

Animal Triage Procedures

Wyoming Department of Health

Adapted from “**Veterinary Disaster Triage: Making the Tough Decisions**” by Wayne E. Wingfield, MS, DVM,
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Veterinary Triage

Veterinary disaster triage begins with the assessment of:

- 1) The medical needs of the patient and
- 2) The medical resources available.
 - As compared to disaster triage in human medicine, triage results and treatment decisions are different because of the differences between human and veterinary medicine. Factors responsible for these differences include the following:
 1. The option of euthanasia;
 2. Little tolerance for fair to poor outcomes of animal patients including long term/permanent disabilities or intensive nursing care requirements;
 - 3) transport difficulties for large numbers of animals, or certain species;
 - 4) Limited veterinary medical resources (facilities, equipment, supplies, and personnel, varying 24-hour emergency care capabilities); and
 - 5) Recognizing that the treatment of animals is still dependent upon the animal owner’s disposable income; therefore “medical resources” includes not only facilities, supplies, equipment, personnel, and time, but also *money*. In a disaster, all animals will receive first aid care regardless of the owner’s ability to pay.

Presently, in veterinary medicine, there is no such designation of a Level I, II, III, or IV trauma clinic or hospital. Most veterinary practices fall into two broad categories: general practice (of 1 or more species), or specialty practice (surgery, medicine, critical care, emergency, etc). Specialty practices tend to be limited to the larger metropolitan areas and academic institutions. Many areas of the country are limited in their access to general practice care as well. Therefore, destination options may be limited, and triage will focus on identifying medical needs of the patient in light of *available* transport and medical resources, as well as the professional competency of the veterinarian.

Triage in Veterinary Medicine Involves Three Systems: Field Triage, Medical Triage, and Mobile Veterinary Unit Triage

Field Triage.

- Requires experienced veterinarians or rescuers and usually does not involve the individual examination of animals. Field triage is designed to identify animals most likely to benefit from the available care under austere conditions.
- It divides animals into three categories:
 - 1) those that will likely die regardless of how much care they receive. Coded color = **Black**;
 - 2) those that will survive whether or not they receive care. Coded color = **Green**; and
 - 3) those who will benefit significantly from austere interventions. Coded color = **Red**.

Triage Color	Triage Category	Explanation
Red	Immediate	Might benefit from austere interventions
Green	Minor	Walking wounded but likely to survive
Black	Dead, dying, or euthanatize	Dead, dying, or euthanatize

Medical Triage.

- Medical triage is done rapidly and involves examining individual animals.
- One approach is to use the following four physiological criteria (RPPN):
 - 1) **R**espiration/minute,
 - 2) **P**ulse rate/minute,
 - 3) **P**ulse pressure (although subjective, pulse pressure has a linear relationship to stroke volume. Therefore, if the pulse pressure is decreased (as you might see in shock) the stroke volume is also likely decreased), and
 - 4) **N**eurological status. Coding in medical triage using RPPN is seen in the following table:

Triage Color	Category	Physiological System Involvement
Red	Immediate	Respiratory, Cardiovascular, (Hypothermia, Hyperthermia)
Yellow	Urgent	Cardiovascular, Musculoskeletal, Neurological, Abdominal Injuries
Green	Minor	Musculoskeletal, Neurological, Abdominal Injuries
Black	Dead, Dying, or Euthanasia	Dead or dying when initially assessed. Mortal wounds not compatible with "Quality of Life" issues. Euthanasia.

* RPPN = **R**espiration, **p**ulse rate, **p**ulse pressure, and **n**eurological status.

- Medical triage **always** begins with a reassessment of patients.
 - **Immediate** and **Urgent** patients go to the treatment area, where they are treated based on severity and resources
 - Those patients who need limited resources with a high probability of surviving will probably be treated first. **Minor** casualties go to an observation area where they are periodically reassessed.

- Patients who do not respond to treatment are re- tagged and sent to the observation area or euthanatized.
- One critical difference in veterinary triage (versus human) is that the category of patients that will die regardless of how much care they receive and those that will suffer for the lack of care will be euthanatized.
 - Therefore, it is very important to properly identify those animals who will survive whether or not they receive care, and those who will benefit significantly from available interventions.
 - Of note, while euthanatizing an injured animal is done for humane reasons, these decisions need to be well documented and supported. It is not uncommon for some animals (horses especially) to be insured, and the insurance company must authorize the euthanasia when possible.
 - When contacting the insurance company is not feasible, documentation and witnesses are very important.

