for rumen development.
- g. Efforts must be made to avoid sudden changes in the type and quantity of feed, except under the direction of the attending veterinarian.

*It is recommended that milk such as hospital milk be pasteurized prior to being fed to calves.*

**FW 6: Pasture**

- a. If pasture is being used as a substantial nutritional source for calves, regular assessment of body condition is mandatory.
- b. When pasture quality is poor, nutritional maintenance through feeding of quality forage and concentrate is appropriate.
- c. All grouped housed calves must have access to outdoor exercise areas for 4 hours per day, weather permitting.

**FW 7: Supplying adequate nutrients**

- a. Calves must be fed a wholesome diet, which meets or exceeds the National Research Council requirements appropriate for their age, weight, behavioral and physiological needs.
- b. All calves must have access to fresh water at all times.

*It is recommended that all calves aged 3-28 days of age be offered a daily ration of at least 20% of their body weight (approximately 8 liters for Holstein calves) in whole milk or equivalent milk replacer. Milk should be between 60°F and 104°F.*

*Milk rations should be increased by 25% when the ambient temperature drops below 50°F or rises above 80°F.*

**FW 8: Easy availability of feed**

- a. Calves must have free access to nutritious feed each day, except when directed otherwise by an attending veterinarian.
- b. Adequate bunk space or a number of individual feed buckets or bottles shall be provided so that calves housed in groups do not need to compete for feed.
- c. Calves must be fed at or above floor level.

**FW 9: Clean feeding equipment**

Feeding and watering equipment must be designed, constructed, placed and maintained so that contamination of the animals' feed and water is minimized.

*The footing surrounding the eating area should be free of mud in depths greater than fetlock (ankle) height.*

- a. Feed troughs/bunks/pails and buckets/bottles must be kept clean. Stale or moldy feed must be removed.
- b. Automatic feed delivery systems must be:
  1. Kept clean;
  2. Free of stale feed; and
  3. Maintained in good working order.

**FW 10: Body condition**

- a. Calves must be fed so that they will sustain full health over their maximum foreseeable lifespan.
- b. In operations where calves are weaned, body condition change in calves must be carefully planned, monitored and maintained prior to and after weaning.

**FW 11: Weaning**

- a. Calves must not be weaned before five weeks of age. Nutritional weaning (ceasing to feed milk or milk replacer) must be accomplished gradually by either diluting the milk with water or reducing the milk volume over a period of at least 5 days.
- b. Removal of calves from individual pens into social groups should not coincide with weaning. Both of these practices are stressful to the animals and should be carried out separately.

**FW 12: Social groupings**

- a. Individual stalls for suckling calves are acceptable from a health standpoint
- b. When suckling calves are housed in group pens, appropriate devices, such as artificial nipples, should be available to reduce inappropriate suckling behavior.
- c. The group socialization of calves should be completed by 8 weeks of age.

**FW 13: Preventing inappropriate suckling**

- a. Calves must not be muzzled or physically altered to prevent suckling. Weaning nose rings and nose-tabs are prohibited.
- b. Alternative devices such as artificial nipples are encouraged.

*Feeding milk through a rubber teat mimics the natural suckling behaviors of nursing. There are indications of improved digestion and health of calves fed by nipples. Some suggestions for provision of artificial nipples include:*

*Providing solid rubber teats to minimize air intake into the abomasums, which could lead to digestive upset.*

*Limiting access to the artificial teats in the period shortly after feeding. This may help satisfy the calf's motivation to suck while minimizing the risk of pathogen spread.*

**FW 14: Avoiding unsuitable feedstuffs**

Control practices must be in place to minimize:

- a. Livestock access to poisonous plants and unsuitable feedstuffs.
- b. Contamination of stored feeds by birds and vermin.

**B. Water**

**FW 15: Water supply**

- a. All calves must be provided with free access to an adequate supply of clean, fresh drinking water each day, except when directed by a veterinarian.

*Providing water to calves promotes cooling in hot weather, and helps prevent dehydration due to diarrheal disease.*

**FW 16: Watering equipment**

- a. Water troughs, buckets or bowls must be kept clean.
- b. Automatic systems must be checked daily to ensure that they are dispensing water.
- c. Water containers must not result in wetting/fouling of bedded areas, and must be accessed from concrete or other non-slip footing, when possible.
- d. The water delivery systems must allow 10% of the group to drink at any one time. If drinking bowls are used in group pens, at least 1 drinking bowl per 10 calves must be provided.
- e. The area around water troughs must be managed to avoid excessive accumulation of mud/puddles around the trough and, if necessary, troughs should be placed on non-slip concrete aprons.
- f. Water sources must be protected from freezing.

*Troughs should be at a height comfortable for the calves to drink from (24 inches -30 inches). Ideally, the water temperature should be between 62°F and 82°F.*

**FW 17: Water for calves on pasture**

- a. When calves are kept primarily on pasture, clean fresh water must always be accessible.
- b. Natural surface water sources are not recommended but, if used, care must be taken to avoid potential disease risk to cattle, wildlife and humans.
- c. Potential contamination of rivers, ponds or streams with cattle feces must be avoided in planning water supply for calves.

- d. Local, state and federal laws must be adhered to when allowing cattle access to running or still water resources.

**FW 18: Emergency water supply**

Provisions must be in place to ensure an emergency supply of suitable drinking water in case normal supplies fail (e.g., in cases of freezing or drought).

## **PART 3: ENVIRONMENT**

**OBJECTIVES:** *The environment in which livestock are kept must take into account their welfare needs, be designed to protect them from physical and thermal discomfort, fear, and distress, and allow them to perform natural behaviors.*

### **A. Buildings**

#### **E 1: Facility design**

Where management systems, designs or layout of facilities not covered in the HFAC *Animal Care Standards* are being employed or considered, these must be referred to, and discussed with the HFAC staff before they can be considered for certification.

