

Additionally paramedics have the right to speak directly to the Base Hospital Physician, if available, for any call.

## **CERVICAL SPINE IMMOBILIZATION:**

While cervical immobilization is a key element in the patient care management of many injured persons, there exists clear indicators for its application. The Cervical Spine Clearance Algorithm card was developed pursuant to clinical standards that have been in use for many years by physicians, and validated through numerous clinical studies.

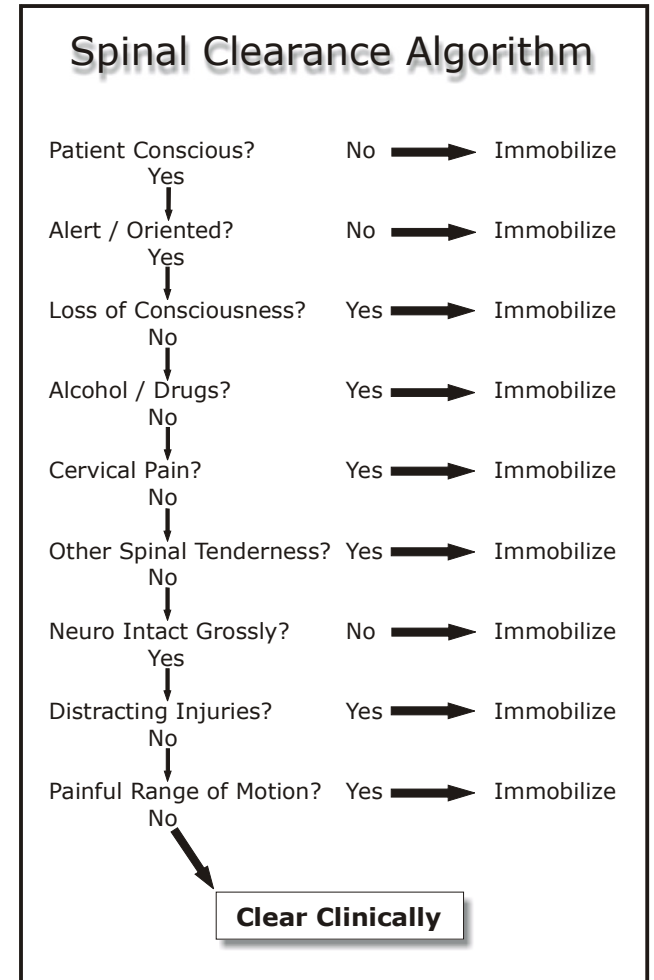
It is important to keep in mind that errors in the decision to not apply c-spine precautions can have disastrous results, and if any question remains about the necessity of c-spine precautions after applying the algorithm, you must error in favor of the patient's best interests and apply it.

Proper c-spine precaution includes all of the following:

- ❖ a rigid cervical collar
- ❖ lightweight head blocks
- ❖ adequate taping to restrict movement
- ❖ a long board which provides for the application of at least three straps
- ❖ minimum of three straps (traditional "X" trunk placement with a third strap across the lower thigh area just above the knees). Currently in this EMS system, "Spider" straps are utilized, which exceeds this minimum.

## **OXYGEN ADMINISTRATION:**

The administration of oxygen is one of the most important interventions available to EMS personnel, and its role in improving compromised patients should not be overlooked. This section is included to provide the basic



guidelines for oxygen use, rather than including specific guidelines for each and every protocol. In general, the following recommendations should apply broadly:

- ❖ When "High-Flow" is indicated in the protocol, this should be interpreted to mean 15 l/min by non-rebreather mask. In the case of some patients (e.g. anxious cardiac patients) this can be reduced to 4-6 L/min via cannula, if the patient will not tolerate a mask. Your use of oxygen should be driven by the patient's level of distress or medical condition, not the Pulse Oximeter.
- ❖ When "as indicated" is listed in the protocol, you should gauge your rate of administration by the patient's level of distress. DO NOT withhold high flow oxygen from a COPD patient in severe respiratory distress, simply be prepared to encourage their respirations and support them with appropriate adjuncts (e.g. BVM, intubation, etc.) as needed.

## **PULSE OXIMETRY:**

The pulse oximeter measures the differences in absorption of light waves by oxygen-saturated vs non-saturated hemoglobin to determine what percent of hemoglobin is carrying oxygen. It does not measure the actual amount of oxygen carried by the blood. Tissue oxygen delivery is proportional to the quantity of blood circulated per unit of time as well as the percent of oxygen saturation. When there is insufficient hemoglobin [i.e., anemia] or diminished circulation, blood may be 100% saturated, but still not carry enough total oxygen for tissue needs. **BASE YOUR USE OF OXYGEN ON THE PATIENT'S LEVEL OF DISTRESS.**

Indications: The monitoring of any patient at risk for hypoxemia from any cause including the administration of medications (such as morphine and diazepam), which can cause respiratory depression, and procedures (such as endotracheal intubation and airway suctioning) during which hypoxia may be worsened.

### **Interpretation:**

greater than 95% = Normal

91-94% = Mild Hypoxemia

86-90% = Moderate Hypoxemia (90% O<sub>2</sub> Sat. = PO<sub>2</sub> ~ 60 TORR)

less than 86% = Severe Hypoxemia (Accuracy below 80% is not reliable)