All animals must be identified and a variety of methods can be used.

Ribbons of the appropriate triage color may be attached to the animal. These will have no information regarding the patient. An alternative would be to attach a triage tag to the animal. This tag utilizes an image of a dog but this should not deter its use on other veterinary species. The idea is to identify wounds, fractures, burns, etc. by marking an approximate location on the triage tag image. It is also important the behavioral disposition of the animal be identified to make other responders aware of potential aggressiveness.

Category	Color	RPPN*
Immediate	Red	Abnormal RPP
Urgent	Yellow	Abnormal PPN
Minor	Green	"Normal RPPN"
Dead, Dying, or Euthanate	Black	Mortal Wounds or <u>Severely</u> Abnormal Neurological

Mobile Veterinary Unit Triage:

- The term "mobile veterinary unit" signifies it is unlikely we will know beforehand what sort of facility might be available during a disaster that will allow us to provide more intensive treatment of ill or injured animals.
- Triage in a mobile veterinary unit utilizes a physiological systems approach entitled **Veterinary Systems Triage and Rapid Treatment (V-START)**. The physiological systems priorities in V-START are as follows:

1) Respiratory, 2) cardiovascular, 3) hemorrhage, 4) neurological, 5) musculoskeletal, and 6) other (abdominal) injuries (Figures 2a, 2b, 2c). The coding system used in V-START is as follows:

