Meningococcal Infection Awareness Prevention and Protection (MIApp)

Teaching and Learning Resource

Forward

The Amanda Young Foundation (AYF), and our founders Barry and Lorraine Young, are committed to fighting meningococcal disease by providing free, interactive health education programs to Western Australian schools.

The engagement of Edith Cowan University (ECU) for the Meningococcal Infection - Awareness, prevention and protection (MIApp) project is our largest education initiative for the year 7 to 10 cohort. This project was possible because of Lotterywest funding and joint financial contributions of the Western Australian Department of Health, ECU and AYF.

Thank you to the education team at Edith Cowan University for writing this teaching package, enabling teachers to implement MIApp in the classroom and undertake additional lessons to reinforce and extend student learning.

Deanna Howell
EDUCATION MANAGER
AMANDA YOUNG FOUNDATION

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Acknowledgement

Background

The AYF is a not-for-profit community organisation dedicated to reducing deaths from Meningococcal Disease (MD). The foundation was formed in 1998 following the tragic death of Amanda Young from meningococcal septicaemia at the tender age of 18 years.

MD is a serious, vaccine-preventable infectious disease, which is rare but life-threatening. Infection is caused by bacteria called Neisseria meningitidis. These bacteria live naturally in the back of the nose and throat of about 1 in 10 people and can spread through very close contact. Most of the time these bacteria don't cause disease, however, sometimes they move through the lining of the throat into the body. When this happens, it causes invasive MD. Some groups in the community are at increased risk of MD, including adolescents and young adults, who have the highest rates of nasopharyngeal carriage (they are more likely to be 'healthy carriers' of the bacteria than other groups).

This resource package supports the teaching and learning of meningococcal awareness and prevention in secondary schools in order to help and protect youth. The resource is specifically developed for students of years 7, 8, 9 and 10. It is designed to accompany the MIApp educational game available via download for Windows PC, and the Apple App Store for iPad.

About the game

The MIApp educational game brings to life the reality of meningococcal infection through interactive game play. Players engage with learning content and are tasked with solving the source of infection. Through game play students are introduced to the content of communicable disease, MD, the concept of ' healthy carriers', signs and symptoms of infection and preventive health care strategies ('ways' to be safe and remain safe).

Players collect items, while solving the source of the meningococcal infection, to increase their work experience points. They interact with the dog character Buddy, who in real life was the pet of Amanda Young.
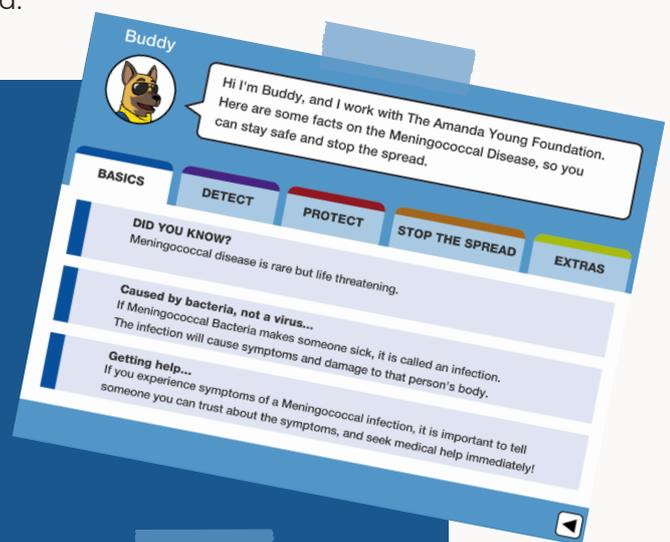
How to use this resource

This teaching and learning resource accompanies the MIApp educational game. The best way to use this resource is to incorporate all three lessons with MIApp game play. The resource is specifically:

- curriculum-aligned to target lower secondary students,
- fun, interactive, cognitively-developed and sequential to develop student knowledge, understandings and skills relating to communicable disease, communicable infection and MD
- game play with skills-based lesson activity for students to apply 'ways' (strategies and actions) to protect, support and maintain own and others' health, safety and wellbeing.
- teacher oriented with supporting notes for ease of understanding of communicable infection and MD.

We encourage educators working with this resource to apply professional insight and cultural awareness to support the diversity in schools and further contextually-based learning.

