

Ensuring the Safety and Health of Technical Intern Trainees Involved in Livestock Agriculture



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JITCO

I Cautions concerning each type of livestock agriculture

1. Dairy farm work

1. Dairy cows may kick with their back legs, so caution is required. Approach dairy cows diagonally from behind.



2. When milking a cow with a milker, take care not to get kicked by the cow's back legs.



3. When using feeding machinery and equipment and facilities for treatment of manure, take care not to get your hands, feet, hair or clothing caught.



Automatic feeder



The screw inside an automatic feeder

1. The characteristics of dairy cows

Dairy cows are timid animals. They become frightened simply when they are approached by unfamiliar people. Avoid shouting or running in the barn so as not to frighten or excite the cows. When workers are kicked or trampled by dairy cows, it usually involves the cow's back legs. The range of a cow's back legs is limited, so take care not to get within that range inadvertently (see the figure at left).

Dairy cows do not like it if you stand directly behind them. Approach dairy cows diagonally from behind where they can see you (refer to the figure at left).

(The explanation above and figures at left are based on material from the National Livestock Breeding Center of Japan, including excerpts from The Behavior of Dairy Cattle by Seiji Kondo published by Dairyman.)

2. Milking work

For milking, a special machine called a milker is used. With tie stalls, when attaching the milker and dipping the teats, stroke the cow's body gently and wipe the teats carefully before touching the udders so as to reassure the cow and avoid being kicked or trampled.

With free stalls, milking is carried out in a special facility called a milking barn. Normally, about ten cows can be milked at one time. When it is time for milking, the cows are herded into the milking parlor, where a worker attaches the milker. After milking, the cows are herded back out.

In a milking parlor, when attaching the milker and dipping the cow's teats, observe the same precautions as with a tie stall. Take care not to get kicked or trampled also when moving cows into and out of the barn.

3. Using feeding machinery and equipment

Injuries occur if a feed mixer or automatic feed dispenser jams and the operator carelessly unblocks it with their hand, and the feeder suddenly restarts. If the equipment jams, ask your supervisor for instructions.

Be sure to turn off the machinery before unblocking the feed in accordance with the instructions given. The same applies when carrying out inspection and maintenance. Typical devices used for removing manure include a barn cleaner for scraping out manure and bedding and a barn scraper for shoveling manure from the passageways. Follow prescribed procedures when using this equipment. Additionally, observe prescribed procedures when cleaning the cattle shed manually.

2. Pig farm work

1. Pigs are easily frightened, so take care not to surprise them.



Pigs may charge, so caution is required.
 When driving pigs from one location to another, they may charge you, so caution is required.



3. When using feeding machinery and equipment, take care not to get your hands caught.

Observe fixed procedures when cleaning the pig sty.



Automatic feeder



The screw inside an automatic feeder

4. In a pig sty without windows, check the evacuation route in advance.



- 3 -

1. The characteristics of pigs

Pigs are very timid animals. If they become stressed, they do not gain weight, so avoid frightening them. However, they are very curious animals and they will try to bite projecting items and could get their necks caught in fencing and so on. They are also delicate and value cleanliness, defecating in a specific place. Handle pigs with an understanding of these characteristics.

2. Points to note when moving pigs

In pig farming, it is sometimes necessary to move the pigs from one location to another (e.g., in order to change pig sties according to their age and for breeding or other reasons). On these occasions, if you handle the pigs carelessly, they may charge and injure you, so use special tools and follow the instructions of your supervisor.

3. Using feeding machinery and equipment

Injuries occur if a feed mixer or feed dispenser jams and the operator carelessly tries to unblock it with their hand, and the feeder suddenly restarts. If the equipment jams, ask your supervisor for instructions.

Be sure to turn off the machinery before unblocking the feed in accordance with the instructions given. The same applies when carrying out inspection and maintenance. In the pig sty, manure is handled with a place set up for defecation in the passageway, or with slatted floors through which the manure falls.

