



# First Responder Accreditation

Topic 10:

## Acute Coronary Syndrome

### Acknowledgements

This resource has been put together to assist you in completing your First Responder Accreditation workbook. St John Ambulance Australia would like to thank A/Prof Brett Aimers for his contribution to this topic.

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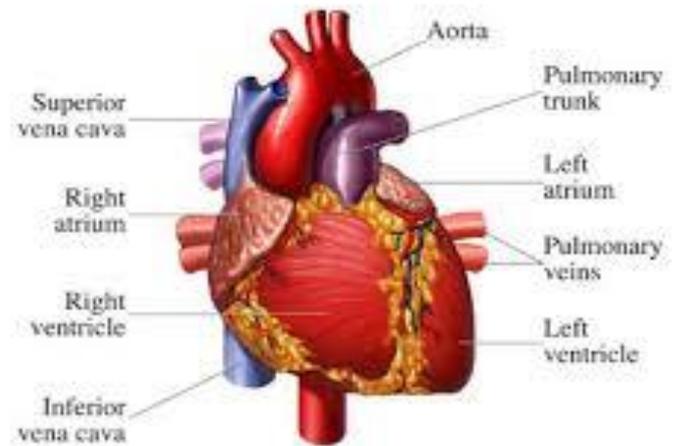
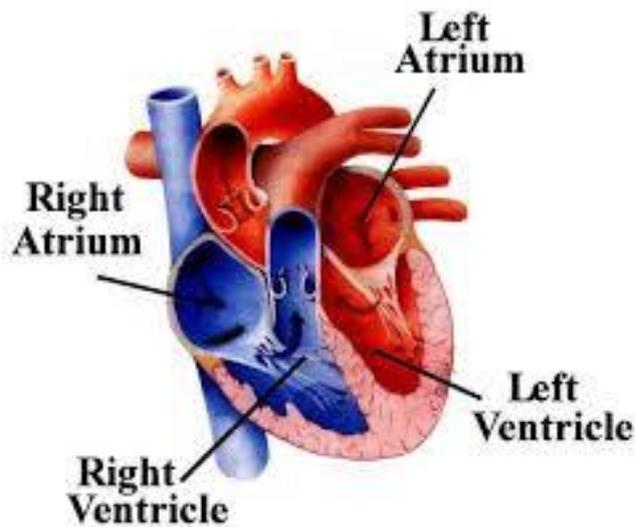
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## Introduction

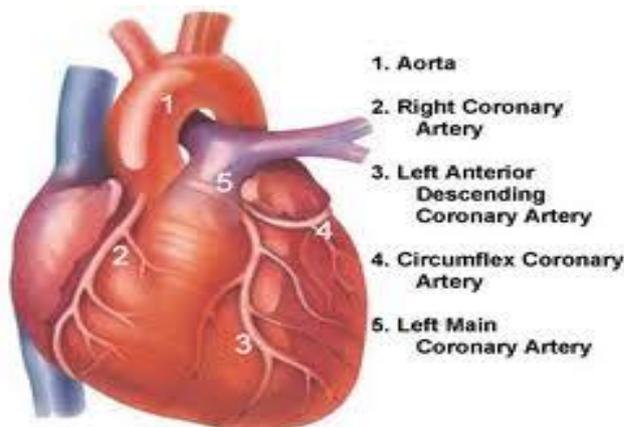
Each year, almost 55,000 Australians experience Acute Coronary Syndrome (ACS). This equates to around 150 episodes every day or one episode every 10 minutes. More than 350,000 Australians have experienced ACS at some stage during their life. 50% of deaths associated with ACS occur outside of the hospital environment.

## The Heart

The heart is a muscular pump that needs a continuous supply of oxygen to function effectively. The heart receives oxygen from blood, which is distributed to the myocardium via coronary arteries.



## Coronary Arteries



ACS occurs when there is a sudden blockage of a coronary artery that supplies blood to an area of the heart

## Signs and Symptoms

Symptoms may include one or more of the following:

- Tightness or heaviness in the chest

- Discomfort or pain in the centre of the chest
- Pain may spread to the neck or throat, jaw, shoulders, the back and either or both arms
- Shortness of breath
- Sweating
- Nausea/vomiting
- Dizziness

## Indigestion?

Sometimes, ACS can be mistaken for indigestion or others including a chest infection. The differences between ACS and indigestion:

- Indigestion generally occurs after eating food
- Discomfort (or pain) associated with indigestion is normally lesser than that experienced during ACS
- Discomfort (or pain) associated with indigestion does generally not radiate to the arms, neck, shoulder or jaw
- If in doubt – assume ACS, initiate care and call for help

## Assessment and Reassessment

An assessment is required to:

- Gather a history
- Build a clinical picture of the patient
- Determine if ACS is occurring or not
- Initiate appropriate care early
- Gather a base set of vital signs
- Escalate care early

Patients experiencing ACS should be reassessed frequently. The frequency will depend on:

- If they are improving or deteriorating
- The effectiveness of your treatment
- The level of care provided

## Management of ACS

- DRSABCD
- Ensure the patient rests
- Measure vital signs (LOC, HR, BP, RR)
- Monitor closely to detect deterioration
- Ensure a defibrillator is available
- Call for help; escalate care immediately (ambulance and/or health professional)
- Repeat observations frequently until help arrives or the patient improves

A number of medicines are approved for the specific management of ACS and associated pain:

- Aspirin
- Glyceryl Trinitrate
- Oxygen
- Methoxflurane (where unable to administer Glyceryl Trinitrate)

For further information on specific medication please refer to First Aid Services Medication Procedures found on the member connect website. <http://members.stjohn.org.au>.