

Fighting  
Meningococcal  
Disease



THE  
AMANDA  
YOUNG  
FOUNDATION



# The Amanda Young Foundation

## Meningococcal Awareness for Students



### Strategies to Prevent, Identify and Treat Meningococcal Disease

## About Amanda



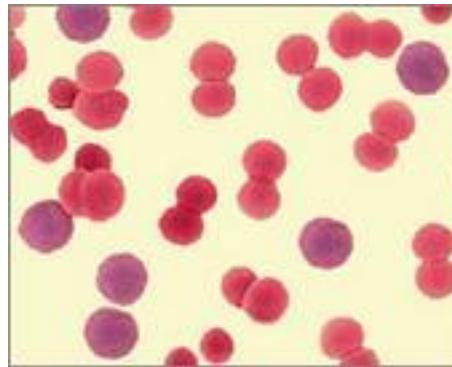
Amanda was a high achieving sportswoman with unlimited potential.

She was a much loved only daughter and friend.

Amanda contracted Meningococcal Septicaemia at a rowing regatta in Sydney in 1997. She died less than 24 hours after the first sign of symptoms, aged 18.



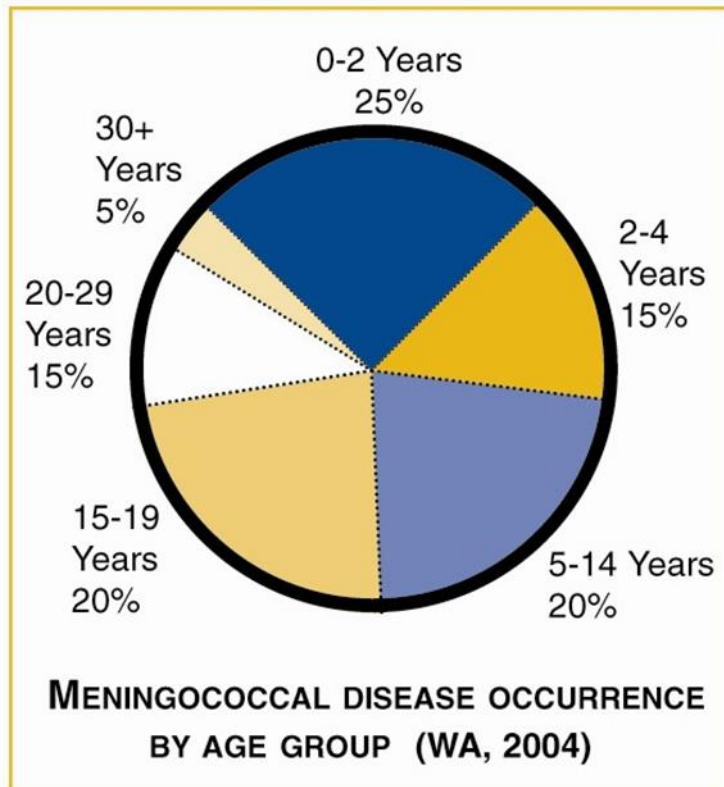
## WHAT IS MENINGOCOCCAL DISEASE?



- acute infection caused by bacteria
- extremely rapid disease from onset:  
meningococcal bacteria can double every half hour
- early detection and treatment vital to survival



## What You Need to Know About Meningococcal Disease



- Teenagers and young adults one of the most at risk groups (approx. one third of cases).
- The disease progresses rapidly with patients at risk of death within hours, so early diagnosis and treatment are vital.
- Early symptoms resemble common, relatively harmless illnesses like cold or 'flu meaning early diagnosis can be difficult.



## How is the Disease Spread?

- Meningococcal bacteria live naturally in the throat and back of nose.
- About 10-20% of people will be carrying the bacteria at any one time without ever becoming ill – they are called “healthy carriers”.
- It is thought that everyone will carry the meningococcal bacteria at some stage of their lives.
- Bacteria spread through mucus and respiratory droplets from the throat: sneezing, coughing, kissing or perhaps sharing food or drinks.



## **Risk Factors**

Reduced immunity due to recent illness or being rundown.

Multiple “intimate kissing” partners.

Smoking or exposure to smokers – smoking damages the lining of the mouth, nose & throat making it easier for the bacteria to invade. Smokers are also more likely to spread the bacteria around through coughing.