When cleaning the pig sty, following the set procedures is the first step towards avoiding injury.

4. Miscellaneous

In a pig sty without windows, be sure you know the evacuation route in case of fires or other emergencies.

3. Chicken farm work

1. If the chickens become frightened, their agitation can raise dust, so take care not to frighten them.



Take care to prevent fires in the chicken coop.
 In a chicken coop without windows, check the evacuation route in advance.



3. When using feeding machinery and equipment and egg sorting and packing machinery (grading and packing center), take care not to get your hands caught.

Observe fixed procedures when cleaning the chicken coop.



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1. The characteristics of chickens

If the chickens become frightened by sudden noises or strong light, their agitation can raise dust, so take care not to frighten them.

2. Fire prevention

Gas, oil or electric heating is typically used to provide heat for newly hatched chicks, so be cautious of fire danger. Furthermore, in a chicken coop without windows, be sure you know the evacuation route in case of fires or other emergencies.

3. Using feeding machinery and equipment

Injuries occur if a feed mixer or feed dispenser jams and the operator carelessly tries to unblock it with their hand, and the feeder suddenly restarts. If the equipment jams, ask your supervisor for instructions.

Be sure to turn off the machinery before unblocking the feed in accordance with the instructions given. The same applies when carrying out inspection and maintenance.

Conveyors are used for gathering and sorting eggs, and egg sorting and packing machinery (grading and packing center) is typically used for sorting and selecting purposes. To prevent getting your fingers or clothing caught in this machinery, wear work clothes with tight sleeves and do NOT use gloves.

In addition, when cleaning the chicken coop, following the set procedures is the first step towards avoiding injury.

Miscellaneous

Chicken coops tend to be dusty, so use a dust mask as necessary. To prevent the chickens pecking each other and feather picking behavior, the tips of their beaks are cut off, referred to as debeaking, when they are chicks.

II. Cautions common to all types of work

1. Precautions before starting work

1. When performing farm work, wear appropriate clothing, a hat, footwear and necessary protective gear suitable for each task so that your hair and clothing does not get caught in the machinery.



- 2. In performing work, when there is something you do not understand, ask until you understand it. There is no shame in asking many times.
- 3. If you notice that the machinery is not working normally or presents a danger, notify the supervisor immediately.
- 4. Be sure to receive education and training concerning safety and health when you start work. Observe all cautions provided.
- 5. Work to keep the workplace clean and tidy, and avoid leaving things lying about.



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1. Clothing and protective gear

When performing farm work, wear appropriate clothing, a hat, footwear and necessary protective gear suitable for each task so that your hair and clothing does not get caught in the machinery.

3. Inspection of machinery and hardware

Before using machinery and hardware, be sure to inspect it first, including the safety devices, protective covers and so on. Also, be sure that you know how to use the machinery properly.

If there is anything wrong with the machinery, hardware, safety devices and so on, inform your supervisor and have it adjusted or repaired. Check that it is working properly again before using it.

4. Training before starting work

When you first work at a farm where you will be using machinery and equipment, listen carefully and be sure to understand the explanations for proper use, safety features, work procedures, checks before starting work and other important points.

In addition, listen carefully and be sure to understand explanations about maintaining a clean and tidy workplace, prevention of illness, what to do in an emergency and so on.

5. Cleanliness and tidiness

Cleanliness and tidiness are fundamental to ensuring safety and health, and are very important for avoiding injuries.

2. Cautions while working

- 1. While working, if you notice that machinery is not working normally or presents a danger, notify the supervisor immediately.
- 2. When at work, concentrate on your own tasks. Chatting, horseplay, and daydreaming leads to accidents.
- 3. Do not forget about safety and health even with simple and familiar tasks.
- 4. Take care not to become entangled in the moving parts of machinery.