#### **E 2: Records of features of facilities that promote animal welfare**

For all buildings, key points relating to welfare must be recorded in the farm logbook or on the farm site plan. These must include:

1. Total floor area;
2. Number of pens or size of bedded area;
3. Maximum capacity of calves in relation to age, weight, feeding and drinking, and bedding space.

*If practical, this information should be displayed at or near to the entrance to each building.*

#### **E 3: Building design and maintenance**

- a. There must be no physical features of the environment that cause recurring injuries to animals.
- b. To ensure that there are no sharp edges or protrusions likely to cause injury or distress to animals, the interior of any building, including the floor and all internal fittings/surfaces to which livestock have access must be:
  1. Carefully designed and constructed;
  2. Well maintained; and
  3. Regularly inspected.  
This includes provision of adequate and safe holding and handling facilities (whether indoors or outdoors).
- c. Particular attention must be paid to handling pens.
  1. Floors must be made of non-slip material or be maintained so as to reduce the risk of slipping (sand, mats or other material applied when necessary) and provide an even and stable walking surface.
  2. Floors must never be so rough as to cause hoof damage or so smooth as to result in slipping.
  3. Smooth concrete floors should be grooved approximately 1/3- 1/2 inch deep or treated with a non-slip coating/belting.

*Excessive occurrence of the following may be indicators of environmental problems: Chronic scar tissue, Neck calluses, Soft feet, Knee or hock swellings/callus, Interdigital infections, Laminitis, Broken tails, Abscesses, Hematomas, and/or Bruised soles.*

**E 4: Preventing injuries from environmental causes**

In both indoor and outdoor systems, there must be no recurrent injuries or bruising of animals that could be attributed to physical features of their environment (to an extent significantly greater than would be caused by occasional bumps and scratches).

**E 5: Limiting the use of toxic substances in buildings**

- a. Calves must not come into contact with toxic fumes or surfaces, such as paints, wood preservatives or surface disinfectants.
- b. Creosote must not be used in areas where the animals have direct contact with the material.

**E 6: Electrical installations**

All electrical institutions at main voltage must be:

- 1. Inaccessible to calves;
- 2. Well insulated;
- 3. Safeguarded from rodents;
- 4. Properly grounded;
- 5. Regularly tested; and
- 6. In adherence with local building codes.

**E 7: Design of passageways**

- a. Passages must be of such design and width, and so constructed, to allow two animals to pass freely.
- b. Care should be taken to minimize, and ideally exclude, blind alleyways in the buildings.
- c. Farm alleyways must be maintained to prevent damage to the animals' hooves.

**B. Thermal Comfort, Environment & Ventilation**

**E 8: Thermal conditions**

The thermal environment, especially for young calves, must not be so hot or so cold as to cause distress. The higher critical temperature for calves is 80-85 °F, and the following chart lists the lower critical temperatures for calves at various ages.

<b>Age of Calf (days)</b>	<b>Lower Critical Temperature (°F)</b>
1	56
10	51
20	47
30	14



**E 9: Ventilation**

Buildings must be ventilated effectively, so as to permit air movement at low velocity while avoiding drafts and minimizing the entrance of rain and snow.

**E 10: Air quality**

- a. Provisions must be made to ensure that, when calves are housed, aerial contaminants do not reach a level at which they are noticeably unpleasant to a human observer (as specified by the Occupational Safety and Health Administration).
- b. Ammonia must not exceed 25 ppm.

*Inhalable dust should not exceed 10mg/m<sup>3</sup> at animal height.*

**E 11: Relative humidity**

Building ventilation must aim to achieve a relative humidity below 60% when ambient conditions permit.

*The objective is to provide a large volume of air and high ventilation rates to remove moisture produced by the stock and to reduce the number of airborne pathogens being passed from animal to animal. Factors contributing to good ventilation include sufficient and correctly positioned air inlets and outlets, and a correct air inlet-outlet height differential. Professional advice should be sought if ventilation problems are encountered.*

**E 12: Partially roofed shelters**

When calves are kept confined in partially roofed units they must be provided with:

1. Effective protection from the wind; and
2. A comfortable, dry lying area.

**E 13: Shade**

- a. When calves are reared on pasture or dry lots, they must all have access to either natural or artificial:
  1. Shade; and
  2. Shelter.
- b. If daytime summer temperatures are consistently above 85°F, shade, fans, misting/fogging systems or other cooling equipment must be provided.

*If daytime summer temperatures are consistently above 85 °F, the welfare of calves may be compromised. Therefore, particular consideration must be given to the provision of shade and misting systems when these conditions prevail.*

*Shade structures should be designed to accommodate all animals simultaneously. Examples would be to allow animals back into buildings or to use natural shade such as trees.*

## C. Housing, Lying Area and Space Allowance

### E 14: Calf hutches or individual pens

- a. Tethering of calves is prohibited.
- b. Calf hutches or individual pens must be of a size appropriate for the age, size and breed of the animal.
- c. Individual pens or hutches must not be used to house calves older than 8 weeks of age.
- d. The calf must be able to stand up, turn around, lie down, rest and groom itself without hindrance.
- e. There must be enough bedding in the hutch to exclude any drafts, and to keep the calves clean.

*There is a serious problem if more than 5% of the calves have soil on their bellies.  
Bedding must not transfer soil onto the calves.*

- f. Hutches or pens must be arranged so that calves may see and hear other calves in neighboring units.
- g. Hutches or pens must be made of material that minimizes heat stress and wide temperature fluctuations.
- h. Hutches or pens must be sufficiently ventilated to remove excess humidity, ammonia and condensation, while at the same time eliminating drafts but retaining constant air circulation.
- i. Hutches or pens must be placed on a free draining base and affixed to the ground, when necessary, to prevent movement in high winds.
- j. Hutches or pens must be sited in a sheltered location, away from prevailing weather.
- k. Hutches or pens must be made of materials that are constructed to facilitate cleaning and disinfection.
- l. An outdoor exercise area must be provided, weather permitting.

