Dairy Production

Level -III

Learning Guide -13

Unit of Competence: Respond to emergency

Module Title: Responding to emergency

LG Code: AGR DRP3 M04 LO1 LG-13

TTLM Code: AGR DRP3 TTLM 1219v1

LO1: Prepare for emergency situations

Instruction Sheet	Learning Guide 13

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

- Applying OHS procedures and safe working practices
- Selecting, using and storing tools and equipment for safety and first aid
- Maintaining state of preparedness for emergency response
- Identifying animal emergencies occurred and that require immediate care
- Identifying and evaluating options for action in handling emergency cases
- Implementing organizational emergency procedures and guidelines

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to –

- Apply OHS procedures and safe working practices
- Select, use, maintain and store tools and equipment for safety and first aids required for emergencies
- Maintain state of preparedness for emergency response
- Identify animal emergencies occurred and that require immediate care
- Identify and evaluate options for action in handling emergency cases
- Implement organizational emergency procedures and guidelines

Learning Instructions:

1. Read the specific objectives of this Learning Guide.

2. Follow the instructions described in number 1 to 7.

3. Read the information written in the “Information Sheet (**1, 2 3, 4, 5** and **6**) on page (2, 5, 12, 15,19 and 21) respectively

4. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.

5. Accomplish the **“Self-check (1, 2, 3, 4 5 and 6)** in page**, 4, 11, 14, 18, 20 and 23** respectively.

6. If you earned a satisfactory evaluation proceed to “Operation Sheet (1 and 2) in page 24 and 25 respectively.

7. Accomplish LAP test on page 24

Information sheet 1	Applying OHS procedures and safe working practices

1.1. Definition of terminologies

Emergency: is a dangerous or serious situation such as accident that happens suddenly or unexpectedly and needs immediate action

Injuries: is a hurt or damage on the parts of body of living things. It includes shock, external bleeding, poisoning, bites & stings.

Hazard: is something risky and likely to cause harm. It could be due to biological, chemical, mechanical, electrical, thermal, and explosive fire etc.

Work Place Procedure: is s an order or method of doing something in the work places.

Personal Protective Equipments: are equipments or materials that are essential or necessary or safe activity.

Disaster: harmful or destructive event**:** an event that causes serious loss,

First aid: The initial administration of care for an injured animal until more thorough veterinary attention can be sought destruction, hardship, sadness, or death.

1.2. OHS procedures

Most work places have safety rules that are designed to protect the health and safety of workers and customers. Employee has to learn and follow the safety practices required for the job. Failure to do so may result in injury to oneself or to others in the workplace. Employers expect workers to practice safe work habits on the job.

OHS requirements always must be applied in accordance with regulations/codes of practice and enterprise safety policies and procedures. This occupational health and safety requirement include:

- Using of relevant protective clothing and equipment, such as
  - ✓ Overalls
  - ✓ Gloves
  - ✓ Safety goggles
  - ✓ Steel capped boots/shoes
  - ✓ Sunhats

- ✓ Overall(gowns)
- ✓ Helmets and other.

- ➢ Use of tools and equipment,
- ➢ Workplace environment and safety handling of material,
- ➢ Use of first aid kit if necessary
- ➢ Controlling Hazard and hazardous materials or substances.
- ➢ Following Occupational health and safety procedure designated for the task
- ➢ Checking and fulfilling required safety devices before starting operation
- ➢ Apply safe operating procedures regarding:
  - ✓ Electrical safety,
  - ✓ Machinery movement and operation,
  - ✓ Working in proximity to others and site visitors,
  - ✓ Working in proximity to cattle,
  - ✓ Ammonia toxicity
- ➢ Work notes.

Instructions and directions provided by supervisor must be followed and if employee or worker has any question we can ask when necessary. And also employee must observe and follow Enterprise policies and procedures in relation to workplace practices in the handling and disposal of materials.

1.2. Safe work practices

Safe work practices are generally written methods outlining how to perform a task with minimum risk to people, equipment, materials, environment, and processes. Safe work practices should be developed as a result of completing a Hazard Assessment and should closely reflect the activities most common in the company's type or sector of construction. All safe work practices should be kept in a location central to the work being performed and readily available to the workforce. Some safe work practices will require specific job procedures, which clearly set out in a chronological order each step in a process.

Self-check -1	Written test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Define Emergency (2 points)
2. Mention occupational health and safety requirement (5 points)?

Note: **Satisfactory rating - 7points** **Unsatisfactory - below 7points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

1. _____

2. _____

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Information sheet -2	**Selecting, using, maintaining and storing tools and equipment for safety and first aids**

2.1. Personal Protective Equipment

It is important to use the correct protective clothing and equipment. Wearing personal protective equipment (PPE) can prevent accidents from happening. As a worker, you are responsible for the following:

- Making sure your uniform is well fitted.
- Keeping all uniforms clean and in good condition, not frayed or badly worn.
- Making sure sleeves are kept cuffs on overalls and trousers are be eliminated, and trouser legs are long enough to hang outside boots.
- Wearing specific personal safety equipment such as goggles, hearing protection, gloves, and aprons when required.

To ensure that you are protecting yourself, your personal protective equipment (PPE) list should include the following items.

Foot wear (Boots)

The OHS Regulation requires that approved footwear must be worn by employees in all industrial occupations. Ensure your footwear is sturdy and provides enough back support to not cause future back problems. Footwear suitable for commercial foodservice establishments must have a non-slip sole and a closed toe and closed back.

Your footwear should be sturdy and comfortable, and if the environment you work requires steeled toes, such footwear should be worn. High leather tops on shoes are a good idea as they will protect your feet from hot grease or liquids.

Hand protection (Gloves)

The most common type of gloves used is natural rubber latex gloves, synthetic rubber gloves, and vinyl gloves. As it is impossible to distinguish between natural and synthetic rubber gloves simply by looking at them, Some people may have an allergic reaction (known as dermatitis) or a more serious reaction known as anaphylaxis to the natural latex glove, and for this reason natural latex gloves are not recommended such kind of person.

Mesh gloves should be used when cleaning the meat slicer. Thick plastic, gloves should be used when handling cleaning products.

Eye protection (Safety goggles)

Eye protection in the form of safety goggles or masks should be worn whenever there is a chance of eye injury. Particles flying through the air can easily land in your eye and possibly do permanent damage. Eye protection is important, for example, when working with the band saw cutting through bone or when working with corrosive cleansers that could splash into your face.

Hearing protection

Approved hearing protection must be worn when high-level noise conditions exist. These conditions are not common in commercial kitchens but may be present in food manufacturing operations.

Respiratory protection

Respirators should be used to protect yourself from inhaling harmful fumes or vapours. The respirator unit should be properly fitted to provide the best protection. Check the components to ensure they are not broken, cracked, or torn and that they do not have holes. Replace faulty components before use. Each unit will have a filter that should be checked regularly and replaced before the expiration date.

2.2. First Aid Tools

Every farm and enterprise should have a basic first aid kit that is easily accessible in times of crisis. Depending on personal preference, a basic first aid kit can be bought preassembled or each item can be purchased individually. Regardless, there are basic items any first aid kit should include.

Fig.1.list of first aid materials

1. First Aid Manual

Every first aid kit should contain a first aid manual. The manual will help you know how to treat wounds, sprains, bites, and other common health issues. The guide should be studied before a crisis arises, and everyone with access to the kit should know the basics of first aid.

2. Tweezers

Tweezers are an important tool to have in any first aid kit regardless of how basic your kit is. Tweezers can be used to remove debris such as glass, dirt, or splinters from a wound. They can also be used to remove stingers left behind by bees.

3. Alcohol Swabs

Alcohol swabs are used to clean the infected or wounded area before antibiotic ointment or bandages are placed on the area. Alcohol swabs may also be used in conjunction with anesthetic swabs and can be used to sterilize tweezers if needed.

4. Antibiotic Ointment

Antibiotic ointment can be used to treat many types of conditions and will aid in the proper healing of the wound area. Antibiotic ointment also helps to keep infection out of the wound and should be administered after the injured area has been thoroughly cleaned.