Teaching and learning

This resource package supports the development of knowledge, skills, behaviours, and dispositions of Australian children and adolescents (aged 12 to 16 years). The package is aligned to the teaching and learning of Health and Physical Education (HPE) in Australian schools as outlined by the Australian Curriculum for HPE and specifically, the year-level syllabuses for the HPE Learning Area in Western Australia (WA). As per these curriculum texts, the resource package draws from the five interrelated key ideas underpinning pedagogy in the delivery of HPE in Australia. Teaching and learning in the package:

- focuses on educative purpose,
- utilises a strengths-based approach,
- values movement,
- develops health literacy, and
- actions a critical inquiry approach.

More information regarding the key ideas is available at: Australian Curriculum – HPE propositions

The teaching and learning described within this package is sequential and designed to cognitively build and support student understanding of concepts and health-enhancing skills and dispositions related to meningococcal awareness and prevention. The package draws from the general capabilities of the Australian Curriculum to contribute to the development of young Australians who are successful learners, confident and creative individuals, and active and informed citizens.

More information about the general capabilities is available at: Australian Curriculum – General capabilities (Version 8.4)

Teachers working with the package could find ways to address the depth and richness of the cross-curriculum priorities as articulated by the Australian Curriculum.

More information about the cross-curriculum priorities is available at: Australian Curriculum – Cross-curriculum priorities (Version 8.4)

Assessing

Teachers working with this resource package should consider the ways in which students demonstrate achievement in learning. Teachers working with the resource should refer to band level (Australian Curriculum) and year-level (WA) achievement standards to integrate assessment points into their teaching and learning via formative and summative assessment.

More information about assessment in HPE is available at:
Australian Curriculum – HPE (Version 8.4)
Western Australian HPE Curriculum – Assessing

Curriculum Links

This resource package addresses content described in the Western Australian HPE Curriculum and the Australian Curriculum – HPE (Version 8.4)

The resource responds to specific content descriptors for the secondary schooling years of 7, 8, 9 and 10. The below tables identify the content descriptors particular to the two Curriculum.

WA curriculum content

Note: As a whole (three lessons), this resource package addresses the below aspects of the Western Australian HPE Curriculum and as mandated curriculum, all dot points that follow a content descriptor are addressed. Dot points following a 'such as' are not mandated curriculum but considered 'suggestions for learning'. For the purpose of this resource, dot points following 'such as' have been developed to reflect content specific to the MD context.

Sub-strand	Content description			
	Year 7	**Year 8**	**Year 9**	**Year 10**
Being healthy safe and active	Help-seeking strategies that young people can use in a variety of situations (ACPPS072) Strategies to make informed choices to promote health, safety and wellbeing, such as: · meningococcal infection awareness and protection (ACPPS073)	Communication techniques to persuade someone to seek help (ACPPS072) Skills and strategies to promote physical and mental health, safety and wellbeing in various environments, such as: · assertive responses · refusal skills · contingency plans · making informed choices (ACPPS073)	Skills to deal with challenging or unsafe situations: · refusal skills · expressing thoughts, opinions, beliefs · acting assertively (ACPPS090) Actions and strategies to enhance health and wellbeing in a range of environments, such as: · school, sporting and social situations where contact is possible (ACPPS091)	The impact of societal and cultural influences on personal identity and health behaviour, such as: · immunisation (ACPPS089)
Communicating and interacting for health and wellbeing	The impact of relationships on own and others' wellbeing: · the influence of peers and family (ACPPS074)	Personal, social and cultural factors influencing emotional responses and behaviour, such as: · prior experience · norms and expectations · personal beliefs and attitudes (ACPPS075)	Characteristics of respectful relationships: · respect for personal differences and opinions (ACPPS093)	Critical health literacy skills and strategies: · evaluating health services in the community · examining policies and processes for ensuring safer behaviours (ACPPS095)

| Contributing to healthy and active communities | Preventive health practices for young people to avoid and manage risk, such as:
· communicable disease prevention
· meningococcal protective behaviours (ACPPS077) | Health promotion activities which target relevant health issues for young people and ways to prevent them (ACPPS077)

Benefits to individuals and communities of valuing diversity and promoting inclusivity, such as:
· respecting diversity of vaccination choice (ACPPS078; ACPPS079) | The implications of attitudes and behaviours on individuals and the community, such as:
· vaccination choice (ACPPS098) | Health campaigns and/or community-based activities designed to raise awareness, influence attitudes, promote healthy behaviours and increase connection to the community (ACPPS096; ACPPS097)