### E 15: Minimum space allowance

For calves weighing less than 250lbs: 32 sq.ft./calf

For calves weighing more than 250lbs: 60 sq.ft./calf

### E 16: Lying area

- a. Calves kept indoors must have access at all times to a lying area that is:
  1. Of solid construction (i.e. not perforated or slatted)
  2. Bedded to provide a comfortable, clean, dry area sufficient to avoid discomfort; and
  3. Sloped as necessary to provide drainage.
- b. Calves kept in dry lots must have access at all times to a lying area that is well drained or well maintained, and that is of sufficient size to accommodate all calves lying down together in normal resting posture.
- c. During periods of prolonged wetness, mud must be managed so the depth of mud in the loafing area is not excessive or sufficient to cause cattle difficulty walking to and from feeding and watering areas. Mud over hoof depth is not allowed in lying areas, passageways, or adjacent to waterers or feeding areas.

### E 17: Group housing

- a. Calves older than 8 weeks of age must be housed in groups.

- b. Calves must be grouped according to size and age.
- c. Space allowance for calves housed in groups must meet the minimum requirements as stated in E15.
- d. Space allowances must be calculated in relation to the whole environment, the age, sex, live weight and behavioral needs of the stock, taking account of the presence or absence of horns and the size of the group.

**E 18: Freedom of movement**

- a. Except as noted in E19, all calves must at all times must have:
  - 1. Sufficient freedom of sideways movement to be able to groom themselves without difficulty;
  - 2. Sufficient room to lie down and freely stretch their limbs; and
  - 3. Sufficient room to rise and turn around.
- b. Tethering of calves is prohibited.

**E 19: Confinement**

Calves must not be closely confined except in the following circumstances. On these occasions calves must not be confined for more than 2 hours, unless directed otherwise by an attending veterinarian:

- 1. For the duration of any examination, routine test, blood sampling, veterinary treatment;
- 2. While they are being fed;
- 3. For the purpose of marking, washing, or weighing;
- 4. While facilities are being cleaned; or
- 5. Awaiting loading for transportation.

**D. Lighting**

**E 20: Sufficient light in buildings**

When calves are housed, adequate light, whether fixed or portable, must be available to enable them to be thoroughly inspected at any time.

**E 21: Light requirements for calves**

Housed calves must be provided with light comparable to the intensity of natural light during the normal period of daylight hours.

**E. Fencing**

**E 22: Design and maintenance of fences**

All fencing, including gates, must be adequately inspected and maintained. In particular, electrical fences must be designed, installed, used and maintained so that contact with them does not cause more than momentary discomfort to the cattle.

## **F. Handling facilities**

### **E 23: Passageways**

- a. Alleyways and gates must be designed and operated so as not to impede the movement of calves.
- b. When operating gates and catches, every effort must be made to reduce excessive noise, which may cause distress to the animals.
- c. If noise from the equipment is causing the animals distress, noise reduction mechanisms must be installed.

### **E 24: Loading facilities**

- a. Loading facilities
  1. Must provide a ramp of no more than 25% incline;
  2. Must be clean; and
  3. Must be well lit.
- b. Both loading ramps and tailboards must be designed to prevent calves from slipping and falling off.
- c. Ramps should be of non-slip footing.

### **E 25: Facilities for stressed calves**

- a. Managers must take proper precautions to prevent and manage hypothermia in young calves.
- b. While healthy young calves can tolerate low air temperatures, newborn animals, calves that have been transported or deprived of feed and sick calves are particularly susceptible to hypothermia. Hypothermia and additional stress must be minimized in susceptible calves by housing them in a well-ventilated building, by the use of thick, dry bedding, and by avoidance of drafts and/or provision of supplemental heat.

### **E 26: Calf quarantine**

- a. When there is a high risk of infectious disease, consideration must be given to quarantine of calves for a period of time as recommended by a veterinarian.
- b. Location or placement of individual calf pens used for quarantine must be such that each calf has the opportunity to see and hear other calves.

## **PART 4: MANAGEMENT**

**OBJECTIVES:** *A high degree of caring and responsible management is vital to good animal welfare. Managers and caretakers must be thoroughly trained, skilled and competent in animal husbandry and welfare, and must have a good working knowledge of their system and the livestock under their care.*

### **A. Managers**

#### **M 1: Farm Plan**

All records, checklists, health plans, contingency plans, farm pest control plans, written standard operating and emergency procedures, policies and publications that the HFAC Animal Care Standards for Young Dairy Beef require the producer to keep and maintain, must be made available for the HFAC Inspector.

#### **M 2: Understanding the standards**

Managers must ensure that:

1. They have a copy of the Humane Farm Animal Care *Animal Care Standards for Young Dairy Beef*;
2. They and the stockpersons are familiar with the standards; and
3. They and the stockpersons understand the standards.

#### **M 3: Management and record keeping activities**

Managers must:

1. Develop and implement a suitable training program for stock keepers, with regular updates and opportunities for continuing professional development. Producers/Managers must be able to demonstrate that staff with responsibilities for stock care have the relevant and necessary skills to perform their duties and, if necessary, are given the opportunity to participate in an appropriate form of training;
2. Develop and implement plans and precautions to cope with emergencies such as fire, flood, or interruption of supplies and provide emergency contact numbers by phones and entrances to buildings;
3. Provide an Emergency Action Plan, sited adjacent to a telephone point, highlighting procedures to be followed by those discovering an emergency such as fire, flood, or power failure; sited in an easily accessible location which must include:
  - a) Procedures to be followed by those discovering such an emergency
  - b) The location of water sources for use by the fire department
  - c) An address, map grid (GPS) reference, and/or postal code to easily locate the unit.
4. Ensure the Animal Health Plan (see H1) is implemented and regularly updated and that the required data are recorded appropriately;
5. Maintain and make available to the Humane Farm Animal Care Inspector, records of production data and use of medications. These records must include documentation of all incoming and outgoing stock on the farm, as well as types and quantities of medicines used; and
6. Ensure calves are fit for transport to their final destination.