5. Avoid tripping or falls when working.



6. Take care to avoid back injuries.



1. Inspection of machinery and hardware

If anything goes wrong with the machinery, hardware, safety devices and so on while you are working, inform your supervisor and have it adjusted or repaired. Check that it is working properly again before using it.

4. Prevention of entrapment

When using machinery that presents a moving hazard, wear clothing with tights sleeves and a tight hem, tie up your hair and wear a hat or helmet. Do not wear a neck scarf or anything that can be caught easily, and do not wear gloves.

Do not put your hands near parts of the machine that move. Before cleaning, inspecting, or lubricating moving parts, stop the machinery completely.

5. Prevention of tripping and falls

* Prevention of head injuries

When carrying out work that involves the risk of tripping, falling or flying objects, wear a helmet or other protective headgear.

* Prevention of foot injuries and slipping

When carrying out work that may involve heavy objects dropping on your feet, flying objects, or stepping on sharp objects such as nails, wear safety shoes, shin guards or other appropriate footwear and protective gear. Select footwear with slip resistant soles.

* Ladders

Do not set up a ladder on uneven ground. Make sure the latches are firmly locked in place before using the ladder.

When placing a ladder, make sure that it is vertical when viewed from the front, and at a proper angle in relation to the wall. If the top rung is placed directly against a curved surface, the ladder is unstable and likely to slip sideways, so never place a ladder against a tree, pole, or similar object.

6. Prevention of back injury (work posture and handling of heavy objects)

Work performed in a strained posture with a significantly bent back or maintaining the same posture for a long time can lead to stiffness in the neck, shoulders, and lower back. It can also lead to accidents, so use an appropriate chair so you can maintain a better working posture. Rest and do exercises to recover from work fatigue.

Carrying heavy objects can lead to falls and lumbar pain, so try to separate out loads, get help from another person, or use a cart to reduce the load. When lifting heavy loads, bend your knees and keep the load close to your body.

3. Cautions when driving a forklift, etc.

- 1. You can only operate a forklift if you have completed forklift operation proficiency training.
- 2. You can only operate a shovel loader if you have completed shovel loader operation proficiency training.



- 4. Cautions concerning the working environment
 - 1. When working in a hot environment, particularly in summer, take care to avoid heatstroke.



2. When working in a cold environment, particularly in winter, take care to avoid industrial accidents as a result of physical impairment due to the cold.



3. Operating a forklift

- 1. You may be required to drive a forklift when moving bagged feed or on other occasions. For work involving the operation of a forklift with a maximum load of one ton or more, you must have completed forklift operation proficiency training.
- 2. You may be required to drive a shovel loader for moving livestock manure. For work involving the operation of a shovel loader with a maximum load of one ton or more, you must have completed shovel loader operation proficiency training.

Vehicles that look like shovel loaders but with four-wheel drive are classified as vehicular construction machinery. For work involving operating vehicular construction machinery with a vehicle weight of three tons or more, you must have completed vehicular construction machinery operation proficiency training.

If you do not have the above qualifications, you must not operate the respective vehicles.

4. Working environment

- 1. When working in a hot environment, particularly in the summer, take the following precautions to avoid heatstroke.
- * Try to avoid working during the hottest time of day, take plenty of breaks, and try to keep working hours as short as possible. Drink plenty of liquids to replace fluid lost through sweating.
- * Wear a hat and clothing that allows sweat to escape. Also, try to work in the shade as much as possible.
- * When working indoors, try to ensure good ventilation so the temperature does not rise significantly.
- 2. When working in a cold environment, particularly in the winter, pay attention to the following points to avoid industrial accidents as a result of physical impairment due to the cold.
- * Try to avoid working during the coldest time of day, take plenty of breaks to warm up, and try to keep working hours in cold places as short as possible. Wear warm clothing and gloves, and avoid losing significant amounts of body heat.
- * If your hands or feet get chilled, warm them up to restore blood circulation and only restart work when you are sure they can move properly.
- * Sudden changes in temperature can have an adverse effect on body temperature regulation and blood pressure, so adjust your clothing and so on appropriately.