Social, economic and environmental factors that influence health, such as:
· level of education
· income/ employment
· social networks and supports (family, friends and community attachment)
· access to services (ACPPS098) |

Australian Curriculum for HPE content

Sub-strand	Year 7-8	Year 9-10
Being healthy safe and active	Practise and apply strategies to seek help for themselves or others (ACPPS072) Investigate and select strategies to promote health, safety and wellbeing (ACPPS073)	Plan, rehearse and evaluate options (including CPR and first aid) for managing situations where their own or others' health, safety and wellbeing may be at short or long term risk (ACPPS091) Propose, practise and evaluate responses in situations where external influences may impact on their ability to make healthy and safe choices (ACPPS092)
Communicating and interacting for health and wellbeing	Evaluate health information and communicate their own and others' health concerns (ACPPS076)	Critically analyse and apply health information from a range of sources to health decisions and situations (ACPPS095)
Contributing to healthy and active communities	Plan and use health practices, behaviours and resources to enhance health, safety and wellbeing of their communities (ACPPS077)	Plan, implement and critique strategies to enhance health, safety and wellbeing of their communities (ACPPS096)

Learning intentions

This resource package contributes to students who:

1. Understand the factors that cause communicable disease and MD disease.

2. Understand the principles of vaccination as a key preventative measure supporting health and MD prevention.

3. Recognise the signs and symptoms of MD.

4. Apply ways to respond when self and others are unwell and when MD is suspected.

5. Make informed choices regarding personal and hygiene behaviours to prevent the spread of communicable infections and MD.

Year 7	Students take positive action to enhance their health, safety and wellbeing toward Invasive MD and other communicable diseases by applying problem-solving and effective communication skills through a range of preventive health practices.
Year 8	Students apply preventative strategies to promote their own and others' health, safety and wellbeing in situations and environments where MD is of increased risk and where others' actions impact health and wellbeing.
Year 9	Students explore MD and disease transmission in the wider communities to further understand external influences on health decisions. Students refine communication techniques to advocate Meningococcal awareness and promote health messages.
Year 10	Students become ambassadors for Meningococcal prevention and awareness.
Key to the learning outcomes	Skill
	Content
	Context

Understandings for learning

The table below outlines the most important health information to prevent and save lives from MD. This information is embedded within this resource package and specifically scaffolded across the three lessons and MIApp Game. The information supports the teaching and learning about MD awareness and prevention and is presented as nine broad, high-level understandings. These understandings are designed to inform teacher practice with further and more detailed explanation of each understanding found at the end of this resource.

Please note the **Understandings for Learning** are for teacher use only. Language would need to be adapted to suit a target audience of students.

|	
1	Meningococcal Disease is life-threatening but rare.
2	The early symptoms can be similar to a cold or flu. However, a person with MD with feel extremely unwell and continue to decline even after standard interventions (e.g., taking Panadol, resting, etc).
3	Some of the most common symptoms include fever, vomiting, diarrhoea, headache, pain in your arms and legs, drowsiness, and confusion.
4	If you have these symptoms, seek immediate medical help, and tell someone you trust of the symptoms you are experiencing.
5	The best way to protect yourself from meningococcal infection is to be vaccinated.
6	Vaccines protect against the five (5) strains of meningococcal infection (A, C, W, Y & B). If you are not vaccinated, talk to your parents, carers or a school nurse about vaccination.
7	Some people in the population are 'healthy carriers' of meningococcal infection but they remain healthy. This means that the organism lives at the back of a carrier's nose and throat without causing harm. Healthy carriers may pass meningococcal infection onto someone without realising and this can make the person sick.
8	The meningococcal organism is spread thorough mucus and respiratory droplets from the throat, including via kissing, sharing things that you put in your mouth like a water bottle, and openly sneezing and/or coughing.
9	Avoid behaviours that can spread saliva/mucus if you want to stop the spread.

