**Smoke Inhalation Injury**

For patients with smoke inhalation

### History
- Number and severity of other victims
- Industrial or residential fire
- Duration of inhalation
- Social history - smoking
- Past medical history
- Other trauma
- Odor

### Signs and Symptoms
- Facial burns, pain, and/or swelling
- Cherry red skin
- Loss of consciousness
- Hypotension/shock
- Airway compromise/distress could be indicated by hoarseness/wheezing
- Seizure/AMS after industrial or closed space fire consider cyanide poisoning

### Differential
- Foreign Body Aspiration
- Asthma exacerbation
- COPD exacerbation
- Cyanide poisoning
- Carbon monoxide poisoning
- Thermal injury
- Heart failure
- Acute respiratory distress syndrome

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**For suspected closed space inhalation, choose Severe Airway Involvement path**

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**Severe Airway Involvement**

Accessory muscle use or altered breath sounds and definitive airway felt necessary OR Any combination of the following: Airway edema, stridor, presence of soot/singed nasal hairs, change in voice, carbonaceous sputum, increased work of breathing/tachypnea.

### Moderate Airway Involvement

Suspected inhalation injury with only one of the following: Wheezing, presence of soot/singed nasal hairs, change in voice, carbonaceous sputum, increased work of breathing/tachypnea.

### No or Mild Airway Involvement

Airway patent, no signs of edema, no stridor or change in voice, no soot in the oropharynx or nasopharynx, nasal hairs intact, low likelihood of airway involvement

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**Assess Airway**

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**Monitor and reassess**

- High flow Oxygen
  - Regardless of SpO₂
- Albuterol
- Epinephrine 1:1,000 nebulized for stridor

**Cardiac monitor**

**CO-oximetry (SpCO), if available**

**Consider, 12-Lead ECG**

**Consider, 2 IV/IO sites**

**Notify burn center. Consider Base Hospital for medical direction**

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**Closest receiving facility for definitive airway. Consider Base Hospital for medical direction**
San Mateo County Emergency Medical Services

Smoke Inhalation Injury

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Pearls

- Ensure patient is properly decontaminated before placing in ambulance and transport to hospital.
- Contact Hazmat or Poison Control Center with questions about chemical or guidance on immediate treatment.
- If able, obtain the name of chemical(s) patient was exposed to pass information along to receiving hospital staff.
- If able, remove patient’s clothing before placing in ambulance and transport to hospital.