5. Bandages

Adhesive bandages in multiple sizes should be part of a first aid kit. Consider purchasing a box of assorted-size bandages and putting a few of each in the kit. Traditional size bandages are needed more often than the largest and smallest sizes, so it's a good idea to add a few extra of these, just in case.

6. Gauze Pads

Adhesive bandages aren't always large enough to cover a wound, which is why it's crucial to have gauze pads in a first aid kit. Gauze pads can be fashioned into a bandage or used to absorb blood. Gauze pads come in many sizes and each kit should include an assortment.

7. Medical Tape

Medical tape is used to secure gauze pads or wraps when they are being used as a bandage. This tape is designed not to leave residue behind and usually comes in a long roll.

8. Elastic Bandages

Elastic bandages help keep a sprained joint immobile and reduce swelling. Elastic bandages come with either hook-and-loop or metal fasteners to keep them in place. These flexible bandages can be wrapped around ankles, knees, wrists, and elbows until you can get to a doctor. These bandages vary in width from one to six inches.

9. Pain Relievers

Each first aid kit should include a selection of pain relievers. Aspirin-based and non-aspirin pain relievers should be included in the kit at all times. If there are children in the house, be sure to include pain relievers meant for them. These will come in handy when treating a deep wound or scrape and can also be used to relieve minor aches and pains.

10. Cold Pack

To prevent swelling, many health care professionals recommend icing an injury. A one-time, instant-use cold pack does not become cold until the seal on the packaging is broken and the material inside is activated. Cold packs of this type are ideal for basic first aid kits because they don’t require refrigeration

Self-check 2	Written test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List down at least 5 safety equipment and tools in work place (5 points)
2. Define first aid service (2points)
3. Write at 5 first aid tools and equipment (5points)

Note: **Satisfactory rating - 12points** **Unsatisfactory - below 12points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

1._____

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2. _____

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3._____

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Information sheet 3	Maintaining state of preparedness for emergency response

3.1. Preparedness

Preparedness involves activities undertaken in the short term before disaster strikes that enhance the readiness of organizations and communities to respond effectively. Preparedness actions shorten the time required for the subsequent response phase and potentially speed recovery as well. During this phase, hazards can be identified and plans developed to address response and recovery requirements. Disaster plans are often developed by individual agencies, but one challenge of disasters is that they demand action from agencies and organizations that may not work closely together from day to day. Thus, plans are much more effective when developed collectively by all agencies that will be responding so that resources and responsibilities are coordinated in advance.

3.1.1. Identifying the risks

Consequences of emergencies may similar, knowing the risks specific to your community and your region can help you better prepare. It is even more important to be aware of the risks in your area if you live on a farm with livestock.

Plan to evacuate

- Contact your local emergency management authority and become familiar with at least two possible evacuation routes. Familiarize all family members and employees with your evacuation plans.
- Arrange in advance for a place to shelter your animals. Plan ahead and work within your community to establish safe shelters for farm animals, such as fairgrounds, other farms, racetracks, and exhibition centers.
- Ensure that sufficient feed and medical supplies are available at the destination.
- If animals are evacuated to a centralized location such as a fair grounds for shelter and will co-mingle with other animals of unknown health status try to:
    - ✓ Make sure your animals have sufficient identification
    - ✓ Minimize the contact among animals from different premises.
    - ✓ Protect feed and water from contact with wild animals and birds.

✓ Handle any mortality in a manner to minimize the possible spread of contagious diseases.

✓ Accommodation will need to include milking equipment for dairy cows (as applicable).

Make an emergency plan

- Make an emergency plan to protect your property, your facilities, and your animals. Create a contact list of emergency telephone numbers, including your employees, neighbors, veterinarian, poison control, local animal shelter, animal care and control, transportation resources, and local volunteer organizations.
- Include an out of town contact person who is unlikely to be affected by the same emergency.
- Review, test, and update your emergency plan

Prepare a farm emergency kit

Make an emergency kit so you have emergency supplies in one location, and let everyone know where it is. Check and update contents regularly. Include the following items and personalize according to your needs:

- Current list of all animals, including their location and records of feeding, vaccinations, and tests.
- Supplies for temporary identification of your animals,
- Basic first aid kit.
- Water, feed, and buckets. Tools and supplies needed for sanitation.
- Emergency equipment such as a cell phone, flashlights, portable radios (with weather radio band) and batteries.
- Other safety and emergency items for your vehicles and trailers.
- Food, water, and emergency supplies for your family.
- Conducted to help prepare responders for real events.

Self-check – 3	Written test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Mention importance of making an emergency plan in controlling of hazard (6 points)

Note: Satisfactory rating - 6points Unsatisfactory – below 6points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

1._____

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Information sheet 4	Identifying animal emergencies that require immediate care

Animal emergencies that require immediate care/veterinary consultation are:

Bleeding

It is important to stem any bleeding as soon as possible, as blood loss can lead to shock, collapse and death.

Bleeding is classified according to which blood vessel is damaged. Arterial blood is bright red in colour and under pressure, so it will spurt from the wound. Venous blood is from the veins, is dark red in colour and flows rather than spurts. Capillary blood is the most common and is slow due to the blood vessels being under low pressure

Burns

Burn damage to the surface and/or deeper layers of the skin will occur immediately regardless of the source of burn. Visible signs can be seen immediately or it can take up to 12-24 hours after the accident depending on the cause or type of burn. Burns can be caused by a dry heat, such as flame, corrosive chemicals, radiation, electricity or cold. A scald is caused by a moist heat, such as hot oil, wax or water.

Fractures, sprains and strains

Fractures are broken bones and they can be open, where the bone is exposed through skin, or closed, where the skin is unbroken. An initial assessment needs to be made to determine if a fracture or dislocation has occurred by feeling for abnormalities and checking for normal range of movement in limbs/pain response etc.

Signs that an animal may have a fracture include not using the limb, pain at or near the fracture site; the limb may be deformed or twisted, swelling around the fracture and shock.

Poisoning

Poisons can be swallowed, inhaled or absorbed through the skin. Poisoning of native animals generally occurs through ingestion of the poison substance or by eating prey that has been poisoned. Insectivorous mammals may be affected by insecticidal poisons. Signs that an animal has been poisoned include:

- Vomiting
- Salivation

- muscle tremors
- lack of co-ordination
- convulsions
- paralysis
- coma
- death

Labored breathing (difficulty breathing)—this is a symptom of various medical conditions such as pulmonary disease heart related problems, poisonings, or metabolic disorders. Veterinary care is required promptly for diagnostics and treatment.

Venomous bites and stings

Bites and stings can be dangerous to an animal if they are allergic to the venom injected. Signs of bites or stings can include drooling, vomiting, muscle weakness, difficulty breathing, convulsions etc. Pressure immobilization is used for snake and spider bites.

Accident

Many animals are often found injured beside the road. Injury can vary from shock, fractures to internal bleeding. The severity of the injury will determine the most appropriate course of action.

Stress

Stress is one of the most common factors leading to death and disease in animal

Signs of stress include:

- trying to escape
- reduced activity or listlessness
- grinding teeth
- licking of forearms/shoulders/chest/hind limbs or flanks

Shock

Shock is a result of a collapsed circulatory system and can occur due to stress, blood loss, fluid loss, low blood pressure and a damaged heart. Many animals which are badly injured show signs of shock. Signs of shock include rapid pulse or breathing, hypothermia (eg. mammals may shiver and birds fluff their feathers) and pale/white

gums. The signs of shock are not always obvious and can develop over time. An animal in shock is usually still, quiet and cold.

Eye injuries

The eyes are very sensitive and can react negatively to any injury. Foreign objects, smoke and wounds are the common causes of eye injuries and may result in infections to complete blindness.

A foreign object in the eye can cause discharge and redness, with the animal rubbing or pawing at the eye.

Self-check- 4	Written test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Mention at 5 animal injuries that require immediate care (5points)

2. List down criteria for prioritizing animal emergency /risks (5points)

Note: **Satisfactory rating – 10points** **Unsatisfactory - below 10 points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

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Information sheet-5	Identify and evaluate options for handling emergency cases

5.1. Basis for prioritizing animal emergency (risks)

The following are the criteria used for prioritization of risks.

