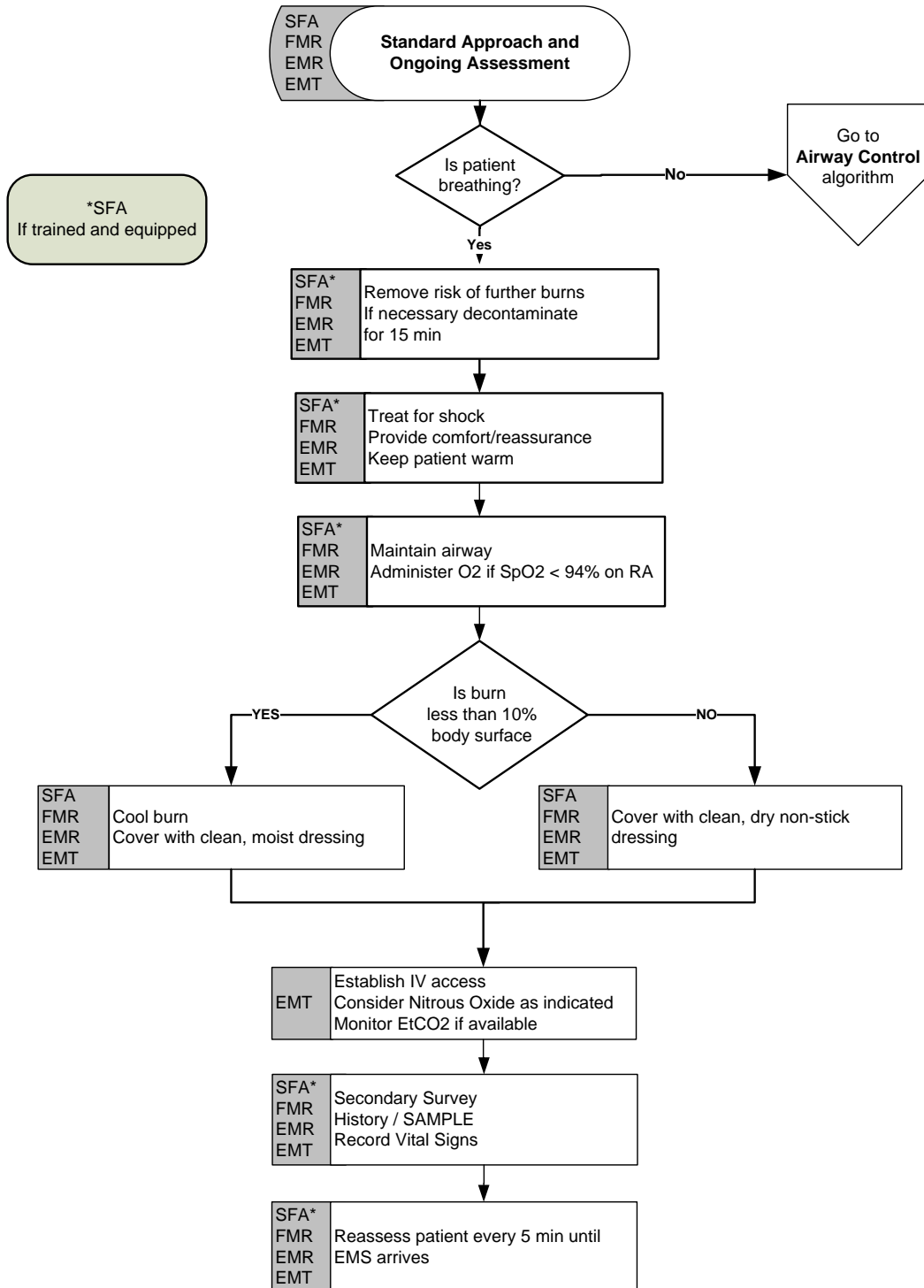


## Algorithm 5

## Burns



## **Pneumonia**

Pneumonia is an inflammatory condition of the lung, affecting primarily the microscopic air sacs known as alveoli. It is usually caused by infection with viruses or bacteria and less commonly other microorganisms, certain drugs and other conditions such as autoimmune diseases.

The most common symptoms of pneumonia are:

- Cough (may be productive – greenish/yellow mucus, or even bloody mucus)
- Fever
- Shaking / chills
- Shortness of breath

## **Patient Safety Considerations**

Remember, “**All that wheezes is not asthma.**” Practitioners must consider other causes of bronchospasm such as CHF, toxic inhalation and pneumonia. Asthma or COPD may present as a “Silent Chest.”

## **Burns (Algorithm 5)**

### **Airway**

If the patient was in an enclosed space at the time of the burn, whether chemical or thermal, a strong possibility of airway damage exists.