Lesson 1: Communicable disease

Learning intentions and support notes	Teaching and learning experiences and resources
Learning intention • Understand informed choices and practices to promote health and wellbeing • Understand communicable diseases • Understand how close contact is responsible for the spread of communicable diseases and the rate of spread is dependent on exposure • Understand help-seeking as a strategy to remain healthy and well **Focus questions** • What is and isn't a communicable disease? • What ways can a communicable disease be passed between individuals? • What contributes to a communicable infection? • What can prevent communicable disease and/or infection? **Support Notes** • Refer to support notes within this package.	**Introduce communicable diseases:** • **Activity 1 Infection control** This fun activity introduces communicable disease to students and explores how communicable diseases can spread from one person to another, or from animals to people. Teachers can select either **Activity 1a Bingo or Activity 1b Balloon bounce.** **Develop understandings of communicable diseases:** • **Activity 2 Communicable diseases** This activity guides students to define communicable diseases. • **Activity 3 Disease sort** This activity explores a range of common diseases and requires students to identify the type of disease, e.g., communicable or noncommunicable. NOTE: There is an option for year 7/8 students and an option for year 9/10 students. Teachers can select if they want to conduct this activity in small groups or as a whole class activity. **Reflect on communicable diseases:** • **Activity 4 Skills for staying safe** This activity encourages students to consider ways to prevent and reduce communicable infection. Students identify 'ways' to prevent the spread of communicable disease and rank the 'ways' according to perceived effectiveness. • **Activity 5 Exit statement** This activity consolidates lesson content to support students' sense-of-self in relation to the lesson's learning. Students complete an unfinished sentence to explain why the learning is important to them.

Additional Resources
Australian Government, Department of Health – Communicable diseases Australian Institute of Health and Welfare – Infectious and communicable diseases Government of Western Australia, Department of Health – Communicable disease guidelines World Health Organization – Communicable diseases

Lesson 2: Understanding MD

Learning intentions and support notes	Teaching and learning experiences and resources
Learning intention • Identify why MD is categorised as a communicable disease • Create awareness that adolescents are an at-risk group for MD • Understand the ways MD spreads, including healthy carriers • Identify the symptoms of MD **Focus questions** • What makes a disease communicable? • What are the risks of communicable infection? • How can communicable disease be prevented? • Why is MD a communicable disease? • What are the symptoms of MD? • How is MD spread? • What is a healthy carrier? • Who can be a healthy carrier? **Support Notes** • Refer to support notes within this package.	**Introduce communicable diseases:** • **Activity 6 Communicable disease review** This activity guides students to reflect on the definition and the criteria for identifying a communicable disease (created in Activity 2 – Lesson 1). Students identify why MD is categorised as a communicable disease. **Develop understandings of communicable diseases:** • **Activity 7 MIApp game play**, downloadable from the Amanda Young Foundation website This activity is MIApp game play and takes approximately 25 minutes. It is recommended that students play individually. Accompanying audio is available (if suitable and/or preferred). **Reflect on communicable diseases:** • **Activity 8 MIApp reflection** This activity requires students to reflect on knowledge gained from MIApp game play through a knowledge sort task. • **Activity 9 Seeking help saves lives** This activity requires students to contemplate why seeking help saves lives with MD.

Additional Resources
Healthy WA - Meningococcal disease Healthy WA – Year 10 school-based immunisation program The Royal Children's Hospital Melbourne – Meningococcal infection

Lesson 3: Advocating for our and others' health

Learning intentions and support notes	Teaching and learning experiences and resources
Learning intention • Review ways of staying safe and reducing the spread of communicable diseases • Identify local organisations who advocate for good health and disease prevention • Identify strategies for seeking help when unwell **Focus questions** • What are the symptoms of MD? • How is MD spread? • What is a healthy carrier? • Who can be a healthy carrier? • What ways can help people stay safe from MD? • What organisations advocate for health? **Support Notes** • Refer to support notes within this package.	**Review prevention methods:** • **Activity 10 If only they knew** This activity uses Case File information from student game play. Students review Nakia's story to make recommendations to prevent the spread of MD – based on evidence collected in the Case File. **Develop strategies for seeking help:** • **Activity 11 Who can help?** This activity requires students to identify people they can seek help from to keep safe and healthy. • **Activity 12 Scenarios** This activity requires students to review a set of situations and identify ways (strategies or actions) for staying safe. Students then prepare a chain of links to represent ways to stay safe. • **Activity 13 Advocating for our own and others' health** This activity requires students to conduct a WebQuest to identify organisations who advocate for good health and disease prevention within our community. The Amanda Young Foundation is used as an example.