Seriousness, Manageability, Acceptability, Urgency, Growth (SMAUG)

Seriousness: This includes the potential for lives to be lost and potential for injury as well as the physical, social and as mentioned, economic losses that may be incurred

Manageability: The "relative ability to mitigate or reduce the hazard (through managing the hazard, or the community or both)". Hazards presenting a high risk and as such requiring significant amounts of risk reduction initiatives will be rated high.

Acceptability: The degree to which the risk of hazard is acceptable in terms of political, environmental, social and economic impact

Urgency: This is related to the probability of risk of hazard and is defined in terms of how imperative it is to address the hazard.

Growth: This is the potential for the hazard or event to expand or increase in either probability or risk to community or both. Should vulnerability increase, potential for growth may also increase.

5.2. Options for action in handling emergency cases

- Remain calm. Emergencies require rapid action; the most important factor in effectively handling the situation is to keep calm.
- Seek additional help. Call for emergency assistance. Use whatever number is applicable to call emergency services.
- Determine the nature of the emergency.
- Know that sudden changes can be emergencies
- Assess the immediate threat. Remove yourself from danger
- Go to an area where you will be safe
- Safely assist someone else in leaving a dangerous situation

Self-check-5	Written test

Directions**:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Mention criteria for prioritizing emergency cases (5 points)
(4points)

Note: **Satisfactory rating - 5 points** **Unsatisfactory - below 5 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

1. _____

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Information sheet-6	Implement organizational emergency procedures and guidelines

These emergency events are in addition to animal emergencies that occur as part of the research such as surgical emergencies or injuries sustained during trapping.

Each establishment that holds animals should have an emergency plan that lists the types of emergencies that may be encountered and the procedures for dealing with each emergency.

The emergency plan should be publicized within each establishment and readily available to relevant personnel.

Procedures for dealing with emergencies should identify such things as:

- after hours contact details (for example for researchers, on duty veterinarian, Chairperson, building maintenance, authorities for fire, water and gas leaks);
- means of detecting and dealing with power failures and breakdown in equipment such as ventilation, filtration or watering systems (including the provision of temporary services until the breakdown is rectified);
- evacuation procedures and emergency accommodation for animals:
- Security of data, records and samples.

Consider the types of incident and possible impacts on housed animals living in an artificially maintained environment:

- Fires - Consider the likely effect of a bushfire or structural fire affecting the building housing the animals and/or nearby structures.
- Floods - For susceptible sites, consider the effect of generalised flooding affecting the whole of the site or areas with buildings housing animals. For any site, consider which animal housing areas could be involved in (and the likely effects of) localized flooding from sources such as heavy rain entering storm damaged roofs, water accumulating due to blocked drains or downpipes and accidental escape of water from leaking storage tanks, burst supply pipes or defective fire sprinklers.
- Power failure - May be due to fire, flood, storm or other damage to local infrastructure or main supply trunks remote from your site. Consider the effects

of a prolonged power outage on air-conditioning, ventilation, water reticulation, filtration and waste disposal systems. Can essential services to the animal rooms be maintained? What are the specific problems and solutions if a failure is limited to particular rooms in a single building or if it is more generalized, affecting a group of buildings or the entire site?

- Hazardous spills or leaks - Consider what other events such as gas leaks; chemical, radioactive or biological spills may pose a risk to animals either directly by exposure to the hazardous materials or indirectly, by preventing access of human carers into the facility. Consider how an event such as this in a laboratory area may impact upon the animal housing facilities in the same building.

Self-check-6	Written test

Directions**:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List down types of incidents and their possible impacts on farm animals (4points)

Note: **Satisfactory rating - 4 points** **Unsatisfactory - below 4points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

1. _____

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Operation sheet-1	Hazard Control

Procedure

1: Collect existing information about workplace hazards

2: Inspect the workplace for safety hazards

3: Identify health hazards

4: Conduct incident investigations

5: Identify hazards associated with emergency and no routine situations

6: Characterize the nature of identified hazards, identify interim control measures, and prioritize the hazards for control

Operation sheet-2	Assist in difficulty breathing

Procedure

1. Wear appropriate PPE
2. Lay animal on their right hand side
3. Check firstly for any obstructions in the mouth or throat
4. Gently pull the tongue out of the mouth as far as it will comfortably go
5. Gently hold the animal mouth closed without hurting the tongue
6. Providing supplemental oxygen via a mask or by placing the patient in an oxygen-enriched cage to support animals with pneumonia or other lung diseases.
7. Frequent monitoring of vital signs including heart rate, oxygenation and breathing blood pressure.

LAP Test	Practical demonstration

Name: _____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within 30 minutes.

Task.1. Assist in difficulty breathing

References

E.M. Singletary, N.P. Charlton, et al. First Aid: 2015 American Association and American Red Cross Guidelines Update for First Aid. *Circulation*. 2015; suppl. 2.

D.A. Zideman. E.D.J. DeBuck, et al. 2015 First Aid. *Resuscitation*. 2015.:95:278-287

Indian Red Cross Society – Belgian Red Cross Flanders. Indian First Aid Guidelines. 2014.

Dairy Production

Level -III

Learning Guide - 14

Unit of Competence: Respond to Emergency

Module Title: Responding to Emergency

LG Code: AGR DRP3 M04 LO2 LG-14

TTLM Code: AGR DRP3 TTLM 1219v1

LO 2: Perform pre-hospital evaluation on patient

Instruction Sheet	Learning Guide 14

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

- Establishing immediate patient history with client.
- Conducting patient evaluation initially from a distance.
- Communicating emergency first aid advice for the patient clearly to the client

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to –

- Establish immediate patient history with client.
- Conduct patient evaluation initially from a distance.
- Communicate emergency first aid advice for the patient clearly to the client

Learning Instructions:

1. Read the specific objectives of this Learning Guide.

2. Follow the instructions described in number 1 to 5.

3. Read the information written in the Information Sheet (**1, 2 and 3**) on page 2, 4 and 10

4. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.

5. Accomplish the **"Self-check 1, 2 and 3"** in page **3, 9 and 10** respectively.

Information sheet 1	Establishing immediate patient history with client.

The following are information to be included in history of patient and client

Information included in patient history

- Date and time of admittance**:** Establishes a starting point for intervention and monitoring
- Patient identification: Name, number, Ear tag
- Species
- Breed
- Sex and reproductive status
- Age: In years, months, weeks, or days depending on age of patient
- Color: In order of predominance
- Distinctive markings: Genetic and acquired (including tattoos, ear notches and cropping, scars, tail docking, etc.)

Client information, including:

- Client name
- Contact information: Patient address also provides geographical history of patient which may help in assessment. Include a second party emergency contact.
- Co-owner information: Important for treatment and euthanasia decisions
- Referring veterinarian if applicable

Self-Check -1	Written Test

Directions**:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List down information to be included in patient history (6points)

2. List down information to be included client (4points)

Note: Satisfactory rating – 10 points Unsatisfactory - below 10 points

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

1._____

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2._____

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Information Sheet-2	Conduct patient evaluation initially from a distance.

The following are used to evaluate patient initially from a distance without laboratory evaluation:

- Obtain a detailed information from the client
- Observing physical appearance and behaviors of the patient

When obtaining information from a client, keep in mind the following guidelines:

- Ask open-ended questions
- Record the information in the client's own words
- Follow up with qualifying questions about the first problem before moving on to a new problem.

2.1. Collecting a patient history from owner

- Onset of the current problem
- Anatomical location of the problem or body system affected
- Character of the problem, including:
  - ✓ Severity
  - ✓ Onset
  - ✓ Duration
  - ✓ Time of day
  - ✓ Frequency
  - ✓ Triggers (influences related to the occurrence of the problem)

2.2. Behavior evaluation

A perception or characteristic of the patient that is based on the evaluator's observations Examples: body condition score, pain scale rating, temperament

Pain assessment based on physiological parameters has proven inapplicable as these are often unspecific and sensitive to stress as well as being difficult to measure on-farm. Three classes of behaviors, useful for pain evaluation of animals, have been proposed: (1) pain specific behaviors, (2) a change in certain behaviors that the animals are very motivated to perform (e.g. feeding) and (3) preference choices. While preference choices are suitable for research purposes, pain specific behaviours and to a lesser extent the change in certain normal behaviors are more practically useful. However, the

change in normal behaviors is not a readily usable measure as it necessitates long observation times. Pain behaviors comprise: changed posture (crouching, arched back, low head position), severe lameness, and attention towards the painful area, vocalization, teeth grinding (bruxism), and modification of social behavior.

