

### Animal Handling Skill Sets

- Dogs and cats
- Horses, mules, donkeys
- Other livestock
  - Cattle, sheep, swine, llamas
- Alternative livestock
  - Elk, deer, bison
- Poultry, ratites
- Small pets
  - Birds, reptiles, rodents, rabbits, ferrets, others



#### **Animal Handling**

From a safety perspective, no inexperienced worker should be handling animals. This is when recruiting, pre-qualifying, training, and rostering volunteers ahead of time will pay off.

While 2/3 of the population owns dogs and cats, many other animal species fill our lives on a daily basis. Equine, including horses, mules, and donkeys, are the most common livestock species likely to be affected. Pot-bellied pigs and poultry can be found in cities and towns. Nontraditional herds, including elk, deer, and bison can be found throughout Indiana. Small pocket and exotic pets, such as reptiles, should also be considered when rostering volunteers.

The risk-assessment process during planning will identify what species are most likely to need shelter services. This information should be the basis for recruiting volunteers with specialized skill sets.

## Animal Handling: Pets

**Restraint**

- Loop leashes only for dogs!!
  - NO leashes clipped to collars
- Minimum 2 people in dog areas
- *Dangerous dogs (separate)*
  - Handled by shelter professionals, veterinary professionals and ACOs ONLY
  - Identify with clear signage

***If possible, have perimeter fencing***

The logo for the Board of Animal Health (BOAH) features a blue outline of the state of Indiana to the left of the letters "BOAH" in a bold, blue, sans-serif font. A small yellow and red emblem is positioned between the "O" and "A".

Handling pets can be easy, but handling unfamiliar pets can be a challenge. Only professionals skilled in handling dangerous or vicious dogs should be allowed to work with those animals. Their cages should be clearly marked with warning information. The Safety Officer should be aware of the situation and monitor any activity. Shelter policy should require at least two people be present when working with a difficult animal in case someone gets hurt or knocked down.

## Most Common Reasons for Injury

Major causes of animal-handling accidents:

- Fearful, agitated animals
- Male dominance aggression
- Maternal aggression
- Inexperienced handlers
- Faulty equipment

Reducing fear improves both animal welfare and safety

*List adapted from Temple Grandin, Colorado State University*



Animal behavior expert Dr. Temple Grandin cites the most common causes of injuries: fear created by various conditions (mothers, hormones, agitation, etc.); inexperienced handler; and improper/faulty equipment. Remember, these animals are not at home in their territory. Their anxiety is very high; they will react very differently and sometimes unpredictably.

## Bites & Scratches

**Guidelines/policies (written)**

- Prevention/safety training
- Post-bite protocols
  - medical treatment
- Quarantine protocols
  - 10 days: dogs, cats, ferrets
- Risk recognition
- Cat scratches
  - Cat-scratch fever

**REPORT ALL BITES**



Animal bites WILL occur no matter how carefully animals are handled. Remember: These pets are NOT in their home environment. A bite protocol for the shelter that includes proper reporting should be in place.

In the state of Indiana, animal bites to people are a reportable event. Quarantine is required for biting animals. Shelters should have a designated quarantine area or protocol for transporting animals to another shelter or veterinary clinic for quarantine. Animals need to remain in quarantine for 10 days.

Scratches are not reportable, but can develop infection or cat-scratch fever from exposure to certain bacteria. All injuries from animals need to be recorded and monitored. The ICP or EOC can provide direction for medical attention for volunteers. All injuries should be recorded by the shelter for compensation.

## Rabies Prophylaxis

**Vaccination**

- High-risk personnel should receive pre-exposure prophylaxis
- Antibody titer monitoring once vaccinated

**Post-exposure prophylaxis**

- Coordinate with public health
- Needed in:
  - Known positive cases
  - Exposure by animals unavailable for testing (wildlife)



Rabies is a public health concern. While the disease is more common in other parts of the country, potential exposures should not be ignored.

Veterinarians and other high-risk professionals often have been vaccinated for rabies exposure and only require boosters. The general public is not routinely vaccinated and may need post-exposure vaccine if a bite occurs, depending on the situation. Always coordinate with the county public health department, as they have jurisdiction. Work with them to report and treat biting situations appropriately.

Containing the biting animal is important to proper handling of these cases. Escape or loss of biting animals may result in rabies post-exposure treatment, which is very expensive and not easy to obtain in disaster situations.

## **Animal Handling: Livestock**

- Use halters and lead ropes for all horses
- Use appropriate herding techniques for non halter-broken livestock
- Use care with mares with foals
- **ONLY EXPERIENCED PERSONNEL SHOULD HANDLE LIVESTOCK!**



Only livestock-handling experts should handle livestock, plain and simple. These animals weigh several hundred pounds more than people and understanding them is critical to safe handling. Use only appropriately trained people and equipment to work with livestock.