Teacher support notes
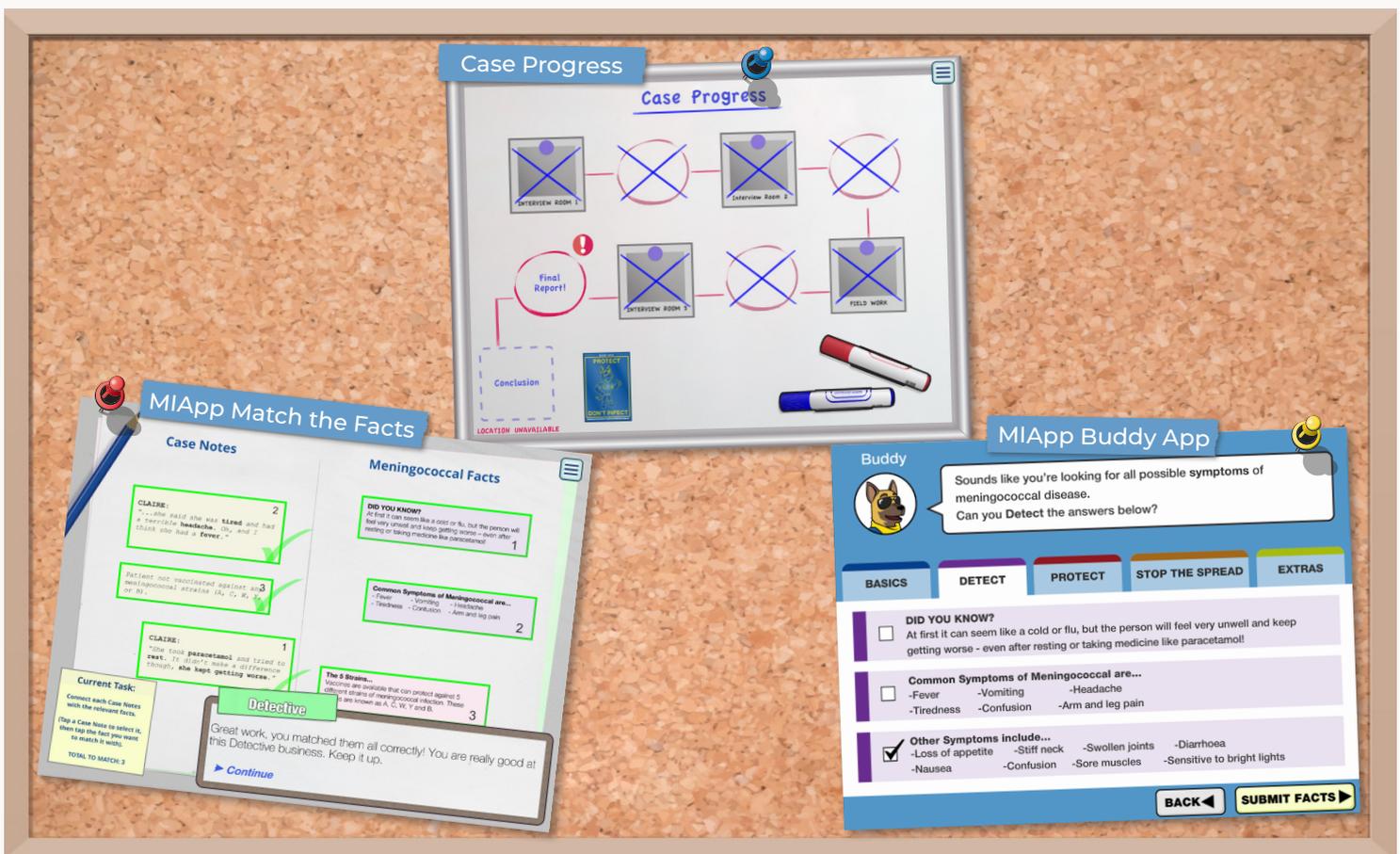
Key understandings and Information	Additional links
1.0 UNDERSTANDING COMMUNICABLE DISEASES	
1.1 What is a communicable disease? • Diseases that spread from person to person such as the common cold or stomach bug. • Caused by infectious agents that can be passed from one person to another or from animals to people. • Transmission can occur directly (through contact with bodily discharge), indirectly (for example, by sharing a drinking glass) or by means of vectors (such as mosquitoes). • Caused by bacteria, viruses, parasites or fungi or their toxin products. • Usually mild and lasts for a few days. • Examples include coronavirus, malaria, influenza, and chickenpox • Steps are taken to prevent, monitor and respond to communicable diseases. • Prevention reduces the risk communicable disease pose to health • Vaccinations are a key preventive measure, but they are not available for all communicable diseases. • Most people experience an infection or a communicable disease during their lifetime. Disease is defined by the Australian Institute of Health and Welfare (AIHW) as "a physical or mental disturbance involving symptoms, dysfunction or tissue damage, while illness (or sickness) is a more subjective concept related to personal experience of a disease. The two main categories of disease that may lead to ill health are infectious and chronic diseases" (AIHW, 2010). Communicable diseases are diseases caused by infectious agents and can be passed from one person or animal to another (AIHW, 2020). Communicable disease "transmission can occur directly (through contact with bodily discharge), indirectly (for example, by sharing a drinking glass) or by means of vectors (such as mosquitoes). Examples of these communicable diseases include coronavirus, malaria, influenza and chickenpox" (AIHW, 2020). Noncommunicable diseases defined by the World Health Organization (WHO) "also known as chronic diseases, tend to be of long duration and are the result of a combination of genetic, physiological, environmental, and behavioural factors" (WHO, 2021). **1.2 How communicable diseases are spread** Direct contact • Person-to-person transmission (direct contact or bodily fluids). • Respiratory droplets from the nose and mouth, such as coughing or sneezing and talking in close proximity (Department of Health, 2015). • Animal-to-person contact – known as zoonotic diseases (Centers for Disease [CDC], 2021). Indirect contact • Respiratory droplets. • Respiratory secretions passed from person-to-person via contaminated surfaces and objects (Department of Health, 2015). • Airborne transmission – some infectious agents can travel and remain in the air for long periods of time (Department of Health, 2015). • Contaminated food and water (CDC, 2021). • Vector-borne disease – infectious agents are transmitted by insects CDC, 2021).	Australian Government, Department of Health - Communicable diseases NSW Government, NSW Health – Diseases by disease group Government of Western Australia, Department of Health – Communicable disease guidelines Queensland Government, Queensland Health – Communicable disease control Australian Institute of Health and Welfare – Health and illness