Table 1. Description of behaviors when evaluating patient by observation

Category	Definitions of behaviours
Attention	Is the cow attentive towards the surroundings? Is the cow active, performing normal cow activities such as eating, ruminating or sleeping? Is the cow facing the wall/away from nonspecific or is the cow relaxed and following activities in the near surroundings? Attention' should be evaluated when the cow is undisturbed
Head bearing	The head bearing is evaluated as being below withers, at withers or above withers. The head position may be evaluated when the cow is standing, walking or lying down (not sleeping)
Ear position	The ears on a relaxed cow may be positioned forward or frequently moving while a cow in pain may have low ears or both ears consistently backwards. Ear position' should be evaluated when the cow is undisturbed
Facial expression	Changes in muscle tension along the sides of the head and above the eyes manifested as oblique lines or above the nostrils manifested as wrinkles should be noted. The nostrils may be dilated. 'Facial expression' should be evaluated when the cow is undisturbed
Eye white (visible)	The proportion of white visible in the eyes of the cow
Nostril cleanliness	Evaluation of the presence of nasal discharge and of whether the action of cleaning the nostrils has been observed. Dust or sand on the muzzle is not considered a lack of nostril cleanliness
Chewing	Chewing without feed in the mouth

Category	Definitions of behaviours
Tooth grinding	Pressing the teeth hard together, resulting in a creaking sound
Vocalizing	Moaning or grunting, usually on expiration
Shivering	Muscle tremors
Tenesmus	Abdominal straining with little production of either feace or urine
Piloerection	Erect hair on the neck and back
Response to approach	The response elicited when approaching the cow slowly with one hand kept in the level of the observer's waist, reaching towards the cow
Back position	The contour of the top line of the standing or walking cow

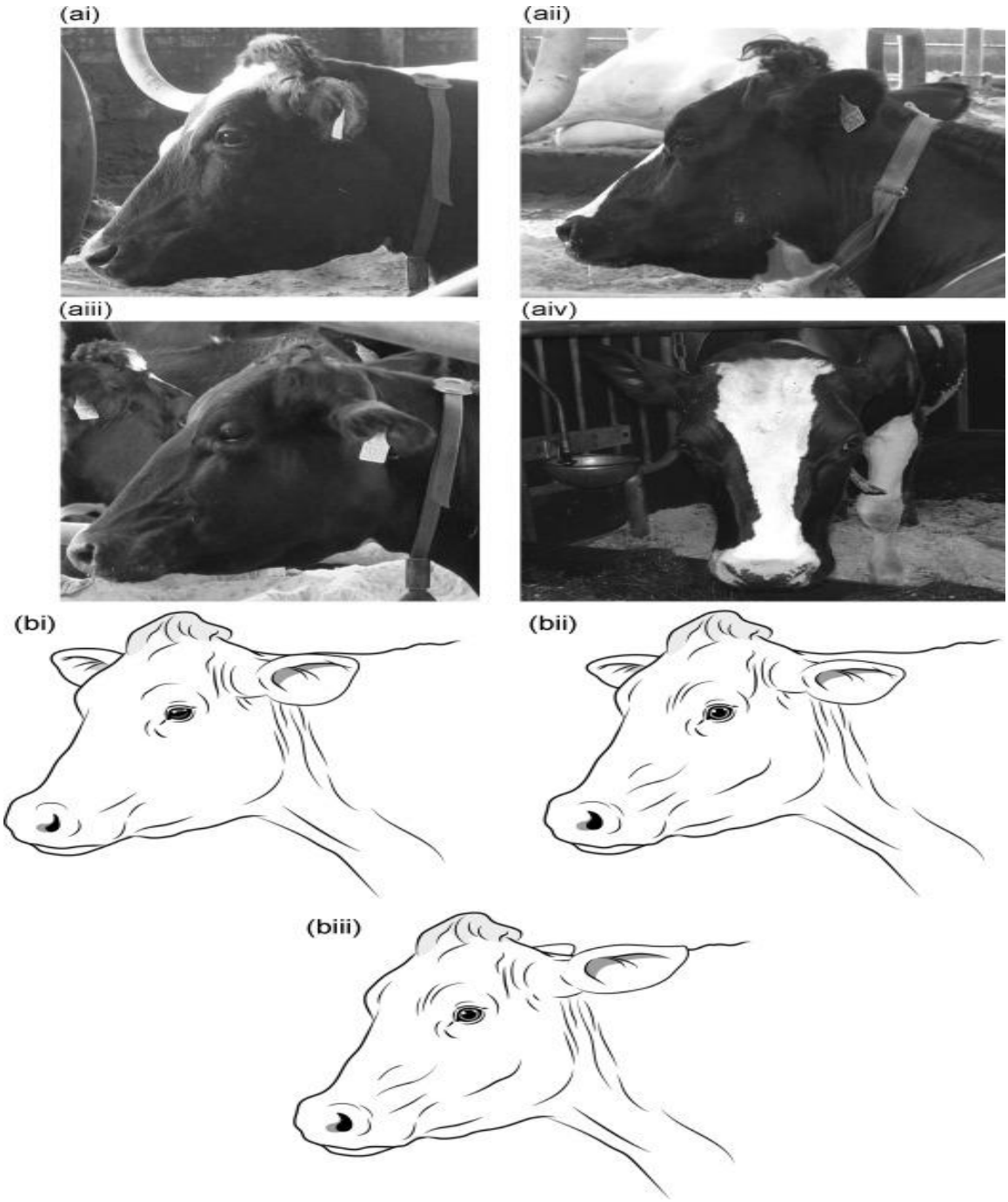

Fig.1. (a) Photos of a cow relaxing, not in pain (I) and three cows in pain: lameness (II), compromised vascular system, udder sore, few and week peristaltic movements (III) and post-surgical pain after rumen fistulation (IV). The features of the pain face of the cow comprise changes in 4 areas: (1) Ears: ears are tense and backwards (II) or

low/lambs ears (III). (2) Eyes: eyes have a tense stare (II + IV) or a withdrawn appearance (III). Tension of the muscles above the eyes may be seen as ‘furrow lines’ (III + IV). (3) Facial muscles: tension of the facial muscles on the side of the head (II + III). (4) Muzzle: strained nostrils, the nostrils may be dilated and there may be ‘lines’ above the nostrils. There is increased tonus of the lips (II + III + IV). (b) Illustrations of the Cow Pain Face. The scientific illustrations aim at accentuating the important changes in the facial expression without disturbances of the specific cow's individual expression. (I) Relaxed cow. (II) Cow in pain with low ears/lambs ears. (III) Cow in pain with ears tense and backwards.

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List at least ten behaviors for evaluating health of animals by observation? (10 points)

2. Mention mechanism of evaluating patient from a distance without laboratory examination (4poits)

Note: Satisfactory rating - 14 points Unsatisfactory – below 14points

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

1._____

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2._____

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Information Sheet-3	Communicate emergency first aid advice for the patient

Effective communication is essential to avoid owner confusion. By increasing owner understanding the animal will benefit. Even if a clinician does an excellent job, insufficient communication could give the impression that they do not know what they were doing, or even, do not care. Always include the owner in the consultation process, in as many stages as safely possible. Listen carefully to owners when taking a history and include them in the treatment process, as this encourages their interest in the case and good compliance.

- Teach them how to clean eyes and wounds, pick out feet, or change dressings.
- Demonstrate first, do not just describe because, unless they see it, they may not have the confidence to do it.
- Let them help to medicate the animal the first time.
- An owner will often be more successful later since they have practiced
- Speak with owners about all aspects of the animal's management and husbandry
- Encourage owners to see and feel the pathology,
- Encourage the owner to empathies with the animal and understand the pain
- The need for a referral of the victim to more advanced or specialized medical care must always be foreseen.

