

Cardiovascular disease

“Getting to the heart of things”

In your table groups

Discuss the following question:

- What do you believe are the major risk factors for heart disease?

Document your answers page 2.2 in your resource kit

Allow the group to take a few minutes to discuss.



Heart facts

- An amazing pumping ability
- Beats around 70 beats per minute
- 4,200 beats per hour
- 100,800 beats per day- 705,600 per week and 36,691,200 per year
- Pumps 11,500 litres per day
- Pumps over 42 million litres per year

Current rates of CVD

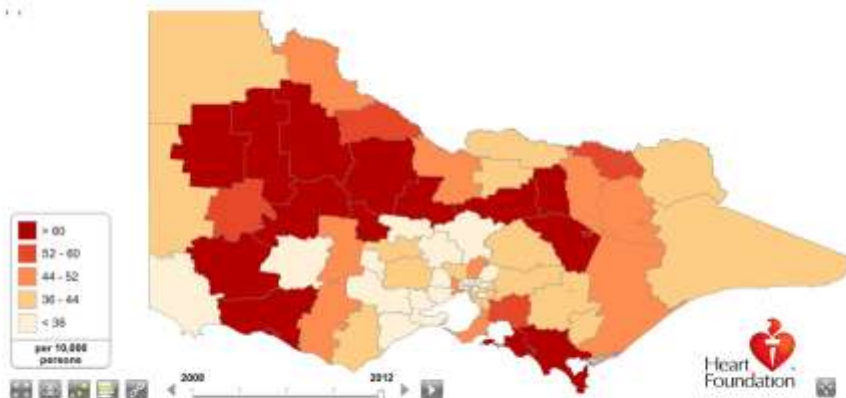
Cause of death	Males	Females
All Cardiovascular disease	20,953	22,992
Coronary heart disease	10,907	9,138
Other Cardiovascular disease	5,801	7,320
Stroke	4,245	6,524

Australian Bureau of Statistics, 2012. Causes of Death, Australia2012. ABS. Cat. No 3303.0. Canberra, accessed online 23 November 2015



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Current rates of CVD



Source: <http://www.heartfoundation.org.au/information-for-professionals/biostatistics/age/interactive-map/victoria.aspx>

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Anatomy of the heart

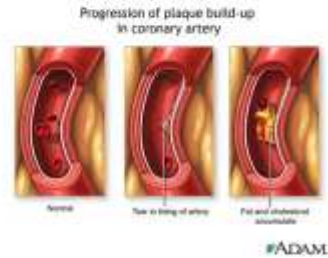


- Works as a double pump
- Requires blood to work
- Disorders develop over the lifespan
- Coronary vessels are the link to heart disease
- Damage is irreversible
- Cholesterol and smoking damage the vessels



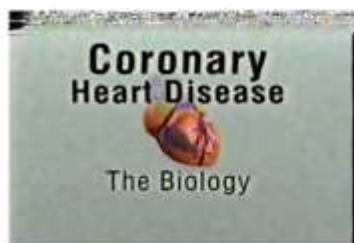
Physiology of heart disease

- Vessels are 2mm in diameter
- Supply blood to the chambers
- Cholesterol builds up in these
- Pumping ability is affected
- Risk factors are cumulative to heart disease progression



Video presentation

- Coronary heart disease. Section 1
- Biology
- Russell Knightly Media



Risk factors for cardiovascular disease

Source: National Heart Foundation 2008

- Family history
- Smoking
- Raised cholesterol levels
- Diabetes
- Raised stress levels
- Social isolation
- Raised blood pressure
- Being overweight
- Elevated alcohol consumption
- Physical inactivity
- Gender and age

Risk factor review

In your table groups

Discuss the following question

- How the above information might relate to rural farmers and their families?

Document your answers on page 2.8 in your resource kit

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Your heart

Depth: 2750
Height: 2050

SUPA TANK

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Well documented health inequities exist between regional and remote versus urban settings, In the former life expectancy is 1-7 years lower and decreases with increasing remoteness. (AIHW Australia Health 2010 (AIHW 2008) AIHW PHE 97. An approximate 10% difference in all – cause mortality has been consistently documented between major cities and the rest of Australia. Australian Institute of Health and Welfare. *Australia's health 2010 (AIHW Cat. No. AUS 122)*. Canberra: AIHW, 2010. <http://www.aihw.gov.au/publication-detail/?id=6442468376&tab=2> (accessed May 2012).e.

here are two reasons for excess CHD deaths -- risk factors among the population and inadequacies in the level of medical care provided.