2.0 UNDERSTANDING THE DISEASE

2.1 What is MD?
- MD is rare and life-threatening.
- Acute infection caused by neisseria meningitidis bacteria not a virus.
- If people received prompt medical attention 70% who develop MD will make a full recovery.
- 20% will have permanent disabilities, such as:
  - Memory loss/concentration problems
  - Sight and hearing problems
  - Kidney and lung problems
  - Amputations – loss of fingers, toes or limbs
- 10% of people who develop MD will die.
- There are different 'strains' of the disease (A, C, W, Y & B). The most common strains found in Australia are C, B, W & Y.
- Meningococcal bacteria can double in the body every 30 minutes.
- The disease progresses rapidly with patients at risk of death within hours.
- Patients can have only septicaemia, only meningitis or both.
- Septicaemia: Infection of the blood.
- Meningitis: Infection of the membranes surrounding the spinal cord and brain (the "meninges").

2.2 At risk groups (The AYF, 2017)
- MD can infect both children and adults. Those most at risk are:
  - Babies and children up to the age of 5 years – this group accounts for two thirds of cases (due to their less mature immune system and tendency to put things in their mouth and share food, drink, and toys).
  - Teenagers and young adults from 15-25 years – primarily due to the socially interactive lifestyle they lead, which is more likely to involve intimate activities such as kissing and sharing drinks.
- Smoking and passive smoking.
- Winter and early spring – higher risk due to the many viruses in the community can weaken the body's immune system. There is also a risk of catching a virus first, followed days later by a meningococcal infection, making the illness much harder to identify.

2.3 Difference between carriage and infection
- Some people in the population (about 1 in 10) are healthy carriers of meningococcal bacteria – this means the organism lives at the back of their nose and throat without causing harm. These carriers may pass it onto someone else without realising and make them sick.
- Being a healthy carrier doesn't mean you will develop MD.
- Meningococcal carriage is most common in the adolescent age group – this puts adolescents at an increased risk of developing MD or passing the bacteria on to others.