The procedures for emergency conditions must be communicated to everyone: workers (as part of their overall briefing on health and safety), first-aiders, safety officers, occupational health services, health facilities to which a casualty may be referred, and institutions which play a role in communications and the transport of the casualty (e.g., telephone services, ambulance services, taxi companies and so on).

Self-Check -3	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Mention important advice that the veterinarian give to the animal owner (5points)
2. List down important materials in communications and the transport of the casualty (3 points)

Note: Satisfactory rating - 3 points Unsatisfactory – below 3 points

Answer sheet

Score = _____

Rating: _____

Name: _____ Date: _____

1_____

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2. _____

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Dairy Production

Level -III

Learning Guide -15

Unit of Competence: Respond to emergency

Module Title: Responding to emergency

LG Code: AGR DRP3 M04 LO3-LG-15

TTLM Code: AGR DRP3 TTLM 1219v1

LO3.Participate in emergency cases

Instruction Sheet	Learning Guide 15

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

- Developing clinic policies and procedures for the treatment of emergencies
- Applying emergency procedures
- Carrying out specific safety procedures for the handling and use of drugs and chemicals

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to –

- Develop clinic policies and procedures for the treatment of emergencies
- Apply emergency procedures
- Carry out specific safety procedures for the handling and use of drugs and chemicals

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 4.
3. Read the information written in the information sheet 1,2 and 3 on page 2,5 and 9 respectively
4. Accomplish the “Self-check 1, 2 and 3 on page 4, 8 and 10respectively.
5. If you earned a satisfactory evaluation from the “Self-check” proceed to “Operation If you earned a satisfactory evaluation proceed to “the next topic”.
6. If your rating is unsatisfactory, see your teacher for further instructions or read back the Learning guide information sheets 1, 2 and 3.

Information sheet 1	**Developing clinic policies and procedures for the treatment of emergencies**

1.1. Guidelines for classifying veterinary facilities

The diverse types of practices, economic conditions and facility requirements throughout country are results development of a single set of specific guidelines applicable to all facilities. All veterinary practices should consult with their respective state practice act for veterinary facility requirements. The name of a veterinary facility should represent the type of practice conducted. To avoid confusion on the part of the general public and to provide guidelines for consistency in the future designation of veterinary facilities by the veterinary profession, the following suggestions are offered. These guidelines are superseded in states where the practice act regulates the naming of a facility.

Veterinary Teaching Hospital: veterinary teaching hospital is a facility in which consultative, clinical, and hospital services are rendered and in which a large staff of basic and applied veterinary scientists perform significant research and teach professional veterinary students (Doctor of Veterinary Medicine or equivalent degree) and house officers.

Hospital/Clinic: veterinary or animal hospital is a facility in which the practice conducted typically or may include in-patient as well as out-patient diagnostics and treatment.

Outpatient Clinic: veterinary or animal outpatient clinic is a facility in which the practice conducted may include short-term admission of patients but where all patients are discharged at the end of the workday.

Mobile Practice: mobile practice is a veterinary practice conducted from a vehicle with special medical or surgical facilities, or from a vehicle suitable for making house or farm calls. Regardless of mode of transportation, such practice shall have a permanent base of operations with a published address and telecommunication capabilities for making appointments or responding to emergency situations.

Emergency Facility—A veterinary emergency facility is one with the primary function of receiving, treating, and monitoring of emergency patients during its specified hours of operation. A veterinarian is in attendance at all hours of operation and sufficient staff is available to provide timely and appropriate care.

Veterinarians, support staff, instrumentation, medications, and supplies must be sufficient to provide an appropriate level of emergency care. A veterinary emergency service may be an independent, after-hours service; an independent 24-hour service; or part of a full-service hospital. Specialty Facilities—a specialty facility is a veterinary or animal facility that provides services by board-certified veterinary specialists. Referral Facilities—a referral facility provides services by those veterinarians with a special interest in certain species or a particular area of veterinary medicine.

Self-Check 1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Define the following terminologies (2 points each)
   a) Veterinary Teaching Hospital
   b) Hospital/Clinic
   c) Outpatient Clinic

Note: Satisfactory rating - 6 points Unsatisfactory - below 6 points

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

1. a)_____
   _____
   b) _____
   _____
   c)._____

Information Sheet-2	Apply emergency procedures

Different types of events which can cause similar functional disturbances that necessitate a planned and coordinated emergency response.

Emergencies that may be encountered include: fire, flood, power failure, contaminated feed or water, disease or injury, escapes, gas leaks, inclement weather, damage from wind, lightning and storm, road accidents, water failure and security threats.

Prepare an emergency plan

An emergency plan is a written set of instructions that outlines what workers and others at the workplace should do in an emergency. An emergency plan must provide for the following:

- emergency procedures, including: an effective response to an emergency
- evacuation procedures
- notifying emergency service organizations at the earliest opportunity
- medical treatment and assistance, and
- effective communication between the person authorized to coordinate the emergency response and all people at the workplace
- testing of the emergency procedures—including the frequency of testing, and
- Information, training and instruction to relevant workers in relation to implementing the emergency procedures.

Identify types of emergencies

The types of emergencies to plan for may include fire, explosion, medical emergency, rescues, and incidents with hazardous chemicals, bomb threats, armed confrontations and natural disasters. The emergency plan should be based on a practical assessment of hazards associated with the work activity or workplace, and the possible consequences of an emergency occurring as a result of those hazards. External hazards should also be considered in preparing an emergency plan, for example a chemical storage facility across the road.

In developing the plan, consideration should be given to the application of all relevant laws, including public health laws (for example, workplaces that are also public places) and state or territory disaster plans.

In preparing an emergency plan, all relevant matters need to be considered including:

- the nature of the work being carried out at the workplace
- the nature of the hazards at the workplace
- the size and location of the workplace, for example, remoteness, proximity to health services, and
- The number and composition of the workers, for example, employees, contractors, and other persons at the workplace such as visitors.

An emergency plan may include practical information for workers such as:

- emergency contact details for key personnel who have specific roles or responsibilities under the emergency plan
- contact details for local emergency services, for example police, fire brigade
- evacuation procedures including arrangements for assisting any hearing, vision or mobility-impaired people
- a map of the workplace illustrating the location of fire protection equipment, emergency exits, assembly points
- Procedures for testing the emergency plan including the frequency of testing must be included.

Additional requirements for higher-risk workplaces

Higher-risk workplaces may require additional information in their emergency plans. Examples of these workplaces include:

- workplaces with confined spaces
- workplaces that use fall arrest harness systems
- Major Hazard Facilities and mines
- workplaces that store or handle hazardous chemicals, and
- Workplaces that carry out demolition and refurbishment sites.

Training in emergency procedures

Workers must be adequately trained in emergency procedures. Arrangements for information, training and instruction of workers must be set out in the emergency plan itself. Training may include practicing evacuations, identifying assembly points, location of emergency equipment, first aid arrangements and how to safely shut down machinery.

In determining training requirements, the following should be considered:

- inclusion of emergency procedure training in induction courses for new workers
- provision of refresher training for existing workers
- provision of training for short-term contractors or visitors at the workplace (this may not need to be as extensive as may be required for workers), and
- Provision of specific training for individuals who have a formal role in an emergency for example fire wardens, floor wardens, first aid officers.

Reviewing emergency plans

For emergency plans to remain current and effective they must be reviewed and revised (if necessary) on a regular basis. For example:

- when there are changes to the workplace such as re-location or refurbishments
- when there are changes in the number or composition of staff including an increase in the use of temporary contractors
- when new activities have been introduced, and
- After the plan has been tested.

Self-Check 2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write all relevant matters need to be considered in preparing an emergency plan (6points)

1. List down information required for higher-risk workplaces (4points)

3. Mention points to be considered in determining training requirements for emergency procedures (5points)

Note: Satisfactory rating - 15 points Unsatisfactory - below 15 points

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

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3. _____

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Information Sheet-3	Carry out specific safety procedures for the handling and use of drugs and chemicals

3.1. Safety procedure for handling and use of chemicals

Chemical safety is an essential element of an effective occupational health and safety program. Controlling exposures to chemical agents requires the following:

- Careful process of hazard recognition
- Risk assessment
- development of control measures,
- Communication of the risks and control measures,
- And training to ensure that the indicated controls will be utilized.

