

Emergency Medical Responder: A Skills Approach

Fifth Canadian Edition



FIFTH CANADIAN EDITION

EMERGENCY MEDICAL RESPONDER

A SKILLS APPROACH

MEETS PARAMEDIC ASSOCIATION OF CANADA'S
NATIONAL OCCUPATIONAL COMPETENCY PROFILE



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Chapter 13

Cardiac and Respiratory
Emergencies

Objectives (1 of 2)

- State seven signs and symptoms of a patient experiencing chest pain or discomfort and describe the emergency care for such a patient.
- Discuss the cause and the signs and symptoms of the two common causes of chest pain or discomfort: angina pectoris and acute myocardial infarction.
- List the signs of adequate breathing versus the signs and symptoms of a patient in respiratory distress.
- Describe the emergency care of a patient in respiratory distress.



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Objectives (2 of 2)

- Discuss the anatomical and physiological aspects of the common causes of breathing difficulty, including chronic obstructive pulmonary disease, asthma, pneumonia, acute pulmonary edema, and hyperventilation.
- Discuss the signs and symptoms of the five common causes of breathing difficulty.
- Demonstrate a caring attitude toward the patient and family when dealing with a cardiac or respiratory emergency, while giving priority to the interests of the patient.

Coronary Artery Disease (CAD)

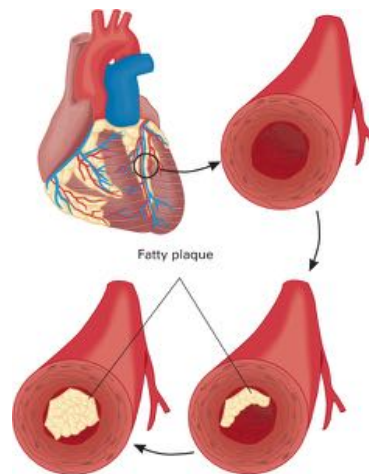
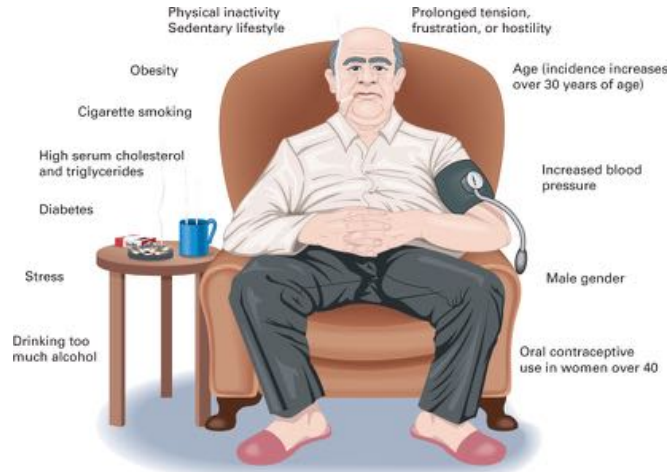


Figure 13-1 Fatty deposits build up in coronary arteries, depriving the heart muscle of blood and oxygen.

CAD Risk Factors



Family history of premature coronary heart disease (usually under age 60 years)

Figure 13-2 Major risk factors for coronary artery disease and heart attack.

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Signs & Symptom of Cardiac Emergency



Figure 13-3 Signs and symptoms of a cardiac emergency.

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Assessment of Cardiac Chest Pain

- **O** – Onset
- **P** – Provocation
- **Q** – Quality
- **R** – Region
- **R** – Radiation
- **R** – Relief
- **S** – Severity
- **T** – Time

To Provide Emergency Care: (1 of 2)

- Have patient cease all movement
- Place patient in position of comfort
- Make sure airway is open, give O₂
- Loosen tight clothing

To Provide Emergency Care: (2 of 2)

- Maintain body temperature as close to normal as possible
- Comfort and reassure patient
- Hail EMS, if not already done

Coronary Artery Disease

Two problems are commonly caused by coronary artery disease:

- Angina Pectoris
- Acute myocardial infarction

Common Breathing Problems

- Chronic Obstructive Pulmonary Disease (COPD)
- Asthma
- Pneumonia
- Acute pulmonary edema
- Hyperventilation syndrome

Figure 13–6 Signs and Symptoms of Breathing Difficulty



Figure 13–6 Signs and symptoms of breathing difficulty.

Figure 13–7 Patients with Emphysema and Chronic Bronchitis Often Lean Forward as They Breathe



Figure 13–7 Patients with emphysema and chronic bronchitis often lean forward as they breathe.

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Treating Respiratory Distress

- Determine if patient's breathing is adequate
- Place conscious patient with adequate breathing in position of comfort
- Administer oxygen
- Comfort and reassure patient
- Update en route paramedics

Specific Respiratory Conditions

- COPD
- Asthma
- Pneumonia
- Hyperventilation Syndrome
- Acute Pulmonary Edema