Australian Immunisation Handbook – MD

Healthy WA – MD Fact Sheet

Australian Government, Department of Health – MD

The Royal Children's Hospital Melbourne – Meningococcal infection

Better Health – MD

3.0 UNDERSTANDING THE PRINCIPLES OF VACCINATION AS A KEY PREVENTATIVE MEASURE

3.1 How vaccines work
- The best way to protect yourself from MD infection is to be vaccinated.
- Meningococcal vaccines work by introducing the body to small parts of the bacteria, so that they will recognise the bacteria when exposed. Vaccines prevent those who are vaccinated from becoming infected.
- A person who has received the meningococcal vaccine cannot get the disease.
- The meningococcal vaccine prevents both invasive disease and carriage of bacteria at the back of the throat. Therefore, those who are vaccinated protect themselves from becoming unwell, and protect others by transmitting the disease.
- Vaccination against meningococcal during adolescence protects against infection for several years into adulthood.

3.2 Available vaccines
- Vaccines protect against the five strains of meningococcal infection (A, C, W, Y & B). Check first and if you are not vaccinated, talk to your parents or a school nurse about vaccination.

3.3 Are they safe/ effective/ do they hurt?
- The safety of all vaccines is actively and continuously monitored in Australia – the meningococcal vaccine is safe AusvaxSafety.
- Following vaccination, some people report minor symptoms like a headache, a sore arm or feeling tired – these symptoms should pass after a short time but if they do not subside, medical advice should be sort.
- Vaccinating adolescents has been shown to reduce invasive disease in this age group and also, in other vulnerable age groups (protect yourself, protect your community).

Australian Government, Department of Health – Vaccines

Australian Government, Department of Health – Meningococcal immunisation service

4.0 UNDERSTANDING OF PERSONAL HYGIENE BEHAVIOUS TO PREVENT THE SPREAD

4.1 Preventing spread
- The bacteria is spread through mucus and respiratory droplets from the throat, including: kissing, sharing things that you put in your mouth like a water bottle, and openly sneezing and/or coughing.
- Avoid behaviours that can spread saliva/mucus if you want to stop the spread.
- Avoid multiple intimate kissing partners.
- Avoid sharing anything you put in your mouth:
  - Water bottles and cups
  - Mouth guards
  - Eating utensils
- Keep that cough under cover by following government health advice: "cough or sneeze into your arm or a tissue and put the tissue in the bin straight away. Wash your hands with soap and water for at least 20 seconds afterwards" (Australian Government, Department of Health, 2022).
- Do not smoke.

Sanitation:
  - Thorough hand washing
  - Effective cleaning of surfaces to remove germs
  - Use of Protective Personal Equipment (PPE) and appropriate cleaning tools
- Get vaccinated.
- Stay home when you are unwell – you might be at risk of developing MD after you've been sick with another illness.
- Antibiotics are defined as "medicines that treat infections and diseases caused by bacteria. Antibiotics damage bacteria so the body's immune system can fight them. They do not work against viruses" (HealthDirect Australia, 2020).

Better Health – Hand washing

Better Health Channel, YouTube – Staying healthy starts with your hands

Centers for Disease Control and Prevention – Sanitation & Hygiene

Australian Government, Department of Health – About Immunisation

Australian Government, Department of Health – Coronavirus (COVID-19) – Keep that cough under cover

5.0 RECOGNISING THE SIGNS AND SYMPTOMS, AND WHAT TO DO IF YOU OR OTHERS ARE UNWELL

5.1 Signs and symptoms
- The early symptoms can be similar to a cold or flu. HOWEVER, you will feel extremely unwell and will continue to decline even after taking paracetamol and resting.
- Some of the most common symptoms include fever, vomiting, diarrhoea, headache, pain in your arms and legs, drowsiness, and confusion.
- There is a unique purple rash that occurs in some cases of meningococcal infection – IMMEDIATE medical help must be sought. A person should not wait for this rash to appear before seeking medical help (see link below for further details re: rash).
- The signs and symptoms of meningococcal infection can be different depending on whether or not a person has a blood infection (septicaemia) or an infection of the area surrounding the spinal cord and the brain (meningitis) – as a result people experience different signs and symptoms.

5.2 What to do if you or others are unwell
- If you have these symptoms seek medical help and tell someone you trust of the symptoms you are experiencing.
- If you suspect MD, seek medical help – ask an adult you trust to take you immediately to the doctor or hospital.
- HealthDirect is available for advice. Call 1800 022 222.