Managing chemical safety in animal care and use presents a unique challenge. The chemical agents specific to each of these environments are typically well understood by the employees working there; however, the extent of understanding may not be adequate when these individuals, or chemicals, cross over into the other environment.

In addition, many chemicals utilized in animal production and level of employee knowledge and proficiency may be less compared with more routinely used materials.

Safety precautions can help keep workers and animals from injuries

Safety precautions for handling of chemicals:

- Carefully read the ingredient list of any product or chemical you use. The label can also tell you how to use the proper protective equipment, how to handle the chemicals, and how to respond to emergencies. The label will tell you if the substance is flammable, corrosive, or may cause cancer.
- Purchase the proper personal protective equipment like gloves or goggles. Clean and care for them properly.
- Be aware of the hazardous materials you come in contact with. Learn about the specific characteristics and dangers.
- Handle, store, and get rid of hazardous materials safely and according to approved procedures. Never pour them down sewers or drains.

- Transferring flammable liquids like gasoline, from one container to another can make static electricity that could ignite the fumes.
- Always carry chemicals in approved containers.
- Always wash your hands after using any unsafe material.
- Store materials properly, as directed on their labels.
- Flammable chemicals should be stored in a cool, dry place away from heat and sunlight. Some chemicals like acids must be stored separately from each other.

3.2. Safety procedures for the handling and use of drugs

Improper handling and use of drug can cause injury, health problems or death to workers and animals. Exposure may be through skin contact, skin absorption, inhalation of aerosols and drug particles, ingestion and needle stick injuries resulting from the following activities:

- drug preparation
- drug administration
- handling patient waste
- transport and waste disposal, or
- Cleaning spills.

Measures to control exposure should be applied in the following order:

- use totally enclosed systems where reasonably practicable;
- control exposure at source, for example, by using adequate extraction systems and appropriate organizational measures;
- Issue personal protective equipment where adequate control cannot be achieved by other measures alone.
- ensuring safe handling, storage and transport of drugs and waste material containing or contaminated by them;
- . prohibiting eating, drinking and smoking in areas where drugs are handled and providing washing facilities;
- Training staff/employee that handle drugs or deal with contaminated waste, on the risks and the precautions to take.

Self check 3	Written test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Define chemical safety. (2pts)
2. Write important thing that required in controlling exposures to drugs (4points)
3. What do exposures to hazardous materials can cause? (6pts).

Note: Satisfactory rating - 12 points Unsatisfactory - below 12 points

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

1. _____

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2.._____

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3._____

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References

1. ASHP [American Society of Hospital Pharmacists]. 1990. ASHP Technical Assistance Bulletin on Handling Cytotoxic and Hazardous Drugs. Am J Hosp Pharm 47:1033-1049.
2. Bush RK, Stave GM. 2003. Laboratory animal allergy: An update. ILAR J 44:28-51.
3. Harrison DJ. 2001. Controlling exposure to laboratory animal allergens. ILAR 42:17-36.

Dairy production

Level -III

Learning Guide 16

Unit of Competence: Respond to emergency

Module Title: Responding to emergency

LG Code: AGR DRP3 M04 L04 LG16

TTLM Code: AGR DRP3 TTLM 1219v1

LO4. Provide essential first aid techniques

Instruction sheet	Learning Guide 16

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

- Minimizing immediate risk to self and affected animal health
- Assessing the affected animal injuries and vital signs
- Applying relevant procedures for haemorrhage control or breathing assistance Reassuring casualty in a caring and calm manner and made comfortable using available resources.
- Providing First aid care in accordance with established first aid procedures

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to –

- Minimize immediate risk to self and affected animal health and safety by isolating the hazards
- Assess the affected animal injuries and vital signs
- Apply relevant procedures for haemorrhage control or breathing assistance Reassure casualty in a caring and calm manner and made comfortable using available resources.
- Provide First aid care in accordance with established first aid procedures

Learning Instructions:

1. Read the specific objectives of this Learning Guide.

2. Follow the instructions described in number 1 to 7.

3. Read the information written in the “Information Sheet (1, 2,3 4and 5) in page 4,6,9,12 and 14 respectively

4. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.

5. Accomplish the “Self-check (1, 2, 3, 4 and 5) in page 5, 8, 11,13 and 17 respectively.

6. Read the “Operation Sheet 1 on page 18 and try to understand the procedures discussed.

7. Accomplish LAP Test on page 19 Request your teacher to evaluate your performance and outputs.

Information sheet -1	Minimizing immediate risk to self and affected animal

Every workplace has hazards. As an employer, you have a legal responsibility to look after your employees' safety and protect them against health and safety hazards at work. In order to manage workplace health and safety and help prevent accidents and sickness absence, it's important to identify, monitor and reduce the risk associated with workplace hazards.

Simply put, workplace hazards are any aspect of work that cause health and safety risks and have the potential to harm. Some hazards are more likely to be present in some workplaces than others, and depending on the work that you do; there will be hazards that are more or less relevant to your business.

What are the most common workplace hazards?

There are many types of workplace hazards, which tend to come under four main categories:

- physical hazards – the most common workplace hazards, including vibration, noise and slips, trips and falls;
- ergonomic hazards – physical factors that harm the musculoskeletal system, such as repetitive movement, manual handling and poor body positioning;
- chemical hazards – any hazardous substance that can cause harm to your employees;
- Biological hazards – bacteria and viruses that can cause health effects

Common health risks

Some of the most common health risks associated with workplace hazards include:

- breathing problems;
- skin irritation;
- damage to muscles, bones and joints;
- hearing damage;
- Reduced wellbeing.

How to prevent workplace hazards

The best way to protect yourself and your employees from workplace hazards is to identify and manage them and take reasonable steps to prevent their potential to harm.

In order to control workplace hazards and eliminate or reduce the risk, you should take the following steps:

- identify the hazard by carrying out a workplace risk assessment;
- determine how employees might be at risk;
- evaluate the risks;
- Record and review hazards at least annually, or earlier if something changes.

Self check-1	Written test

Directions: Answer all the questions listed below. Use the Answer sheet provided in this page:

1. Write common health risks associated with workplace hazards (2 points)

2. List down method of eliminating or reducing the risk in work place (5 points)

Note: Satisfactory rating - 7points Unsatisfactory - below 7 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

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2. _____

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Information Sheet -2	Assessing the affected animal injuries and vital signs

Vital signs

Vital signs are measurements of the body's most basic functions. The four main vital signs routinely monitored by medical professionals and health care providers include the following:

- Body temperature
- Pulse rate
- Respiration rate (rate of breathing)
- Blood pressure (Blood pressure is not considered a vital sign, but is often measured along with the vital signs.)

Vital signs are useful in detecting or monitoring medical problems. Vital signs can be measured in a medical setting, at home, at the site of a medical emergency, or elsewhere.

Body temperature

The normal body temperature of a animal varies depending on sex, recent activity, food and fluid consumption, time of day.

An animal's body temperature can be taken in any of the following ways:

- **Orally.** Temperature can be taken by mouth using either the classic glass thermometer, or the more modern digital thermometers that use an electronic probe to measure body temperature.
- **Rectally.** Temperatures taken rectally (using a glass or digital thermometer) Axillary. Temperatures can be taken under the arm using a glass or digital thermometer.
- **By ear.** A special thermometer can quickly measure the temperature of the ear drum, which reflects the body's core temperature (the temperature of the internal organs).
- **By skin**. A special thermometer can quickly measure the temperature of the skin on the forehead.

Body temperature may be abnormal due to fever (high temperature) or hypothermia (low temperature). A fever is indicated when body temperature rises about one degree or more over the normal temperature

Pulse rate

The pulse rate is a measurement of the heart rate, or the number of times the heart beats per minute. As the heart pushes blood through the arteries, the arteries expand and contract with the flow of the blood.