**M 4: Mitigating problems**

- a. Managers must understand the times and circumstances in which calves are prone to welfare problems on their unit.
- b. Managers must be able to demonstrate competence in recognizing and dealing with these problems.

**M 5: Awareness of the welfare implications of management practices**

Managers must be aware of the welfare concerns related to injection, oral dosing, dehorning, identification procedures, and castration, where applicable.

**M 6: Training**

- a. Prior to being given responsibility for the welfare of livestock, employees must be properly trained and/or have the experience appropriate to their job responsibilities, and:
  1. Be able to recognize signs of normal behavior, abnormal behavior, pain and fear;
  2. Be able to recognize signs of common diseases and know when to seek help;
  3. Have a basic knowledge body condition scoring;
  4. Have knowledge of the care of the newborn calf.
- b. In addition, managers must have a basic knowledge of what constitutes proper nutrition in calves.
- c. Formal or on-the-job training should be made available to staff (including temporary and part-time employees.)

**M 7: Compassionate treatment**

- a. Managers must be able to demonstrate competence in handling animals in a positive and compassionate manner.
- b. Managers must be able to demonstrate their proficiency in procedures that have the potential to cause discomfort (e.g., injections, foot trimming, dehorning, castration, and marking).

**M 8: Complaints to Operators**

- a. To be certified, an Operation must maintain systems for receiving, responding to, and documenting complaints alleging the Operation's failure to comply with *Humane Farm Animal Care* standards (ISO §15).
- b. Whenever an Operator receives a complaint, the Operator must:
  1. Take appropriate action to respond to the complaint; and
  2. Correct any deficiency in products or services that affect their compliance with requirements for certification.
- c. Written records must be retained by the Operation for a minimum of 3 years from the date of the records' creation. Records must contain information documenting:
  1. All complaints received (written or verbal); and
  2. Actions taken by the operator to respond to the complaint.
- d. These records must be made available to *Humane Farm Animal Care* upon request. *Humane Farm Animal Care* will review these records at least annually, during the operation's annual inspection.
- e. If a farm operation has "organic" or "natural" certification, operators must notify *Humane Farm Animal Care* if an adverse ruling related to the operation's organic or natural status

(such as suspension or revocation of certification, fine, or sanction) is levied against the operation by another certifier or by a governmental program that regulates the industry.

*The complaints log is ONLY for recording if someone makes a complaint to a producer about their compliance with the HFAC Standards.*

## **B. Handling**

### **M 9: Quiet handling**

- a. Animals must be handled with care and in a manner that imposes the minimum possible stress on the animals. When moving calves, facility design and the surrounding environment must be considered. Handlers should strive to move calves at a slow, comfortable pace and refrain from using loud noises to move calves or hitting them in a manner that might cause injury.
- b. Young calves may be moved by lifting them, but never moved by dragging or grabbing skin, hair, ears, tail or leg(s), even for short distances.

### **M 10: Anticipating animal stress factors**

Animal handlers must be trained and must understand the likely stressors that cattle may be subjected to; and be knowledgeable about how cattle react toward other cattle, towards humans and to strange noises, sights, sounds and smells.

*Calves have the following behavioral characteristics, which should be taken into consideration when they are handled:*

*They have a cautious and fearful nature.*

*They have acute hearing, so they should not be subjected to loud noises.*

*They are herd animals and, if possible, should not be left in isolation.*

### **M 11: Handling in passageways**

- a. Calves must not be driven unless the exit or the way forward for the lead animal is clear.
- b. Calves must not be rushed or run along alleyways, passageways, or through gateways.

### **M 12: Benign handling**

- a. Sticks and flags may be used as benign handling aids (e.g., as extensions of the arm) for calves over 4 months of age.
- b. Sticks must not be used for hitting calves.
- c. Animals must not be pulled or lifted by the tail, ears, or limbs.
- d. Aggressive tail twisting or jacking can cause tails to break, especially in young animals, and is prohibited.
- e. The use of electric prods is prohibited.
- f. Calves may only be moved by lifting, walking them, or other conveyance; pulling and dragging is specifically prohibited.

**M 13: Rapid diagnosis and treatment**

- a. All efforts must be made to ensure a rapid and proper diagnosis/treatment of the animal.
- b. If the animal does not respond to treatment, euthanasia must be considered.
- c. No animal can leave the farm unless it can walk unassisted.

**M 14: Non-ambulatory animals**

- a. All non-ambulatory animals must be treated without delay or euthanized.
- b. Appropriate equipment (e.g. sling or harness, sled, bucket of a front end loader, floatation tank, or stone boat) must be available on the farm to move an injured or non-ambulatory animal. Whatever type of lifting gear is used on a recumbent animal, care must be taken not to cause unnecessary pain or distress to the animal.
- c. Hoisting by chain, dragging, lifting without complete body support, and other means that can cause further physical damage are prohibited.
- d. The use of hip-lifters is permitted only for emergency, short-term assistance.
  1. Calves must never be left unattended when hip-lifters are in use.
- e. Hind leg hobbles may be used when necessary to prevent calves from becoming non-ambulatory (splitters). Calves that require hobbling to walk must not be transported.
- f. All non-ambulatory and injured animals must be provided with deep bedding, shelter from adverse weather, and accessible water and feed.
- g. Where the prognosis for recovery of a non-ambulatory animal is poor, early intervention by euthanizing the animal on farm must be undertaken.

