Inhalation Injury

History
- Type of exposure (heat, gas, chemical)
- Duration of exposure
- Time of injury
- Past medical history
- Other trauma
- Loss of consciousness

Signs and Symptoms
- Burns, swelling, pain
- Dizziness
- 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
- Upper Respiratory Infection
- Asthma exacerbation
- Anaphylaxis
- COPD exacerbation
- Cyanide poisoning
- Thermal injury
- Chemical/Electrical injury
- Radiation injury
- Blast injury

Scene safety. Quantify and triage patients. Load and go with assessment and treatment enroute to hospital

Assess Airway

No or Mild Airway Involvement
Airway patent, no signs of edema, no stridor or change in voice, nasal hairs intact, low likelihood of airway involvement

If oxygen saturation ≥ 92%
Routine Medical Care

Severe Airway Involvement
Accessory muscle use or altered breath sounds and definitive airway felt necessary
OR
Any combination of the following: Airway edema, stridor, change in voice, increased work of breathing/tachypnea.

Moderate Airway Involvement
Suspected inhalation injury with only one of the following: Wheezing, change in voice, increased work of breathing/tachypnea.

Monitor and reassess
- Apply Oxygen to maintain goal SpO₂ ≥ 92%
- Cardiac monitor
- Consider, 12-Lead ECG
- Consider, 2 IV/IO sites
- Consider, Albuterol or Albuterol MDI with spacer or Levalbuterol

Notify receiving facility. Consider Base Hospital for medical direction

Airway Field Procedure

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High flow Oxygen
Regardless of SpO₂

Cardiac monitor

Consider, 12-Lead ECG

Consider, 2 IV/IO sites

Albuterol or Albuterol MDI with spacer or Levalbuterol

Epinephrine 1:1,000 nebulized for stridor

CPAP

Closest receiving facility for definitive airway. Consider Base Hospital for medical direction

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Pearls

- Consider expedited transport for inhalation injury.
- 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.