The pulse rate may fluctuate and increase with exercise, illness, injury, and emotions

How to check pulse Rate

As the heart forces blood through the arteries, you feel the beats by firmly pressing on the arteries, which are located close to the surface of the skin at certain points of the body. The pulse can be found on the side of the neck, on the inside of the elbow, or at the wrist. For most people, it is easiest to take the pulse at the wrist. If you use the lower neck, be sure not to press too hard, and never press on the pulses on both sides of the lower neck at the same time to prevent blocking blood flow to the brain.

When taking the pulse:

- Using the first and second fingertips, press firmly but gently on the arteries until you feel a pulse.
- Begin counting the pulse when the clock's second hand is on the 12.
- Count your pulse for 60 seconds (or for 15 seconds and then multiply by four to calculate beats per minute).
- When counting, do not watch the clock continuously, but concentrate on the beats of the pulse.

Respiration rate

The respiration rate is the number of breaths an animal takes per minute. The rate is usually measured when an animal is at rest and simply involves counting the number of breaths for one minute by counting how many times the chest rises. Respiration rates may increase with fever, illness, and with other medical conditions. When checking respiration, it is important to also note whether a person has any difficulty breathing.

Self check-2	Written test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Mention Vital signs for measurements of most basic body's functions? (6 pts)
2. Write techniques of taking animal's body temperature (5points.)

Note: Satisfactory rating – 11 points Unsatisfactory - below 11 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date _____

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Information sheet -3	**Applying relevant *procedures for haemorrhage* control or breathing assistance**

There are many ways to control bleeding, and each technique has advantages and shortcomings. Wound packing is talked about but rarely ever taught—especially to prehospital providers. New products are also emerging to provide additional and perhaps superior means to control external hemorrhage.

1. Direct pressure will control bleeding.

Direct pressure is the primary technique used to control bleeding, but this technique will only work if focused digital pressure is placed on the source of bleeding. Placing an entire palm over the bleeding is often unsuccessful because pressure is diffused over a wide surface area.

Some knowledge of anatomy is required for the fingers to press the source bleeding from deep wounds against the underlying structures. Effective digital pressure is difficult to maintain for more than a few minutes (the muscles of the fingers tire). Hemorrhage control via direct pressure is extremely challenging during transport due to constant movement of the patient and provider. Other hemorrhage control techniques are required to transport a bleeding patient and to free the hands so that other priorities can be dealt with.

2. Pressure dressings enhance hemorrhage control.

Persistent bleeding is managed by the application of additional dressings. This approach to hemorrhage control is still written and stressed in many modern textbooks. However, if persistent bleeding saturates a pressure dressing, then the pressure isn't focused on the source of bleeding. Pressure dressing should apply pressure directly to the site of vascular injury. The application of additional layers of dry dressing results in a more diffuse and therefore less effective, pressure atop the existing nonfunctional one.

This continued addition of dry dressing only results in soaking up more blood. The sponge-like effect draws blood from the wound, and ultimately wicks away clotting factors from the site of the vascular injury. Additionally, small motions that naturally occur between the patient and dressing disrupt the clot that may be forming in the

gauze matrix and wound. Blood, and the resulting hematoma responsible for sealing the damaged vessel, is better left inside the body and not outside.

3. Tourniquets will control all extremity bleeding

There are many types of tourniquets and each one has its advantages and disadvantages. Tourniquets require proper training to apply effectively and quickly. Personnel with limited experience rarely get the initial strap application tight enough, and rely too much on the limited ability of the windlass to tighten the tourniquet.

Loose placement of the tourniquet is not uncommon, and can result in an increase in complications. A properly tightened tourniquet must occlude arterial flow, and will produce extreme pain in the extremities. Tourniquets don't work well when attempting to occlude the artery located between two bones in the leg or arm, such as in the lower leg or forearm.

4: Application of haemostatic agents to bleeding wounds (bleeding).

It's not uncommon to see haemostatic dressings being placed on top of a bleeding wound with the belief it will stop the bleeding. Haemostatic agents (most are bound to gauze but some are still in powder formulations) need to be packed into a wound against the injured vessel and effective compression maintained for at least three minutes. The technique for packing the wound is critically important and should ideally be taught in a live tissue training environment. Proper technique pushes the haemostatic agent to the bottom of the wound and is successively packed in with a single finger to maintain effective pressure on the bleeding source.

5: Direct pressure devices can be used to control bleeding

An absolute contraindication to use of direct pressure devices, such as the iTClamp, is that it can't be used on the eyes and will not stop internal bleeding into the chest or abdominal cavities. The clamp creates a pressure and watertight seal of the skin edges. The resulting wound pocket fills with blood until pressures equalize and bleeding is tamponaded. The wound must be amenable to forming a pocket for the clot to form. In order to do that, it requires skin edges be brought together, which means the device will often be ineffective on large amputations, areas of large skin loss, and extensive open wounds on mangled extremities. Tourniquets are better options for these types of wounds.

Self check-3	Written test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List down technique of controlling haemorrhage? (5 pts)
2. Mention advantage of using pressure to control bleeding (3points)

Note: Satisfactory rating – 5 points Unsatisfactory - below 5 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date _____

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Information sheet-4	**Reassuring casualty in a caring and calm manner and made comfortable using available resources.**

Any person who arrives first at the scene of an injury or sudden illness must:

- Assess the situation quickly – check for danger;
- Identify the nature of the injury or illness as far as possible;
- Arrange for assistance and/or emergency services to attend;
- Stay with the casualty and assist the casualty to the best of their ability until able to hand-over to a First Aid Officer or health care professional; and
- Give further assistance if necessary or as directed.

Assess the situation quickly – check for danger

- Check if there is any danger to yourself, the casualty or others before rendering any assistance;
- If safe to do so, remove the danger or remove the casualty from danger.
- Identify the nature of the injury or illness as far as possible
- Check if the casualty is conscious/unconscious;
- Is the injury or sudden illness life threatening or time critical?
- Does the casualty need urgent medical attention?

N.B. Stay with the casualty and assist the casualty as best you can until able to hand-over to health care professional.

Self check-4	Written test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List down what person who arrives first at the scene of an injury or sudden illness can do for casualty? (4 points)

Note: Satisfactory rating - 10points Unsatisfactory - below 10 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date _____

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Information sheet-5	Providing First aid care

First aid is immediate treatment or care given to a person or animals suffering from an injury or illness until more advanced care is provided or the person or animals recovers. The aim of administering first aid is to prevent suffering and where practical preserve life. The following are some of first aid in handling different emergency cases

For bleeding: Apply firm direct pressure over any bleeding until bleeding stops. Wounds often become infected and need professional care. Use gloves when in doubt. Call for veterinarian for further evaluation.

For Poisoning: You should record how much animal ingested, inhaled, absorbed or came into contact with as well. Most poisonings will require prompt veterinary care call veterinarian.

Straining to urinate: Straining is a frequent and exaggerated effort to urinate. Veterinary care must be sought immediately, as this condition can be fatal within 24 hours if left untreated. Animal having trouble urinating can be obstructed as well but for different reason and should be examined by veterinarian immediately as well.

Eye Injuries: The eye can be opened to examine it, and the foreign material can be washed out with clean water. If this doesn't work attempts can be made to remove the object if possible, however never try and remove if the object is penetrating the globe. Any attempt to remove any foreign material by means other than flushing (using sterile saline or fresh water) in a conscious animal is likely to risk additional injury to the eye.

Eye injuries resulting from smoke should be treated by flushing the eyes with water .. In all cases, basic treatment and release as soon as possible is the preferred option however seeking veterinary care or euthanasia should be considered if prognosis with basic treatment is poor

For a burn

- Cool the area immediately with cool running water or a cool compress
- Immerse in or flush with water or apply a cool pack to the affected area for a minimum of 5 minutes
- Apply a moist, cool compress to the affected area
- Transport the animal to a vet

For choking

- Raise hind legs; the hind feet can rest on the floor or you can lift the animal off the ground depending on their body weight
- Place backline against your front (for larger dogs you may have to lower your body position
- Place your arms around just under the ribs, where the ribs finish and the abdomen starts
- Squeeze firmly up and forward

'For convulsions

- Clear any danger away make the room quiet and dark, wait until the convulsion has stopped before touching or moving animal
- If unconscious, check breathing and there is no airway obstruction
- Do not attempt to give food or water while animal is convulsing
- Reassure animals comes out of the convulsion
- After the convulsion has stopped, see a vet promptly

For wounds

- Control bleeding
- Keep your pet warm by wrapping them in a blanket
- Avoid being bitten or scratched as most pets are in shock and in pain
- See a vet immediately

Artificial Respiration

If an animal stops breathing for 3-5 minutes there is a very poor chance of survival as brain damage is likely to have occurred.