While 4-H members may have experience in this area, volunteers need to be at least 16 years of age to be rostered.

**Animal Handling: Exotic Pets**  
(Birds, Reptiles, Rabbits)

**Special concerns**

- Often temperature sensitive
- Better if owner brings normal cage
- May need high humidity for some reptiles and most amphibians
- Caution for escape, injury

**Restrict handling to experienced personnel!**

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These animals need special environments such as heat lamps and special foods. Sheltering is best if the owner can supply the animals normal enclosure and food to maintain health and comfort. Exotic veterinary clinics as well as rehabilitation and species interest clubs/groups are good sources of personnel who can help with these species.

Handling should be limited to the owner and experienced staff. Extra care should be taken, as many exotic species may carry bacteria that can make humans sick such as *Salmonella*.

**General Safety Considerations**

If you don't think you should: **DON'T**  
If asked to do something that:

- You are not qualified for...
- You think is dangerous...**DON'T**

1. Find appropriate personnel/equipment
2. Seek appropriate supervision
3. Report to Safety Officer if unresolved



In general, the rule of thumb for safety is: If you can't or shouldn't: **DON'T!**

Contact the Safety Officer if:

- An activity is unsafe
- The worker is unable or unqualified or unknowledgeable
- Equipment or facility is inadequate or unsafe

**IF YOU SEE SOMETHING....SAY SOMETHING!**



*Animal Issues in Disasters, Unit 4*

**Sanitation,  
Cleaning & Disinfection**

## 10 Essential Steps in Cleaning and Disinfection

1. Assess areas to be cleaned
2. Remove all visible debris
3. Clean with water and detergent/soap
4. Thoroughly rinse the cleaned area
5. Allow area to dry completely
6. Select and apply disinfectant
7. Allow proper contact time
8. Rinse
9. Leave area empty for sufficient time
10. Evaluate/monitor



Proper cleaning and disinfection requires several steps to eliminate organisms from the environment. The most important step is to remove all visible debris (organic matter, dirt, fecal matter). Disinfectant cannot disinfect dirt no matter what the concentration. Organic matter or debris must be removed to allow disinfection.

## Disinfectant Considerations

Label information

- Statements of efficacy
  - Medical environment claims
  - Broad spectrum/general purpose
- Dilution and use instructions
- Storage and stability
- Safety information
- Environmental considerations



### Disinfectant Considerations

Bleach can be used at 2% to 10% concentration. It is inexpensive, but does not kill all organisms. All disinfectant should be used at the concentration ordered on the label. If diluted too much, then it will not kill the organism. All concentrate must be measured to obtain maximum effect for cleaning. Disinfectants need to be used at the concentration sufficient to eliminate as many microorganisms as possible.

Understand the product and requirements. Do not mix disinfectant without verifying safety. MSDS sheets (Material Safety and Data Sheets) accompany all chemicals used in cleaning. These chemicals have storage requirements and environmental considerations. While bleach is often inexpensive and readily available, a feline respiratory disease or other outbreak may require a different disinfectant to kill the bug involved.

When planning ahead, be aware of expiration dates on stock-piled disinfectants. Stock needs to be rotated or procured at the time it's actually needed.

#### For disinfection:

Bleach needs to be  $\frac{3}{4}$ -cup per gallon of water. The mixture must stand on the surface for 5 minutes to eliminate parvo virus and many (not all) other organisms.

A higher concentration of 1 cup per 9 cups of water (10% solution) should be used with a 5-minute contact time for highly infected areas. This strength may produce a strong odor requiring a mask for use.

## Challenges

- **Wire cages/crates**
  - Use brush with soap/water, then rinse, spray with disinfectant
- **Gravel or dirt surfaces**
  - Cannot disinfect organic surfaces
  - Periodically move portable kennels
  - Plastic tarps for base

*You cannot disinfect dirt, debris, wood, feces!*



Some equipment presents a challenge for proper cleaning and disinfecting.

Using a brush with soap (disinfectant) and water plus the spray (high intensity will help) will help remove bacteria and viruses along with killing the organisms. If cages are sitting on dirt or gravel floors, cover the ground to decrease the chance of contamination.