Medical Triage Using RPPN

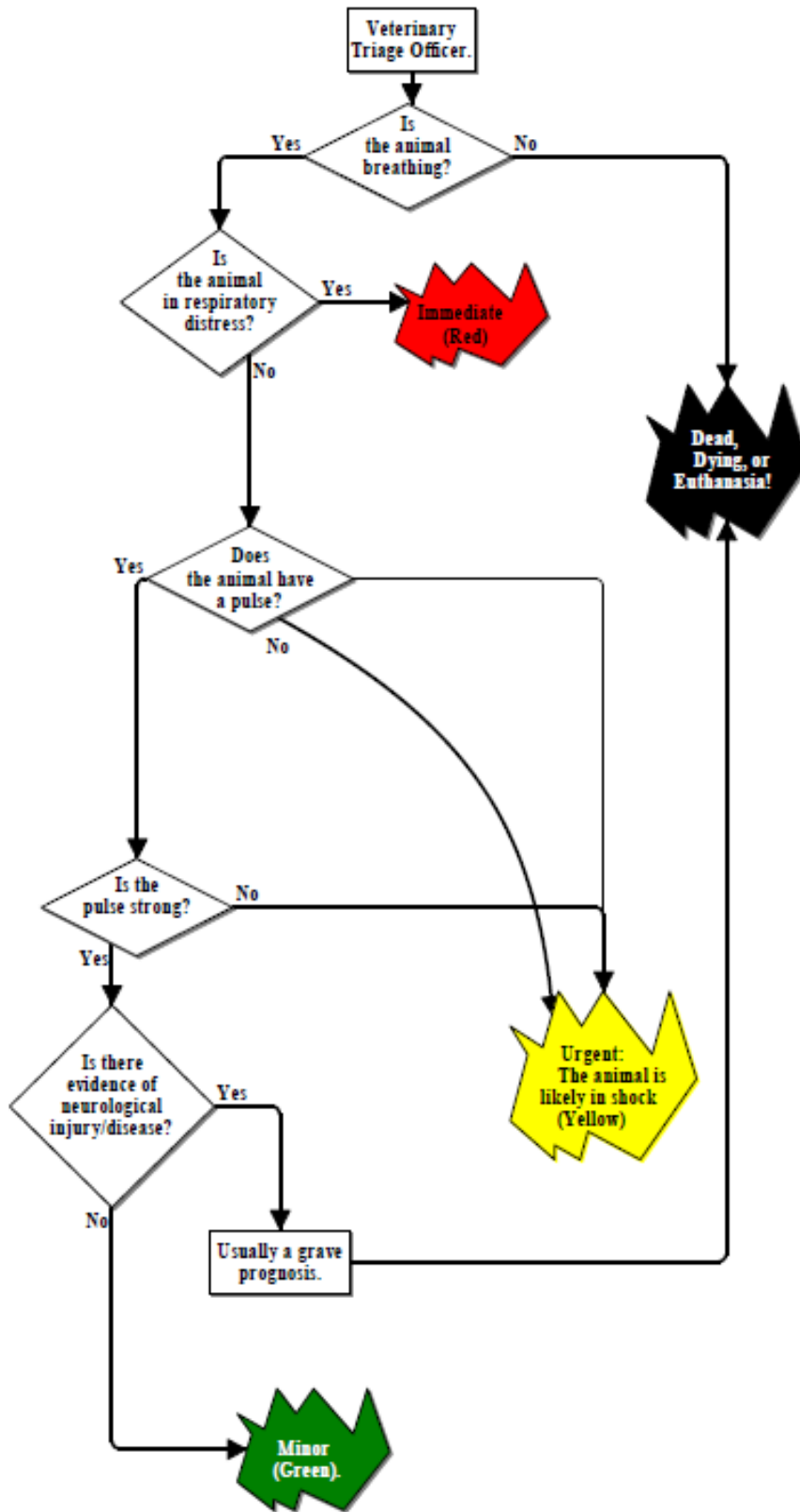


Figure 1: Algorithm to assist veterinary responders in providing Medical Triage.

Veterinary Systems Triage and Rapid Treatment (V-START)
Step 1: Check for Arterial Bleeding and Breathing