5. Cautions concerning responding to abnormal situations

- 1. Check in advance how you should respond to abnormal situations.
- 2. Check the evacuation route in case of fire and the locations of firefighting equipment.
- 3. Also check how you should respond to dangerous insects and animals such as wasps, snakes, bears and so on.
- 4. Take cover promptly in a safe place during lightning or other bad weather.

6. Cautions concerning health

- 1. Have a health examination when you start work and receive periodic health examinations, and take care of your health at all times.
- 2. Take care to avoid the factors leading to brain and heart disease.



3. Protect mental health.

5 Responding to abnormal situations

- 1. Be sure of who you should inform in case of an accident or emergency. Learn the procedures to follow in an emergency.
- Be sure you know the evacuation route in case of fire, and where firefighting equipment is located.
 In particular, in any farm building without windows, be sure you know the evacuation
- route in case of emergency.3. Depending on the region and season, farm work can carry the risk of danger from insects such as hornets, as well as snakes, bears and other animals. Understand how you should respond and what to do if you are attacked.
- 3. Take cover promptly in a safe place such as inside a building during lightning or other bad weather. It is dangerous to take cover under a tree during lightning or a thunderstorm.

6 Protecting your health

- Have a health examination when you start work and receive periodic health examinations, and take care of your health at all times. Lead a healthy lifestyle by avoiding excessive eating and drinking, and by getting enough sleep and rest. Rest appropriately, manage your physical condition carefully, and avoid accumulating work fatigue.
- 2. Every year, a number of technical intern trainees die suddenly from brain or heart disease.

The risk factors for brain and heart disease are shown at left. If you have a high or very high level of fatigue as determined by the JITCO Physical and Mental Health Check Sheet (see Appendix), in particular try to reduce the following risk factors. * Try to avoid long overtime as far as possible.

- * Get sufficient sleep, and eat a balanced diet.
- * Follow the instructions, if applicable, of the doctor concerning the results of electrocardiogram, serum lipids, blood pressure, blood sugar level, urine analysis and other tests in your health examination.
- 3. Many technical intern trainees experience stress simply from living in a foreign country, and personal relationships in the workplace can also be another source of stress.

Stress in humans can lead to various symptoms including anorexia, gastrodynia, palpitations, chest pains, lethargy, insomnia, and loss of motivation. Coping with stress

- * Aim to achieve a good lifestyle rhythm with enough sleep and a proper diet.
- * Get appropriate recreation and entertainment such as listening to music, watching videos, going shopping and pursuing personal interests.
- * If you have a problem, don't keep it to yourself. Talk to your family, fellow interns, advisor and so on about it.

Document 1 Prevention of traffic accidents

Follow these five traffic rules when commuting or shopping by bicycle.

Bicyclists should, as a rule, ride in the street or, in certain cases only, on sidewalks.

The Road Traffic Law of Japan designate bicycles as light vehicles. Bicyclists are therefore required, as a general principle, to ride with car traffic on roads that are divided into vehicle and pedestrian lanes.



Regulations concerning riding a normal bicycle on sidewalks

- OA bicycle can be ridden on sidewalks if:
 - 1. It is indicated by road signs or other signs
 - 2. The cyclist is a child
 - 3. It is unavoidable due to the state of the road or traffic
- *However, if a police officer or traffic warden deems cycling on sidewalks a hazard to pedestrians and indicates that you should get off, you must comply.

○Pedestrians also have an obligation to avoid walking on designated cycle paths.

Bicycles drive on the left side of the road.



Bicyclists must ride on the left side of the road and pass other vehicles on the left.



Pedestrians have the right of way on sidewalks and in pedestrian lanes. All vehicles must yield to pedestrians.

On sidewalks bicyclists must ride at a speed slow enough to stop immediately and must come to a stop if they might interfere with pedestrian movement.