## Sample C&D Protocol

### Airline kennels, cat cages, litter pans

1. Disassemble; remove all visible debris
2. Clean with soap and water
3. Rinse
4. Apply 1:30 diluted bleach
5. Wait 10 minutes
6. Rinse and allow to dry
7. Reassemble



Here is a sample protocol for cleaning and disinfecting (C&D) equipment:

Taking cages and kennels and other items apart will help with the disinfection process. Bacteria and other organisms can hide in the crevices and hidden places of all the screws and bolts. At the end of the sheltering process, all items will need to be thoroughly cleaned, disinfected and dried for storage or return with no chance of passing on illness to the next occupant.

## PPE for Disinfection

- **Gloves**
  - EXAM (not Latex)
  - Dishwashing-type
- **Eye protection (goggles)**
- **Apron, smock or coveralls**



PPE stands for Personal Protective Equipment. The garbage bag as a poncho is a nice effort, but really only effective for keeping debris off clothing and does nothing to protect from contact with bacteria or viruses. True PPE protects the person, as well as the next animal handled, from illness. Eye protection is important as the mucus membranes in eyes can get splashed from infected surfaces. Animals can infect people or another animals. Fully suited PPE is not always necessary, but protocols such as treating ill animals LAST helps minimize the spread of infection.

PPE is considered disposable, and arrangements for obtaining this resource should be made during planning.

## Debris Removal

- Have protocol for accumulated waste
- Potential source of contamination
  - Ideal place for insect/disease development
- Arrange for proper disposal
- Clean up facility
  - Leave in better shape

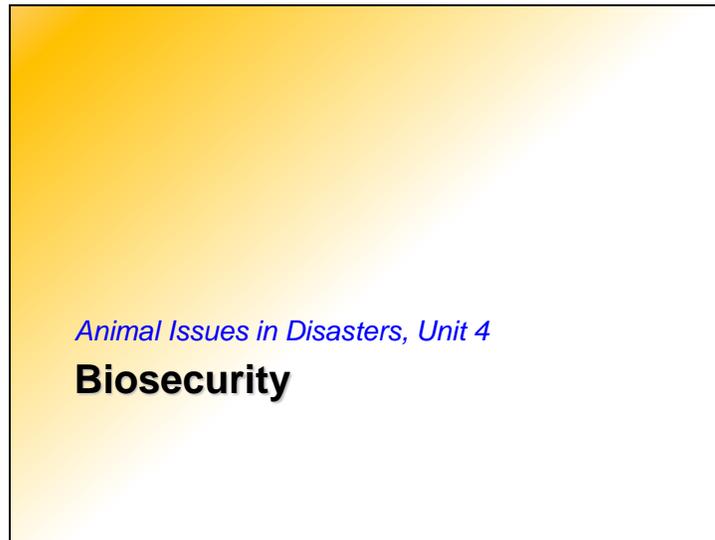


Because running a shelter uses many disposable items, there will be large amounts of waste. Inform the EOC that the shelter will need waste disposal, and some companies may consider some of it hazardous. Work with the Emergency Manager and Incident Commander to resolve this issue before the accumulation of waste serves as a source of infection and health issue for people and animals. The county health department will not appreciate nor want to allow the accumulation of garbage and waste material, especially the kind that can serve as a breeding ground for rodents, insects, and disease.

Remember: The shelter staff needs to leave the facility in the same (or better) shape than when the team arrived to open the shelter.

Sanitation must be handled promptly and thoroughly. As part of setup, disposal and management of waste and garbage needs to be accommodated. A shelter will generate a lot of trash, from uneaten food to pet waste to medical supplies. Designated spaces and a dumpster (if daily pick up is not available) will minimize odors and pest problems. A request should be placed through the EOC for a dumpster and removal services.

In some cases, animals that die or are euthanized may need to be disposed of (that is, if an owners does not want the remains). Livestock species should be handled via rendering pickup. Other animals can be double-bagged and placed in garbage.



**Biosecurity**

As mentioned in Unit 3, biosecurity derives from two words: Bio = life and security = safety

“Biosecurity” refers to life safety for people and for animals through specific practices.

Biosecurity has application to operating and managing shelters. When different individuals and animals come together, there is ALWAYS an increased possibility of disease occurring and spreading, especially when all are in close quarters.

## Disease Transmission Routes

1. Oral (including foodborne)
2. Aerosol
3. Fomites
4. Direct
5. Vector



*Some diseases may use multiple routes of transmission*



Shelter staff can minimize risk of disease spread by recognizing the major modes of transmission:

1. **Oral:** Wiping a dirty hand across one's mouth or eating contaminated food (happens often in makeshift shelters) can cause infection with viruses or bacteria
2. **Aerosol:** Sneezing cats and dogs and sneezing volunteers lead to spread of disease
3. **Fomites:** Any inanimate object that can spread disease; shoes can very easily carry parvovirus which is hardy and concentrated in fecal material
4. **Direct:** Nose-to-nose contact and contact with blood or mucus is a direct way to acquire disease
5. **Vector:** Ticks, mosquitoes, and flies can be both mechanical vectors (carry viruses and bacteria from one animal/person to another) or biological (the disease agent had to develop in the insect before it is transmitted).

