Examination of the Individual

When health problems are identified and dealt with quickly, they affect fewer animals, decrease losses and reduce suffering. Examination of individual animals is an important adjunct to flock examination. Every stockperson should be capable of examining a sheep to identify important physical abnormalities. In many cases, methodical examination of one or more affected sheep can lead to a tentative diagnosis, or at the very least a short list of differential diagnoses, permitting first aid and development of a plan for further diagnostics, treatment and prevention, in consultation with the flock veterinarian.

It is important to be orderly and consistent when conducting a physical examination. First, observe the animal from afar, noting attitude and awareness of its surroundings, feed and water consumption, gait and posture, and any discharges around head and rear, especially excessive fecal staining of the wool suggesting diarrhea. Count the breaths taken per minute while the animal is undisturbed. Sheep that are disturbed or kept under high ambient temperatures will have higher respiratory rates than normal.

When moving the animal, note its gait and if this sudden activity induces a cough and whether urination and defecation occurs normally. Catch and restrain the sheep only to the degree required to conduct the hands-on part of the examination. Begin by taking the rectal temperature, preferably using a digital thermometer; rectal temperatures up to 40°C are considered in the normal range. While you are waiting, record body condition over the loin and use a hand pressed in the left flank to assess rumen fill and contractions. Assess skin and fleece for abnormalities and infestations; “wool break” indicates stress or disease in the preceding weeks.

Examination:

- Examine the head:
  - check for bottle jaw, enlarged lymph nodes along the jawline, orf lesions and nasal discharge due to respiratory infections
  - assess the teeth for wear and other abnormalities
  - assess the colour of the oral mucous membranes and the conjunctiva (anemia check) and look for deviations of the eye, sunken eyes due to dehydration, or inflammation due to pink eye.
- Assess the character of the breathing use a stethoscope if you have one, or just watch and listen
- Record a heart rate, placing a stethoscope (if you have one) on the area of the chest under the left elbow
- Press and release your fists in the flanks to assess the gut, checking for abnormally sloshy, dry or gassy contents
- Palpate the udder or scrotum for asymmetry, heat, swelling, or scarring
- Check the vulva or prepuce for swelling and unusual discharges and odors
- Check the feet and legs for footrot (trim if necessary to complete your assessment) and other locomotor abnormalities
- When in doubt, compare findings to unaffected sheep in the same group.

Normal ranges for physical examination findings in sheep

<table>
<thead>
<tr>
<th>Finding</th>
<th>Normal Range</th>
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<tbody>
<tr>
<td>Respiration</td>
<td>20-30 breaths/minute</td>
</tr>
<tr>
<td>Heart rate</td>
<td>70-90 beats/minute</td>
</tr>
<tr>
<td>Rectal temperature</td>
<td>38.9-40.0°C (average 39.5°C)</td>
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<tr>
<td>Rumen contractions</td>
<td>1-2 contractions/minute</td>
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</tbody>
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Handling Disease Outbreaks

- Examine affected individuals
- Retain and chill recent dead animals for post mortem
- Retain the fetus and a portion of placenta from abortions
- Collate numbers affected, assess “risk factors” and call your veterinarian with the information
- Isolate affected animals if there is any chance an infectious agent is involved – biosecurity principles apply
- Consider removing feed if possibly feed-related
- Consider moving sheep elsewhere if toxin could be involved
- Arrange a veterinary visit
- Use mass-medication or vaccination only after veterinary consultation

Flock Medical Emergencies and First Aid

Some conditions are true emergencies and are best dealt with immediately, usually before a veterinarian can attend. Other conditions are straightforward to treat and do not require a veterinarian to attend (e.g. entropion, pink eye, minor wounds). You should have on hand certain medications and equipment for emergency treatment and you should be familiar with the correct methods of administration of these treatments. These standard operating procedures should form part of your flock health plan, which should be developed by you and your veterinarian in the context of a valid veterinary-client-patient relationship.

The following are examples of medical emergencies for which stockpersons should be prepared (knowledge and supplies): fly-strike; rumen overload; hypocalcemia (milk fever); ketosis (pregnancy toxemia); polioencephalomalacia; bloat; water belly (urinary calculi); rectal prolapse; vaginal prolapse; uterine prolapse; and stabilizing fractures.

There are a few things to remember when administering medications: always read the label on any medications; don’t mix medications; confirm live weight if possible and dose appropriately; think about withdrawal times before treating and record all treatments. Talk to your veterinarian if extra-label drug use is required. Injecting wet or muddy sheep can be associated with post-injection infections. Needles can be multi-use in some cases (e.g. vaccinating), but replace frequently; always use a clean needle to drawing up drugs or vaccines. Take care with medical waste.