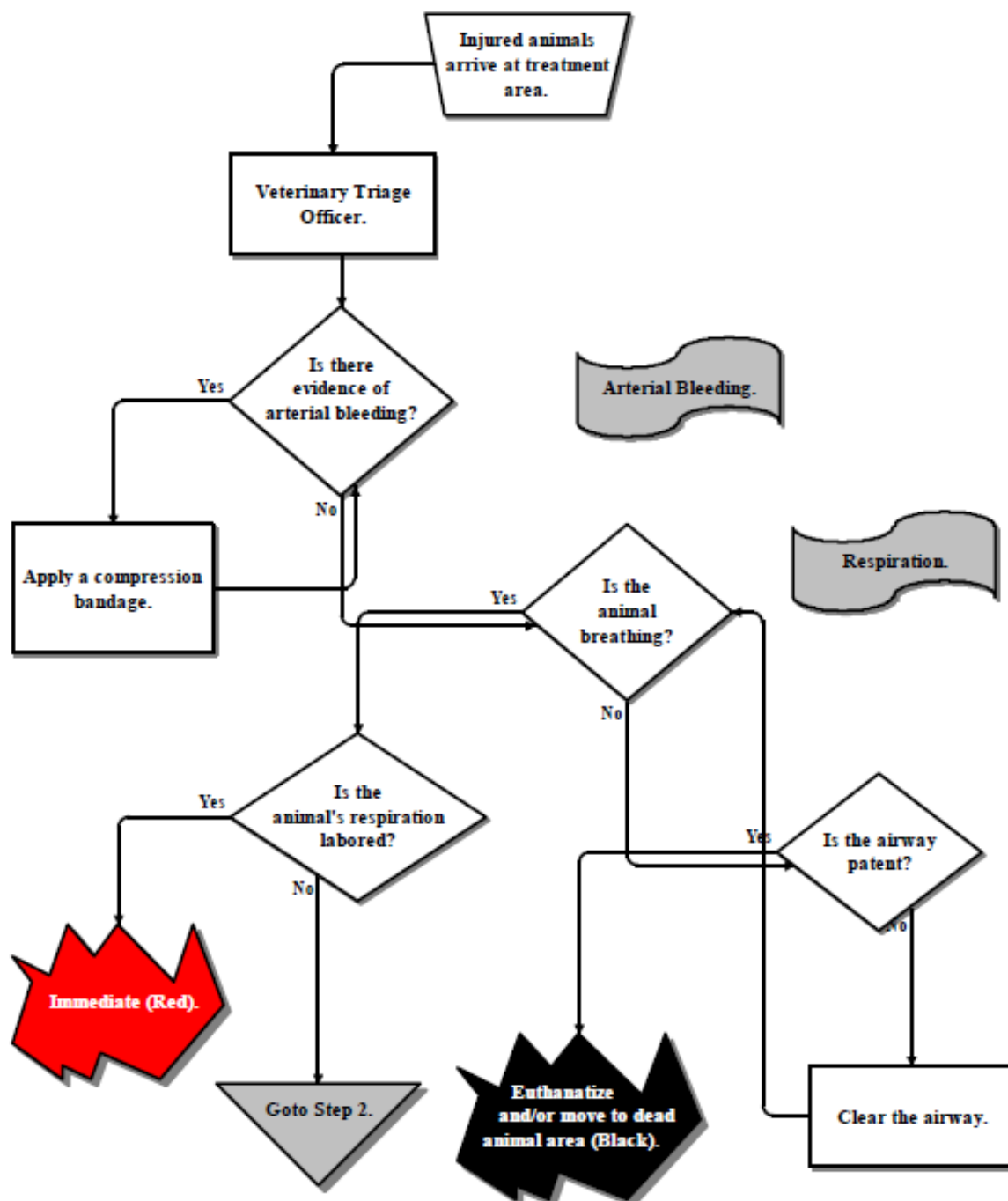


Figure 2a: Step 1 in providing Mobile Veterinary Unit Triage using V-START.

Step 2: Check Circulation and Control Hemorrhage

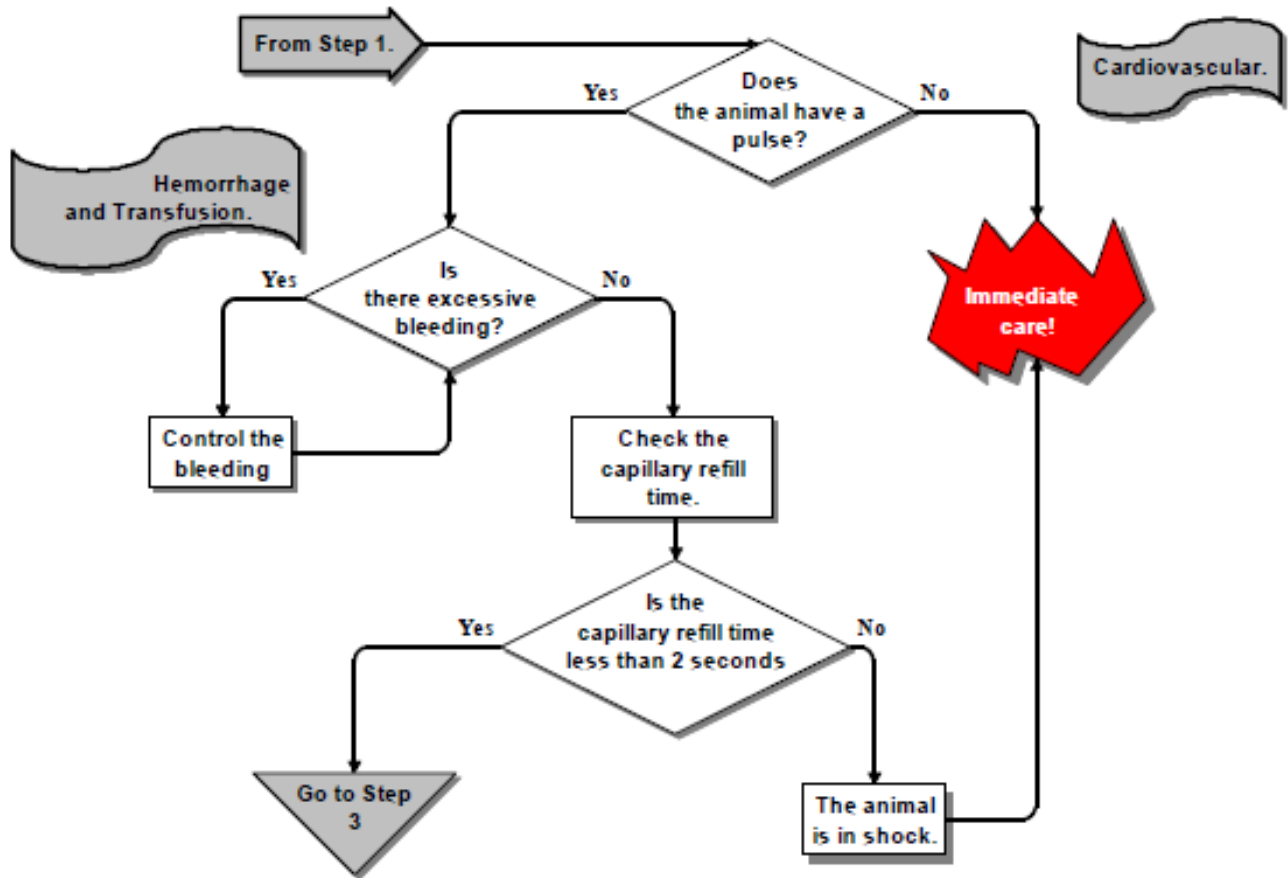


Figure 2b: Step 2 in providing Mobile Veterinary Unit Triage using V-START.