## Infection Control Issues

- Isolate high-risk animals
  - Showing signs of illness
  - Relocate to veterinary facility if possible
- Use written C&D protocols
- Limit access
  - Not a petting zoo
  - Wash hands between contacts
- C&D for potential fomites



Infection control is essential and, as sheltering time goes on, becomes even more important to avoid a wide outbreak of disease:

- Keep a physical distance between sick and healthy populations. Separation is ideal, but more space will help tremendously.
- Always care for sick animals last or have a separate staff/veterinary team attend to those animals. Be sure to wash thoroughly and change clothing/PPE completely if moving on to the general population after handling those animals.
- Have specific cleaning and disinfection protocols posted and ensure everyone follows them (Safety Officer is a good enforcer for these activities).
- The area with ill or susceptible animals, like puppies and pregnant animals, should be closed to the public. One trained crew member should deal with these patients.
- Use foot baths, gloves and other protocols that will help deter disease spread.
- Clean and disinfect all fomites (equipment) as they leave infected areas to avoid spread outside of the shelter.

## Personal Biosafety Practices

- Wash hands frequently, thoroughly
  - Between animal contacts
  - Before eating or drinking
  - Use disinfectant hand gels if hands are not grossly soiled
- Do not eat, drink in animal or laboratory areas (separate break area)
- Use appropriate PPE
  - Change clothes after working in shelter
- Disclose animal contacts to physician if you become ill



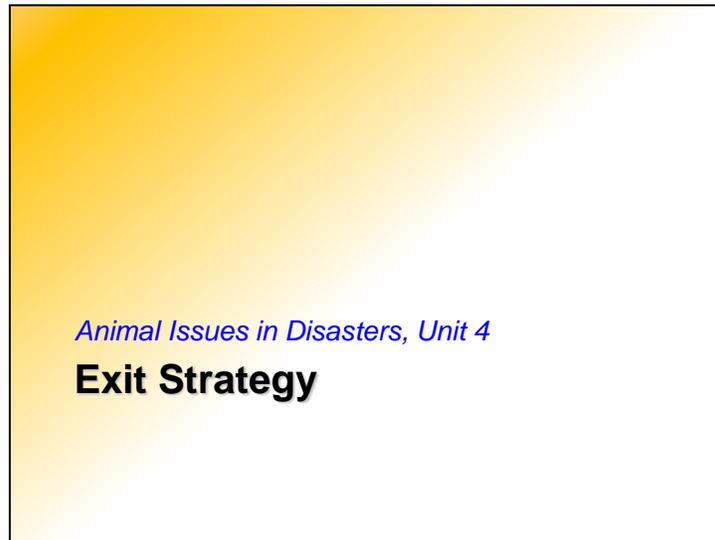
Shelter staff and volunteers should have—at minimum—awareness training about personal biosecurity. In addition, signage at handwashing stations, restrooms, and break areas can help reinforce the message.

Washing hands and wearing gloves where indicated is important, especially when availability of water for the shelter is limited.

If possible, a separate break area for volunteers and employees to eat, socialize, and get away from the shelter will help with disease control.

Use PPE, such as gloves, masks, and shields. Ensure workers inform shelter leaders if they become ill. Staff should seek medical attention as necessary. Pathogens, like norovirus, can spread among volunteers and decimate the shelter's staff.

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There has to be an end to everything. Remember: This is a temporary shelter for the disaster.

## Point of Diminishing Returns

- How many is enough to continue to operate?
- How long should the local jurisdiction provide sheltering after the disaster?
- When does the owner become financially responsible for the boarding costs?
- What will constitute a legal release?
- Where will remaining animals go and how will they be tracked?



### **Plan for the end at the beginning.**

Ask these questions during the OPENING of the shelter:

When will we end this activity? This is sometimes a legal question. Setting limits may be dictated by local government. Will the facility be open for 14 days or 21 days or 7 days?

Once the shelter reaches a pre-determined number of animals remaining or owners are ready to move on, the shelter no longer serves a purpose. As the goal shifts from response to recovery, the shelter needs to set in motion its exit plan to return animals to owners, move them to foster care, or send them to an established shelter for adoption. A shelter presents a financial burden to the community, and closing the shelter is an important part of recovery.