Prevention of cardiovascular disease

- Know family history
- Observe weight and reduce if necessary
- Check cholesterol and lipids
- Reduce fat intake
- Cease smoking
- Monitor blood pressure
- Regular check ups with your health professional or doctor



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Video presentation

- Coronary heart disease. Section 3
- Investigations and treatments
- Russell Knightly Video



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Detection methods and treatments

- Family or genetic history
- Electrocardiograph (ECG)
- Exercise ECG
- Angiography
- Angioplasty balloon and or stenting
- Coronary Bypass surgery



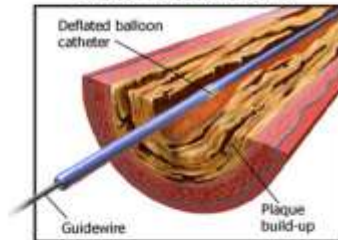
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Angioplasty

Courtesy of www.heritage.com

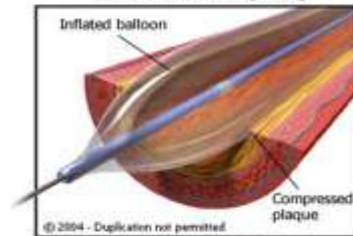
Balloon Catheter (Before)



A guidewire is first inserted, and a balloon-tipped catheter follows the guidewire to the blockage.

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Balloon Catheter (After)



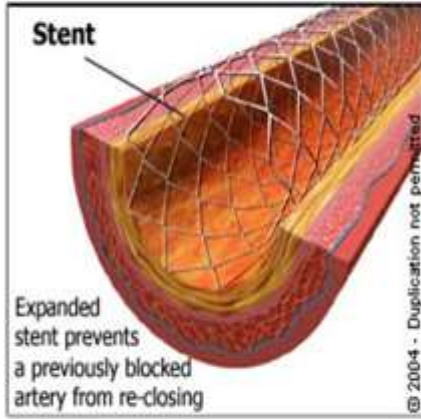
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Once in position, the balloon is inflated, pushing the plaque against the wall and enlarging the opening of the artery.



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Insertion of stents



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By-pass surgery

Courtesy of www.thoripgi.com

Coronary Artery Bypass Graft

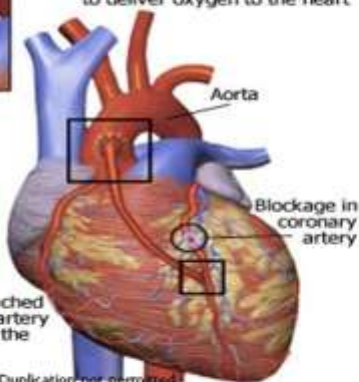
A procedure to bypass a blocked section of a coronary artery and to deliver oxygen to the heart



One end of the blood vessel is attached to the aorta



Other end is attached to the coronary artery at a point below the blockage




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Use model and hand around to participants



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Climate change and CVD

- When temperature is high there is an increase in heat related deaths from heart attack and stroke.
- Some people are at more risk.
- This includes:
 - Those with chronic conditions – i.e. heart problem
 - Physically active or working in the heat of the day
 - On certain medications
 - Elderly
- Contact your health professional if you are at risk



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People with heart conditions may have recommended daily fluid allowances and this means on hot days you cannot go over your allowance. To assist with this we suggest sucking on ice, using water mists to keep you cool. Important to discuss with your health professional.

In your table groups

Discuss the following question

- Identify three things you or your family can do to assist in the prevention of cardiovascular disease

Document your answer on page 2.16 in your resource kit

In summary

- Know your family history
- Watch your weight
- Monitor your cholesterol
- Stop smoking
- Check your blood pressure
- Reduce risk for diabetes
- Be active—30 minutes 5 times per week
- Be mindful of hot weather

Remember - Prevention rather than cure

Cardiovascular disease

“Getting to the heart of things”