*For acceptable methods of moving non-ambulatory cattle, refer to the American Meat Institutes' Guidelines and the National Institute of Animal Agriculture's "Proper Handling Techniques for Non-Ambulatory Animals."*

**C. Identification**

**M 15: Identification equipment**

- a. If neckbands, tail bands, ear tags or leg bands are used for identification purposes, they must be fitted with care and adjusted as required to avoid unnecessary pain or distress. Excessive use of ear tags (more than two per ear) must be avoided.
- b. Face branding of any type is prohibited.
- c. Ear notching is prohibited (unless required for health testing by the state vet or the federal government).
- d. Waddling/wattling and ear splitting are prohibited.

**M 16: Marking**

Calves must be carefully marked for identification and other purposes by trained, competent operators so as to avoid unnecessary pain or distress to the animals.

*Research has shown that while both hot branding and freeze branding are painful procedures, there is some indication that freeze branding may be less painful.*



**M 17: Temporary marking**

Livestock markers especially developed for livestock (e.g., crayons, paint, and chalk used for temporary marking) must be non-toxic.

**D. Equipment**

**M 18: Using equipment**

When equipment is installed that affects animal welfare, managers must:

1. Demonstrate their ability to operate the equipment properly;
2. Demonstrate their ability to carry out routine maintenance;
3. Be able to recognize common signs of malfunction; and
4. Demonstrate knowledge of actions to be carried out in event of a failure.

**M 19: Automatic equipment**

All automatic equipment must be thoroughly inspected by a stock keeper or other competent person, not less than once each day to confirm that there are no defects. When a defect is found in automatic equipment:

1. The defect should be rectified promptly; or
2. If this is impracticable, measures must promptly be taken (and must be maintained until the defect is rectified) as required to safeguard livestock from suffering unnecessary pain or distress as a result of the defect.

**M 20: Automatic ventilation equipment**

When automatic equipment includes a ventilation system, the system must contain:

1. An alarm that will give adequate warning of the failure of that system and will operate even if the principal electricity supply to it has failed.
2. Additional equipment or means of ventilation (whether automatic or not) which, in the event of a failure of the ventilation system, will provide adequate ventilation so as to prevent livestock from suffering unnecessary distress as a result of the failure.

**E. Inspection**

**M 21: Monitoring**

- a. Managers must inspect the equipment upon which livestock depend at least daily.
- b. Young calves must be checked at least twice daily.

**F. Farm Dogs**

**M 22: Managing stock dogs**

Working dogs, herding dogs and guard dogs must be properly trained and all dogs must be under control at all times, with an experienced person in attendance.

## **PART 5: HEALTH**

***OBJECTIVES: The environment in which livestock are housed must be conducive to good health. All producers must develop a health plan in consultation with their veterinarian.***

### **A. Health Care Practices**

#### **H 1: Animal Health Plan**

- a. An Animal Health Plan (AHP) must be drawn up and regularly updated in consultation with a veterinarian.
- b. The AHP (which is part of the Farm Plan) must include details of:
  1. Nutrition program;
  2. Vaccination program;
  3. Parasite prevention;
  4. Biosecurity and infectious disease protocols, including tolerance limits on overall herd performance;
  5. Non-ambulatory (downer) animal procedure; and
  6. Euthanasia for culling and emergencies.
- c. Records must be kept of all medical/animal health procedures that are performed.

#### **H 2: Mitigating health problems**

All sudden deaths, disease outbreaks and euthanasia must be recorded and investigated (in consultation with a veterinarian) when appropriate. The outcome of that investigation and any subsequent actions must be recorded.

#### **H 3: Health monitoring**

- a. The herd must be continually monitored for performance including: production diseases, infectious diseases, and injury as a result of housing/husbandry/handling. For example:
  - Metabolic Disorders;
  - Septicemia;
  - Enteritis;
  - Repetitive physical injury;
  - Lameness;
  - Calf scours;
  - Anemia;
  - Respiratory/infectious diseases;
  - Poor body condition; and
  - Nonambulatory animals.
- b. If any herd performance parameters fall outside tolerance limits identified by the producer and the attending veterinarian, the veterinarian must be informed and management practices adjusted to resolve the problem.

*To minimize the risk of anemia, and subsequent effects on health, performance and overall welfare, blood hemoglobin levels of calves should be monitored. It is recommended that hemoglobin levels of calves between 7-10 weeks of age should be maintained above 9 g/dl, with iron supplementation, if necessary.*

#### **H 4: Segregation pens**

- a. Provisions must be made for segregation and care of sick and injured calves, which, where possible, allows visual contact with other calves.
- b. Any calves suffering from illness or injury, must be treated without delay, and veterinary advice sought when needed. If necessary, such animals must be euthanized.

*In some circumstances, segregation is not feasible or may disrupt the social hierarchy or cause additional stress to the animal. The advantages of segregation should be weighed against its disadvantages, especially for mild illnesses or injuries that can be easily managed.*

- c. Hospital pens must be of a size that is appropriate for the age, size and breed of the animal.
  1. The animal must be able to stand up, turn around, lie down, rest and groom itself without hindrance.
  2. Water and feed must be readily accessible at all times, unless otherwise directed by the veterinarian.
- d. Water and feed and shelter must also be readily available to non-ambulatory animals, even if they are not housed in a hospital pen.
- e. Comfortable lying conditions with clean bedding must be provided in hospital pens or any area with non-ambulatory calves.
- f. Urine and dung from hospital pens in which sick and injured animals are housed must be disposed of so as to not spread infection to other stock or humans. Pens must be constructed to facilitate effective cleaning and disinfection of surfaces and the possible removal of a carcass from the area.