An accurate record must be kept of animals taken in, discharged, died, adopted, and lost to escape. All these figures are important for reimbursement purposes and to account for all activity. Remember: Volunteer hours go toward the state's contribution in a presidential disaster. All volunteers should sign in and out, so hours can be recorded. (This presents another job for a volunteer.) Likewise, animals need to be tracked when they come and when they leave.

## Facility Closure

Closure strategy (time)

- Transfer: known owner
  - Boarding kennels
  - Pet-friendly hotel or temporary housing w/owner
  - Owner agent (foster)
- Transfer: unknown owner
  - Permanent shelters
  - Boarding facilities



**All animals must be relocated for the shelter to close.**

Owned animals need to be have owner contacted and decisions made. Can or will they take their animals back? If not, owners need to sign pets over to the animal authority. If an owner is retrieving it, establish times for pick up. Individuals and families who have been displaced may need additional assistance. Work with Red Cross to place these folks in pet-friendly housing or arrange to transfer the animal to a boarding facility.

Unknown or stray animals need to be transferred to the local shelter or, if no room, relocated to a boarding facility willing to help accommodate animals temporarily.

Foster homes are also an option for some of these animals.

**Animal Discharge**

1. Return to owner/agent
2. Transfer
  - Shelter
  - Other temporary
  - Foster care
  - Veterinary care
3. Mortality
  - Euthanasia
  - Disease/injury
4. Escape
5. Adoption



Discharge of animals happens in several ways:

1. Return to owner/agent
2. Transfer
  - Shelter
  - Other temporary housing
  - Foster care
  - Veterinary care
3. Mortality
  - Euthanasia
  - Disease/injury
4. Escape
5. Adoption

Accounting for all the activity at the shelter means potential for reimbursement of funds expended.

**Holding Periods:**

Normal stray holding: 1-10 days???

Disaster animals: ???

- Ambiguous status
- Never tested in IN
- Coordinate with local jurisdiction and BOAH to establish policy for each disaster
- Publicize official closing date



Holding periods are not defined in Indiana law and are determined by the local authority. If the shelter declares an exact holding period, communicate with the PIO to inform the public about the policy. Local law and ordinances come into effect in these situations. Indiana has no state-mandated holding period. Local officials need to decide whether or not to extend the existing period.

Adoption after holds are very popular with the public on a national basis. People are often eager to adopt dogs and cats affected by natural disasters. *Example:* Joplin, MO held a national adoption event after their tornado that brought in people from all over the country to adopt more than 500 animals.

Make sure these are permanent placements and not just impulse adoptions. The goal is for strays and unclaimed pets to be held an appropriate and well-publicized time before being posted for adoption.

## Discharge Considerations

### Documentation

- Owners must show ID
  - Document owner ID
  - Designate alternate person
- Proof of ownership:
  - Receipt from intake
  - Microchip #/record
  - ID with address matching ASAR intake form

*For questions: Involve animal control/shelter personnel*



When releasing animals at any time, proper proof of ownership is needed, which is why identification is needed when the animals are dropped off. Stray or “record” animals need to be connected to owners. Be sure the right animal connects to the proper owner.

Use the original intake form to verify owner and animal information. Microchips are an excellent identification source—something best done before the disaster, but can be inserted upon entering the shelter.

Owners who are injured, out-of-state, or unable to retrieve their sheltered animals need to be able to designate an alternate person to pick up their pets.

## Shelter Records

Software

- Stand-alone program on laptop
- Available to each district
- Puts animals in established shelters and tracks them as they leave
- Can be retained as Excel file long-term

The logo for BOAH (Breeders of Animal Health) features the letters 'BOAH' in a bold, blue, sans-serif font. To the left of the letters is a stylized outline of the state of Indiana in blue, with a small yellow sun icon positioned above the letter 'O'.

Indiana has a PETS software program to track movement of animals in and out of a temporary shelter. Properly entered, the program can keep track of all movements. This is not a medical records program. Shelters can use their own software, like Excel, to record shelter activity.

Records of shelter animals and activity should be provided to the emergency manager so that he/she can document all the activity for potential compensation under the PETS Act.

For more information on this software, contact BOAH.

## Unit Summary:

1. Emergency animal sheltering protects both people and animals
2. Emergency animal sheltering:
  - May involve many animal populations
  - May involve one or several formats
3. Emergency animal shelters are established through the Incident Command System



### **Unit Summary:**

4. Emergency animal shelters can be managed with an ICS-type management structure
5. Ultimate goal is reunion with the owner or transfer to a authorized facility
6. Reunion depends on:
  - Accurate records
  - Security and professionalism in animal handling and care



## End of Unit 4

Questions?

Please update your evaluation form.

Thank You!