**Step 3: Check for
Neurological,
Musculoskeletal, and
Abdominal Injuries**

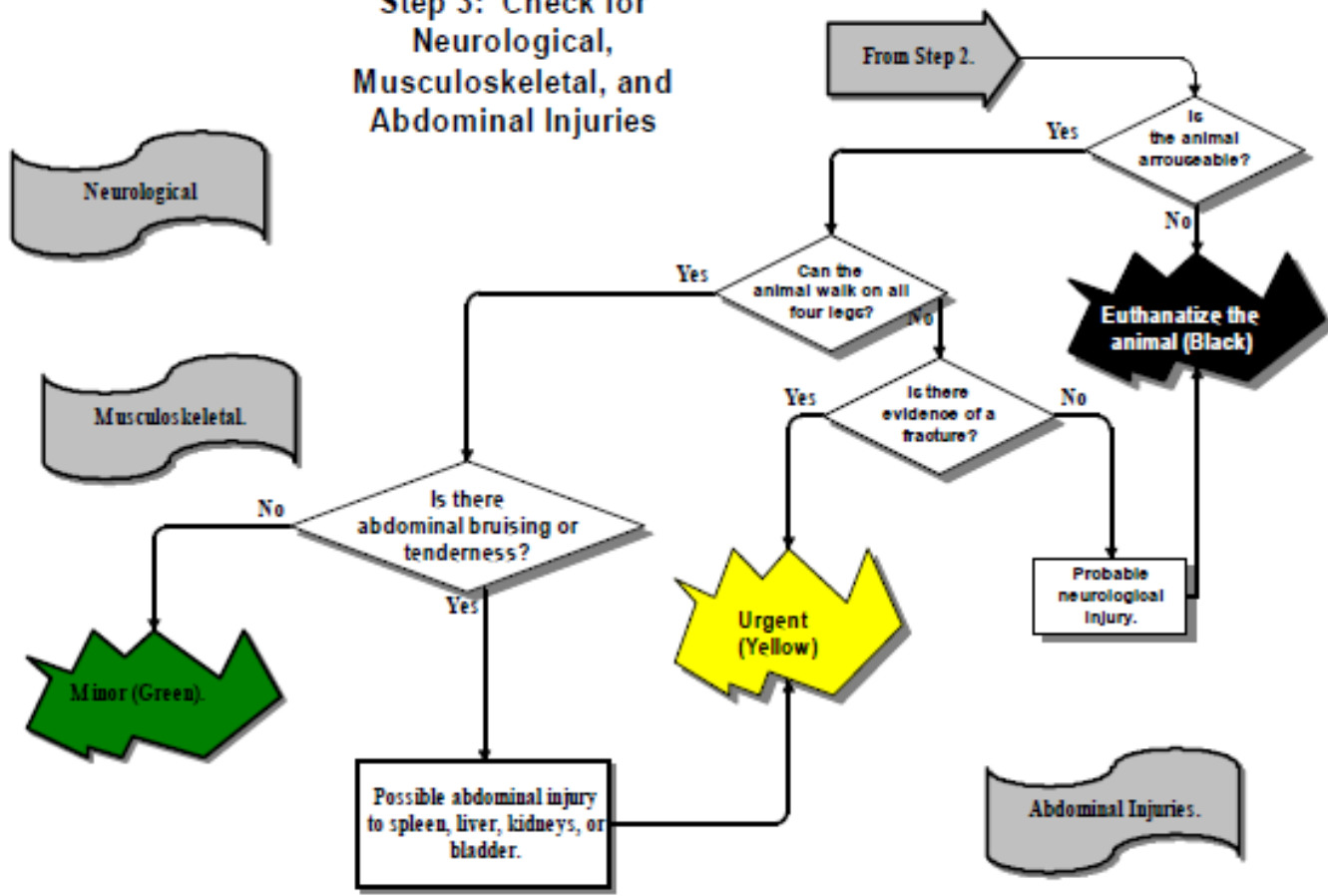


Figure 2c: Step 3 in providing Mobile Veterinary Unit Triage using V-START.