#### **H 5: Mitigating behavioral problems**

If abnormal behaviors (e.g., navel or ear sucking, urine drinking) develop repeatedly and inhibit normal functioning of the animal in any particular pen, a program of modification and enrichment must be agreed on with the veterinarian and a copy of the plan must be sent to HFAC office.

#### **H 6: Controlling Parasites and Predators**

- a) It is essential that all practical measures be taken to prevent or control external and internal parasites as set forth in the Animal Health Plan.
- b) When developing and implementing farm pest and predator control plans, physical exclusion methods and the removal of elements in the vicinity of livestock that might encourage the presence of pests and predators must be included.

Methods of physical exclusion and discouragement of pests and predators include:

- Construction/maintenance of fencing appropriate for excluding the pests/predators in question
- Removal of shelter/cover (e.g., weeds) in the area surrounding livestock buildings
- Removal/protection of obvious food sources
- Maintenance/proofing of buildings against pest and predators.

### **H 7: Physical alterations**

- a. Tail docking is prohibited.
- b. Due to the young age of animals at slaughter, under most young dairy beef production conditions, disbudding/dehorning of calves, and castration of bull calves are not carried out as routine procedures. Any producer performing these procedures, or receiving disbudded or castrated calves from an outside source, must notify Humane Farm Animal Care and discuss the reasons for this procedure, the age of the animals, and the method used.

### **H 8: Navel Care**

The navel of newborn calves must be dipped in disinfectant as soon as possible after birth.

### **H 9: Medicines must be:**

- a. Clearly labeled
- b. Stored in accordance with label instructions
- c. Kept in a secure store which is safe from animals and unauthorized people
- d. Kept separate from food producing areas (including the milking parlor).
- e. A person responsible for the management of the medicine storage must be indicated and that person must keep the appropriate records for stock control purposes.
- f. Any medicines used in the U.S.A. must be licensed for use in the U.S.A

## **B. Casualty Animals**

### **H 10: Calves**

On-farm killing or euthanasia of healthy dairy bull and heifer calves is prohibited.

### **H 11: Euthanasia**

- a. Each farm must have provisions for timely and humane euthanasia of casualty cattle. This can be accomplished on-farm by a named, trained, competent member of farm staff, a slaughterer, or a veterinarian. The method of euthanasia that will be used in each age group of animals must be specified in the Animal Health Plan.
- b. If there is any doubt as to how to proceed, the attending veterinarian must be called at an early stage to advise whether treatment is possible or whether humane slaughter/euthanasia is required to prevent suffering. If an animal is in severe pain that is uncontrollable, then the animal must be promptly euthanized.
- c. Nothing stated here is intended to discourage the prompt diagnosis and appropriate treatment of any ill or injured animal.

*A copy of the AVMA Guidelines on Euthanasia is available on the HFAC website, [www.certifiedhumane.org](http://www.certifiedhumane.org) in the Standards section.*

**H 12: Carcass Disposal**

- a. Disposal of carcasses must meet federal, state and local requirements and regulations.
- b. Disposal of carcasses must be done in a timely manner and using procedures that minimize the impact on the environment and prevent spread of infectious disease or pathogens.

## **PART 6: TRANSPORTATION**

*Objectives: Animal transport systems must be designed and managed to ensure livestock are not subjected to unnecessary distress or discomfort. The transport and handling of livestock must be kept to an absolute minimum. Personnel involved in transport must be thoroughly trained and competent to carry out the tasks required of them.*

### **A: General transportation**

#### **T 1: Procurement of Calves**

Calves must travel directly from the farm of birth to starter (where applicable) or finishing farms. The use of intermediate markets, such as auction barns, is prohibited.

#### **T 2: Journey duration for young calves (up to one month of age)**

- a. Transit time must not exceed 3 hours.
- b. Transit expected to last longer than 1 hour must be made in an environmentally controlled vehicle.
- c. The transportation of calves from place of birth to final destination should be by a route that minimizes transport time.

#### **T 3: Transport of newborn calves**

- a. Prior to transportation, calves must:
  1. Have a dry coat;
  2. Have a treated navel; and
  3. Be able to stand.
- b. Transportation of calves less than 5 days of age must be made using an environmentally-controlled vehicle, which provides appropriate heat and ventilation to the animals.
- c. Calves must be provided with dry bedding and adequate space for all animals to lie down simultaneously during transit.

#### **T 4: Transport of unfit, sick calves**

Any animal that is unable to stand, sick, injured, disabled, fatigued, or for any other reason cannot be moved without causing it avoidable suffering must not be transported.

### **B: Transport equipment and personnel**

#### **T 5: Training**

All personnel must be properly instructed and knowledgeable about the basic facts of animal welfare and be skilful in handling calves under varying climatic conditions.

#### **T 6: Personnel responsibility**

Transport personnel are responsible for the welfare of the calves for the entire stage of transport.

### **T 7: Vehicle design**

Any vehicle used for transporting calves must:

1. Have strong, secure side panels, which are high enough to prevent calves from jumping, falling or being pushed out;
2. Have provision for draining or absorption of urine; and
3. Prevent protrusion of any part of a calf from the vehicle.
4. Prevent heat and cold stress, especially with young calves.

### **T 8: Transport hygiene**

- a. Vehicles and containers must be cleaned and disinfected after each shipment to prevent the spread of disease. Cleaning and disinfecting facilities should be provided at unloading points during all seasons.
- b. Calves must be loaded only into vehicles that are clean and disinfected, and contain suitable dry, fresh bedding material.

### **T 9: Vehicle Ramps**

Vehicle ramps must have sufficient footing to ensure stability for the calves and operators.