Follow Safety Rules

Do not ride after drinking

As with cars, riding a bicycle under the influence of alcohol is prohibited.



Riding two abreast is prohibited

Riding two abreast is prohibited, unless specifically permitted.



Obey all traffic signals.

Bicyclists must obey all traffic signals. When there is a separate traffic signal for pedestrians and bicyclists, bicyclists must obey this designated signal.



Two on a bicycle is prohibited

Two on a bicycle is prohibited, unless the passenger is a child under six years old.



Bicyclists must use a light when riding at night. Wear reflective

clothing. When riding at night, bicyclists must use a front light and back light (or light reflectors). Also be sure to wear reflective clothing that



allows others on the road to see you.

Stop at all intersections and check oncoming traffic.

Obey stop signs, and stop whenever a narrow road opens up on to a large road. Always check for oncoming traffic before proceeding.



Do not ride while holding an umbrella.



Do not ride while using a cell phone.



Materials courtesy of the Japan Traffic Safety Association and National Police Agency

< Stop!

Document 2 Check sheet for physical and mental health

Physical and Mental Health Check Sheet

 \checkmark Check items that apply to you within the past month. igsqcolor

1. Feel irritable	Hardly ever (0)	Sometimes (1)	Often (3)
2. Feel anxious	Hardly ever (0)	Sometimes (1)	Often (3)
3. Feel restless	Hardly ever (0)	Sometimes (1)	Often (3)
4. Feel depressed	Hardly ever (0)	Sometimes (1)	Often (3)
5. Cannot sleep	Hardly ever (0)	Sometimes (1)	Often (3)
6. Feel unwell	Hardly ever (0)	Sometimes (1)	Often (3)
7. Cannot concentrate	Hardly ever (0)	Sometimes (1)	Often (3)
8. Make many mistakes	Hardly ever (0)	Sometimes (1)	Often (3)
9. Feel extremely sleepy during work	Hardly ever (0)	Sometimes (1)	Often (3)
10. Feel unmotivated	Hardly ever (0)	Sometimes (1)	Often (3)
11. Feel exhausted (excluding following exercise)	Hardly ever (0)	Sometimes (1)	Often (3)
12. Feel exhausted upon waking in the morning	Hardly ever (0)	Sometimes (1)	Often (3)
13. Get tired more easily than before	Hardly ever (0)	Sometimes (1)	Often (3)

Add up the numbers in parentheses.

CHECK		<u>т</u>	otal:	points
	Diagnosis Your degree of fatigue is…			
	0-4 points Level 1	5-10 points Level 2	11-20 points Level 3	21 points or more Level 4
	Low	Slightly High	High	Extremely high!

People at levels 3 and 4 need to be especially careful.

Document 3 Prevention of fires in dormitories

The risk of fires is increasing.

Be careful with fire in your dormitory (workplace accommodation)

Recently two fires have been reported in dormitories. The risk of fires is increasing through use of fires for drying and heating in the winter.

In one case, a short circuit in a factory caused a fire, which spread to the dormitory on the same premises, burning it down. In another other case, a two-story steel-frame building used as an employee dormitory was destroyed when the technical intern trainees were away for training. Fires tend to spread when there is nobody around or at night, causing the total destruction of the building. This is a very dangerous situation. Fortunately, nobody was hurt or killed in these two fires, but the passports, cash and clothing of the technical intern trainees were all destroyed.

This winter is expected to be colder than normal, and kerosene stoves are commonly used in this season. All supervising organizations and organizations implementing technical intern training are requested to inspect the fire detectors, fire extinguishers, evacuation routes in dormitories and factories, and work to raise the awareness of the technical intern trainees.





Carefully check emergency exits and evacuation routes



Avoid carelessness with cigarettes and other possible sources of combustion



Be careful with cigarette butts!

Keep electrical outlets and plugs free of dust and damage.



Keep workplaces clean and tidy where fire is used



Be sure to confirm the conditions of the installed fire alarm system and confirm that it works properly.



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