Continually monitor the airway for evidence of obstruction and be aware that respiratory problems due to damage of airway tissues may not develop immediately.

- Signs of Upper Airway Burns
- Burns to the face
- Singed eyebrows or nasal hair
- Burns in the mouth
- Sooty sputum
- Brassy cough
- Hoarseness
- History of being in an enclosed space when burned

### **Signs of Smoke Inhalation**

- Exposure to smoke in an enclosed space
- Unconscious while exposed to smoke or fire
- Cough developing after exposure to smoke or fire
- Shortness of breath after exposure to smoke or fire
- Chest pain after exposure to smoke or fire
- Hoarseness after exposure to smoke or fire

## Oxygen Instructions

All patients who are suspected of suffering from airway exposure to fire, smoke, toxic chemicals, or gases should receive high flow oxygen therapy when it is safe to do so.

## Burn Management

If you are the first on scene responder ensure that it is safe to approach the patient and you are wearing personal protective equipment. Stop the burning process and remove to a safe place with fresh air. Remove non-adherent clothing and any potentially restricting jewellery.

First aid care:

- Cool thermal burns with tepid running water (avoid ice or cold water as this causes vasoconstriction and in turn could worsen the injury)
- Less than 10% burn - cover the burn with clean moist dressing
- Greater than 10% burn – cover with clean, non-stick dressing (cool the burn not the patient)
- Chemical burn – flush with copious irrigation of sterile water if available
- Oxygen should be administered by non-rebreather at 12 - 15 litres/min and patients SpO<sub>2</sub> is less than 94% room air.

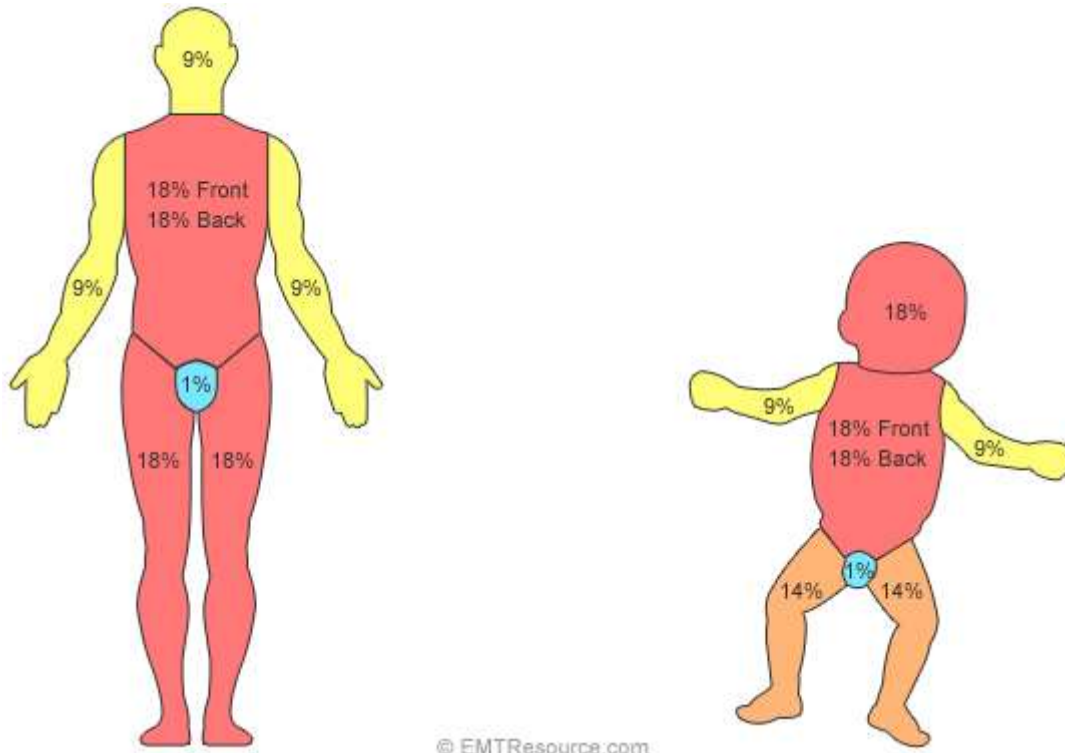
## Burn Measurement

### Small Burns

Rule of Palms - Using the rule of palms, the surface of the patient's palm represents approximately 1% of body surface area and is helpful in estimating the area of small burns.

### Large Burns

Rule of Nines - To approximate the percentage of burned surface area, the body has been divided into eleven sections: Head, Right arm, Left arm, Chest, Abdomen, Upper back, Lower back, Right thigh, Left thigh, Right leg (below the knee), Left leg (below the knee) .



**B. Figure 1 – Rule of Nines**