## **C: Loading and unloading**

*In a new situation or location, all normal, healthy animals are alert and investigative. Any change or disturbance in their surroundings, such as noises, breezes, movement of objects, and flashes of light, should be minimized, as calves in unfamiliar situations are easily frightened. Calves should be loaded or unloaded in a manner that avoids injury, fear, and suffering.*

### **T 10: Location of loading zones**

Loading and unloading zones should be so situated as to reduce the introduction or spread of infectious disease. Precautions should be taken to prevent calves that are in the loading zone or that have been loaded onto the truck from escaping and returning to the building.

### **T 11: Handling aids**

- a. Use of canvas slappers and other devices to move calves should be kept to a minimum to avoid excitement or injury to calves.
- b. Electric prods must not be used.

### **T 12: Loading/unloading ramps**

- a. Small calves may be lifted and gently placed into a vehicle. They must not be grabbed or dragged by their skin, hair, tail, legs, or ears even for short distances.
- b. Ramps should be used; tilting the box of a dump truck is totally unacceptable.
- c. Ramps and alleyways must not have sharp turns that impede movement or could cause injury to the calves. Ideally, loading and unloading alleyways and ramps should be curved, have solid walls, and be properly lit.

- d. Loading and unloading docks should be level with the truck to permit the calves to step safely onto or off the truck.
- e. Ramps and chutes must be strong, provide safe, non-slip footing, and have sides high enough to prevent calves from falling or jumping off.
- f. No gap should exist between the ramp, its sides, and the vehicle.
- g. Doors must be sufficiently wide to permit calves to pass through them easily without bruising or injury.

**T 13: Identification**

Excessive use of ear tags (more than two per ear) must be avoided. Adhesive back tags should be used for short term or temporary identification during transit.

**D: Space**

**T 14: Adequate space provision during transport**

Calves must not be crowded in a way that causes injury or suffering. They must be provided with sufficient floor space and headroom to allow them to stand in their natural position without touching the ceiling or roof.

*Recommended loading density for calves weighing between 100-450 lbs*

<i>Average weight (lbs)</i>	<i>Average area per animal (ft<sup>2</sup>)</i>
100	3.0
200	3.5
250	4.2
300	4.8
350	5.4
400	6.4
450	6.9

*From Livestock Trucking Guide, NIAA, September 2001*

**T 15: Segregation of different sized calves**

Calves of substantially different sizes must be separated from one another.

**E: Care during transit**

**T 16: Vehicle breakdown plan**

In the event of vehicle breakdowns, traffic accidents, or other delays during transit, appropriate action is necessary to ensure the well-being of the calves. Transport personnel must be aware of emergency procedures to follow in these situations.



**T 17: Precautions in cold weather**

- a. During winter travel, openings that allow drafts or freezing rain and snow to enter the vehicle box must be covered.
- b. Weather conditions must be observed and ventilation adjusted accordingly. Too much cold air entering the vehicle could cause the calves to suffer from frostbite, but not enough air could cause suffocation.
- c. Metal floors of vehicle boxes must be suitably bedded and sides covered with wood or other suitable material. Frigid bare metal will rapidly freeze the skin of a calf on contact. Wet bedding tends to freeze and must be removed from the truck after each trip.

*It is recommended, where possible, that both the calves and ventilation should be checked during transit at least every 2 hours.*

**T 18: Precautions in hot and humid weather**

- a. During transit, calves must be protected from direct sunlight, high temperatures, and high humidity. These weather conditions can cause breathing difficulties, stress, and death.
- b. Loading density should be reduced by approximately 10% if the temperature is above 16° C/60° F; reduction of loading density of up to 25% should be considered if the weather is extremely hot and humid.
- c. Suitable airflow throughout the vehicle must be provided to keep calves comfortable.
- d. Loading and unloading the calves should be accomplished promptly. Any stops during transit should be of short duration to prevent rapid buildup of heat inside the truck.
- e. When a closed truck is used, ventilation can be provided by leaving any slats or openings on the sides uncovered. When an open-topped truck is used, the top of the vehicle should be covered with a tarpaulin.
- f. In extreme weather calves must be handled carefully as exercise increases stress problems. Wide temperature fluctuations between day and night also increase stress.

**T 19: Transportation stress**

- a. To avoid over-exertion, every animal must be treated with extreme patience.
- b. Allow calves that have been over-exerted to rest.
- c. Calves must be delivered directly to the buyer from the seller without going through any intermediate markets. This applies to newborn calves traveling to the finishing farms and finished calves destined for slaughter. Every effort should be made to keep the distance to be traveled and the traveling time to a minimum.

**T 20: Transportation to slaughter**

Transportation of calves to slaughter should not exceed 6 hours.

*To reduce stress and the adverse effects of transit in calves transported to slaughter, it is recommended that the nearest slaughter facility suitable for processing veal calves be used.*

## **PART 7: SLAUGHTER**

***OBJECTIVES: All slaughter systems must be designed and managed to ensure livestock are not caused unnecessary distress or discomfort.***

### **A: Slaughter procedures**

#### **S 1: Slaughter systems**

All slaughter systems must be designed and managed to ensure livestock are not caused unnecessary distress or discomfort.

- a. The slaughter plant must meet the American Meat Institute (AMI) Guidelines (as written by Dr. Temple Grandin). AMI Guidelines can be found at [www.certifiedhumane.org](http://www.certifiedhumane.org) under the Standards section.
- b. The slaughter plant must be inspected by Humane Farm Animal Care's inspectors to verify compliance with the AMI Guidelines.
- c. HFAC will also audit the slaughter plant for traceability to ensure that all the product that is labeled with the Certified Humane® logo originates from Certified Humane® farms.