- Lay animal on their right hand side
- Check firstly for any obstructions in the mouth or throat
- Gently pull the tongue out of the mouth as far as it will comfortably go
- Gently hold the animal mouth closed without hurting the tongue
- Providing supplemental oxygen via a mask or by placing the patient in an oxygen-enriched cage to support animals with pneumonia or other lung diseases.

- Frequent monitoring of vital signs including heart rate, oxygenation and breathing rate.

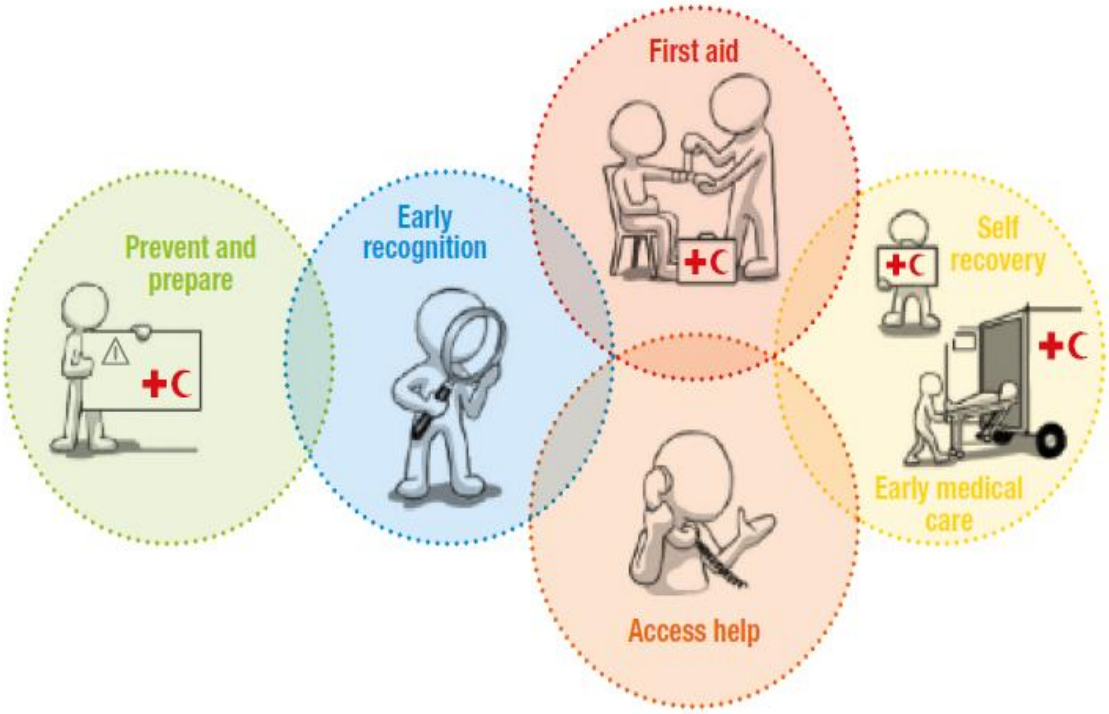

Fig.1.chain of emergency first aid

Self check-4	Written test

Directions: Answer all the questions listed below. Use the Answer sheet provided in this page:

1. List down 3 action taken to control burn. (3 points)
2. Write management action help difficulty breathing (4points)

Note: Satisfactory rating - 7points Unsatisfactory - below 7 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

3. _____

_____

4. _____

_____

_____

_____

_____

_____

Operation sheet-1	**Control bleeding**

Procedure

1. Apply and maintain pressure to the wound with your gloved hand, using a clean pad or dressing if possible; continue to apply pressure until the bleeding stops
2. Use a clean dressing to bandage the wound firmly
3. If bleeding continues through the pad, apply pressure to the wound until the bleeding stops and then apply another pad over the top and bandage it in place;
4. don't remove the original pad or dressing, but continue to check that the bleeding has stopped
5. If a body part, such as a finger, has been severed, place it in a plastic bag or wrap it in cling film and make sure it goes with the casualty to hospital.
6. Always seek medical help for bleeding unless it's minor.

LAB Test	Practical demonstration

Name: _____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within 30 minutes.

Task 1. Control bleeding

References

Hobfoll SE et al. Five essential elements of immediate and mid-term mass trauma intervention: Empirical evidence in *Psychiatry: Interpersonal and Biological Processes*. 70, 283–315, 2007.

International Federation of Red Cross and Red Crescent Societies International first aid and resuscitation guidelines 2016

Dairy production

Level -III

Learning Guide 17

Unit of Competence: Respond to emergency

Module Title: Responding to emergency

LG Code: AGR DRP3 M04 L05 LG17

TTLM Code: AGR DRP3 TTLM 1219v1

LO5. Complete history and Secondary survey

Instruction Sheet	Learning Guide 17

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

- Confirming detailed patient history with client records.
- Re-evaluating patient status is on admission in consultation with the veterinarian

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to –

- Confirm detailed patient history with client records.
- Re-evaluate patient status is on admission in consultation with the veterinarian

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 1 to 6.
3. Read the information written in the “Information Sheet (**1 and 2**) in page **3and 5** respectively
4. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
5. Accomplish the “Self-check (**1 and 2**) in page (**4 and 6**) respectively.

Information sheet 1	Confirming detailed patient history with client records

Important information kept on file of patient (animal)

- Time you were advised of the incident
- Time of your arrival at the scene
- Date and location of the incident
- Name of casualty or casualties
- Time professional medical help or emergency services were called
- Time professional assistance arrived on scene

The following information needs to be recorded in the workers injury register:

- Worker's name
- Worker's occupation or job title
- Time and date of injury
- Worker's exact location at the time of the injury
- Exact description of how injury was sustained
- Nature of injury and the body part(s) affected
- Witnesses to the injury, if any
- Name of person making the entry

Enterprise procedures regarding the recording of accidents and injuries can vary between employers and venues but commonly include:

- A written record is required
- It must be completed „as soon as possible"
- It must be in a form approved by the organization
- Names of those injured, witnesses and responders must be recorded
- Times and dates must be recorded
- Locations must be identified
- Action taken on behalf of the organization must be recorded
- Causal factors should be identified

Self check 1	Written test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List down Information included in incident report (5 points)

2. Mention at least 3 purposes keeping injury records (3 points)

Note: Satisfactory rating - 8points Unsatisfactory - below 8 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

1_____

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2_____

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Information sheet-2	Re-evaluating patient status on admission

When scheduling an appointment the following information should prepare:

- Owner's name and address
- Telephone numbers and email address
- Patient species, breed, age, sex, color
- Presenting complaint or patient problem
- Name of your veterinarian or clinic (optional)
- Name of referring veterinarian (optional)

Prognosis is a prediction of how the presenting condition/disease will progress and the likely degree of recovery if the animal is given appropriate treatment and managed well in terms of owner compliance. Remember, in chronic cases the aim may not be total recovery but return to work. The two things are very different and it is important to be realistic about how the animal will perform in the future.

The ability to determine prognosis accurately often comes from previous experience. However, this improves dramatically with the correct diagnosis. This is where the clinical examination, history taking and owner communication all come together, and gives the clinician a chance for the owner to build up trust and confidence. There are some generalities, but each individual case is different. As a veterinarian, there is a responsibility to examine the animal thoroughly and explain the potential outcome to the owner.

self check-2	Written test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List down information required when scheduling an appointment (5pts)

Note: Satisfactory rating – 5 points Unsatisfactory - below 5 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date _____

1. _____

._____

_____

References

ASEAN 2012 Trainee Manual Perform Basic First Aid Procedures

Lucroy MD [2001]. Chemotherapy safety in veterinary practice: Hazardous Drug Preparation. Comp Cont Educ Pract Vet *24*:140–146.

Trainers prepared the TTLM with their full address

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