## **How Common is Meningococcal Disease?**

Classified as a rare disease in Australia

Approximately 250 cases a year

70% of patients make a full recovery

20% will have permanent disabilities, such as:

- Learning difficulties
- Sight and hearing problems
- Liver and kidney failure
- Scarring from skin grafts
- Amputations – loss of fingers, toes or limbs

10% will die



## QUIZ

### HEADS & TAILS

A - both hands on your head

B - both hands on your bottom

C - one hand on head/one hand on bottom







## Question 1

What is bacteria?

- a) An organism found on all living things
- b) A harmful virus
- c) A type of food



## Question 2

What is meningococcal disease?

- a) An acute viral infection
- b) A 24 hour bug
- c) An acute bacterial infection



## Question 3

What is the average number of cases of meningococcal disease per year in Australia?

- a) 250
- b) 400
- c) 700



## Question 4

Which of these is not a symptom of meningococcal disease?

- a) Itchy skin
- b) Cold hands and feet
- c) Fever that doesn't respond to Panadol



## Question 5

What should you do if you think you have some symptoms of meningococcal disease?

- a) Tell a friend that you are sick
- b) Tell a trusted adult that you need to see a doctor
- c) Call an ambulance



## ***QUESTIONS ARE GOING TO GET HARDER NOW!***

### Question 6

Meningococcal meningitis is...

- a) Infection of the membranes surrounding the brain
- b) Infection of the membranes surrounding the spinal cord
- c) Infection of membranes surrounding spinal cord and brain



## Question 7

Meningococcal Septicaemia is...

- a) Bacteria that display uncontrolled growth, invade adjacent tissues and sometimes spread to other locations within the body via lymph nodes.
- b) A condition where the blood flow to a section of the body becomes blocked, and if the blood flow isn't restored can result in a loss of limbs.
- c) An infection that multiplies rapidly, releasing toxins that cause extensive damage to the tissues and organs of the body.



## Types of Meningococcal Disease



There are two main types of meningococcal disease:

Septicaemia: Infection of the blood

Meningitis: Infection of the membranes surrounding the spinal cord and brain (the “meninges”)

Patients can have just septicaemia, just meningitis or both.





## ***Meningococcal Disease Symptoms***

<b>Meningococcal Septicaemia</b>	<b>Meningococcal Meningitis</b>
Shivering, chills, cold hands or feet, skin colour change	Severe Headache
Sudden, severe pain in arms, legs, joints or stomach	Stiff or painful neck
Fever that doesn't respond to panadol, nausea/vomiting, maybe diarrhoea	Sensitivity to light
Drowsiness, loss of consciousness, rapid breathing	Drowsiness, loss of consciousness, fits
Spots or pinprick rash (develops to purple blotches)	A rash may develop in later stages



## The Septicaemic Rash



The rash appears in the final stages of septicaemia and is caused by blood leaking from damaged vessels into the skin.

The rash can start out as very pale pinpricks on the skin, a faint rash, one pimple-like spot or a blister. In the final, critical stage it spreads rapidly into purple bruises.

**IF A RASH APPEARS WITH SOME OF THE ABOVE SYMPTOMS TREAT IT AS A MEDICAL EMERGENCY!**



## What to Do if You Suspect Meningococcal Disease

- If you are feeling extremely unwell, tell somebody you trust and ensure you both keep a close eye on your symptoms.
- Trust your instincts – you know how you “usually” feel when you’re sick and if you have Meningococcal Disease you will feel far worse, very quickly.
- If you suspect meningococcal disease, ask an adult you trust to take you immediately to the doctor or hospital. Once there demand immediate treatment; don’t wait around for someone to see you.
- To do something costs you nothing, to do nothing could cost you everything.



## Prevention of Meningococcal Disease

### Vaccination

- Vaccine for C-Strain which is the most deadly (introduced in 2003) - part of routine vaccinations at 12 months.
- Provides life-long protection and is very effective.
- Men B vaccine available from 2014 – see your GP

### Cautionary Measures

Avoid sharing:

- Food and drinks
- Utensils
- Toothbrushes
- Cigarettes
- Mouthguards
- Anything that you put in your mouth.

Stay away from crowds and public places when you are unwell.



## In Summary...

- Knowledge is power – share this information with your parents, siblings and other family members.
- Prevention is key – avoid transmission of saliva /mucus within reason. Stay in bed and away from crowds and exposure to coughs and sneezes when you are unwell.
- Tell somebody when you are feeling unwell. Often by the time that meningococcal disease victims realise they are in seriously sick, they are unable to help themselves.
- If a rash appears with some meningococcal symptoms, treat it as a medical emergency!