## **REFERENCES**

- Agriculture Canada. 2009. *Recommended code of practice for the care and handling of dairy cattle*. Communication Branch, Agriculture Canada, Ottawa, Ontario. (<http://www.omafra.gov.on.ca/english/livestock/animalcare/dairycode.pdf>).
- American Association of Bovine Practitioners, Animal Welfare Committee. 1999. *Practical Euthanasia in Cattle, Considerations for the Producer, Livestock Market Operator, Livestock Transporter, and Veterinarian*. Am. Assoc. Bovine Practitioners. Rome, GA. (<http://www.aabp.org/resources/euth.pdf>).
- Animal Behavior and the Design of Livestock and Poultry Systems*. Proceedings from the Animal Behavior and the Design of Livestock and Poultry Systems International Conference, Indianapolis, IN. Pub. NRAES (Northeast Regional Agric. Eng. Service) April 1995.
- Animal Care Series: Dairy Care Practices*. University of California Cooperative Extension Dairy Workgroup. June 1996.
- Animal Welfare Approved Standards for Dairy Cattle and Calves*. Animal Welfare Approved. 2010.
- Armstrong, D.V. 1994. Heat stress interaction with shade and cooling. *J. Dairy Sci.* 77:2044-2050.
- AVMA. *2000 Report on the AVMA Panel on Euthanasia*. JAVMA, Vol 218 (5). March 2001.
- Calves, Heifers, and Dairy Profitability*. Proceedings from the Calves, Heifers, and Dairy Profitability National Conference, Harrisburg, PA. Pub. NRAES (Northeast Regional Agric. Eng. Service). January 1996.
- Cook, N.B. and K.V. Nordlund. 2009. The influence of the environment on dairy cattle behavior, claw health and herd lameness dynamics. *Vet. J.* 179: 360-369.
- Dairy Housing and Equipment Systems*. Proceedings from the Conference on: Dairy Housing and Equipment Systems: Managing and Planning for Profitability; Camp Hill, PA. Pub. NRAES (Northeast Regional Agric. Eng. Service). February 2000.
- Dairy Reference Manual*. 3<sup>rd</sup> Ed. The Pennsylvania State University. Pub. NRAES (Northeast Regional Agric. Eng. Service) June 1995.
- Elanco Animal Health. 1996. Body conditioning in dairy cattle. Bulletin AI 8478. ([http://www.vetmed.ucdavis.edu/vetext/INF-DA/INF-DA\\_BCS.HTML](http://www.vetmed.ucdavis.edu/vetext/INF-DA/INF-DA_BCS.HTML)).
- Federation of Animal Science Societies. 2010. Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching. Pps. 74-85.
- Grandin, T. 1988 and 1992. *Livestock Trucking Guide*. National Institute for Animal Agriculture, Bowling Green, KY.

Grandin, T., Editor. 2007. *Livestock Handling and Transport*. CAB Int., Wallington, Oxon, UK.

Grandin, T., Editor. 2009. *Improving Animal Welfare: A Practical Approach*. CAB Int., Wallington, Oxon, UK.

Guidelines For The Care And Use Of Animals In Production Agriculture. Nebraska Food Animal Care Coalition.

*Livestock Handling Guide*. Livestock Conservation Institute. 1988.

National Research Council. 2001. *Nutrient Requirements for Dairy Cattle*. 7<sup>th</sup> Edition. Natl. Acad. Press, Washington, D.C.

Nocek, J.E. *Hoof Care for Dairy Cows*. W.D. Hoard and Sons Co. City, State USA. 1996.

*Nutrient Requirements of Dairy Cows* 7th ed. National Research Council Publication. National Academy Press, Washington, DC. 2001.

*Recommended Code Of Practice For The Care And Handling Of Farm Animals – Veal Calves*. Canadian Agri-Food Research Council. 1998.

Reynolds, J., Casas, J., Rossitto, P.V., and J. Cullor. 2004. On Farm Euthanasia CD. Veterinary Medicine Teaching and Research Center, University of California, Davis; 18830 Road 112, Tulare, CA 93274. (559-688-1731).  
(<http://www.vmtc.ucdavis.edu/laboratories/DFSL/euth/index.htm>).

*RSPCA Welfare Standards for Dairy Cows*. RSPCA West Sussex, United Kingdom. January 2008.

Shearer, J. K. and P. Nicolette. 2002. Procedures for Humane Euthanasia, Humane Euthanasia for Sick, Injured, and/or Debilitated Livestock. College of Veterinary Medicine, Iowa State University, Ames, Iowa. (<http://vetmed.iastate.edu/HumaneEuthanasia>).

*SPCA Certified Standards for the Raising and Handling of Dairy Cattle*. British Columbia Society for the Prevention of Cruelty to Animals. 2011.

Stull, C., Berry, S., Reed, B. and M. Payne. 2004. Dairy Welfare Evaluation Guide. Cooperative Extension, University of California, Davis, CA.  
([http://cdqa.org/dw\\_eval\\_guide.asp](http://cdqa.org/dw_eval_guide.asp)).

Stull, C. L., Payne, M.A., Berry, S.L. and J.P. Reynolds. A review of the causes, prevention and welfare of nonambulatory cattle. *J. Am. Vet. Med. Assoc.* 231(2):227-234.  
(<http://avmajournals.avma.org/doi/pdf/10.2460/javma.231.2.227>).

Stull, C.L. and J.P. Reynolds. 2008. Calf Welfare. *Vet. Clinics N Amer Food Animal Practice.* 24(1):191-203.

- Tucker, C.B., Ledgerwood, D. and C. Stull. 2010. Muddy conditions reduce lying time in dairy cattle. Proceedings of the 44th Congress of the International Society for Applied Ethology, p. 67.
- Van Horn, H.H. and C.J. Wilcox. 1992. "Large Dairy Herd Management." American Dairy Science Assoc. Savoy, IL.
- West, J.W. 2003. Effects of heat-stress on production in dairy cattle. J. Dairy Sci. 86:2131-2144.
- Young, B.A. 1981. Cold Stress as it affects animal production. J. Anim. Sci. 52-154-163.



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