Symptoms checker available here:
https://www.meningitis.org/meningitis/check-symptoms

Quick access for MIApp

Download Instructions:

MIApp for Windows PC

1. In web browser, visit the [Amanda Young Foundation website](#)

2. Download the zip file:
   - Regular build
   - Small (optimise for smaller screens)

MIApp for iPad – Apple App Store
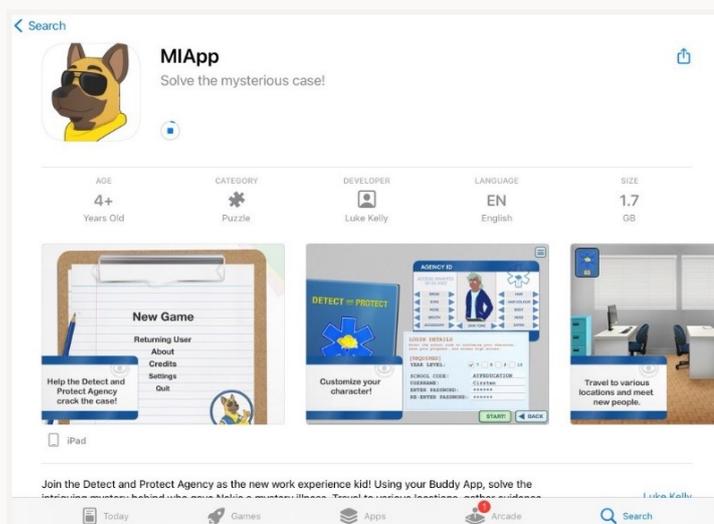
1. Open [Apple App Store](#) app

2. Search for MIApp

3. Download MIApp game for iPad from the [Apple App Store](#)

> **Please refer to Extended MIApp User Guide, for detailed download instructions and full game walkthrough.**

Significant Resources

Australian Curriculum – Cross-curriculum priorities (Version 8.4)

Australian Curriculum – HPE (Version 8.4)

Australian Curriculum – General capabilities

Australian Curriculum – HPE propositions

Australian Government, Department of Health – About Immunisation

Australian Government, Department of Health – Communicable diseases

Australian Government, Department of Health – Meningococcal immunisation service

Australian Government, Department of Health – MD

Australian Government, Department of Health – Vaccines

Australian Immunisation Handbook – MD

Australian Indigenous HealthInfoNet – Communicable diseases

Australian Institute of Health and Welfare – Infectious and communicable diseases

Better Health – MD

Centers for Disease Control and Prevention – Sanitation & Hygiene

Government of Western Australia, Department of Health – Communicable disease guidelines

Healthy WA – Meningococcal disease

Healthy WA – MD Fact Sheet

Healthy WA – Year 10 school-based immunisation program

NSW Government, NSW Health – Infectious diseases

NSW Government, NSW Health – Meningococcal disease fact sheet

Queensland Government, Queensland Health – Communicable disease control

The Royal Children's Hospital Melbourne – Meningococcal infection

Western Australian HPE Curriculum – Assessing

Western Australian HPE Curriculum

World Health Organization – Communicable Diseases

References

Australian Government, Department of Health. (2022), Coronavirus (COVID-19) – Keep that cough under cover, available at: https://www.health.gov.au/resources/publications/coronavirus-covid-19-keep-that-cough-under-cover

Australian Government, Department of Health. (2015), Transmission of respiratory diseases and managing the risk, available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/transmission-of-respiratory-diseases-and-managing-the-risk

Australian Institute of Health and Welfare (AIHW). (2020), Chronic disease, available at: https://www.aihw.gov.au/reports-data/health-conditions-disability-deaths/chronic-disease/about

Australian Institute of Health and Welfare (AIHW). (2020), Infectious and communicable diseases, available at: https://www.aihw.gov.au/reports/australias-health/infectious-and-communicable-diseases

Centers for Disease Control and Prevention (CDC). (2021), Zoonotic Diseases, available at: https://www.cdc.gov/onehealth/basics/zoonotic-diseases.html

HealthDirect Australia. (2020), Antibiotics, available at: https://www.healthdirect.gov.au/antibiotics

World Health Organization (WHO). (2021), Noncommunicable diseases, available at: https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases

Teachers Activity Toolkit

Nakia

Lawrence

Jamie
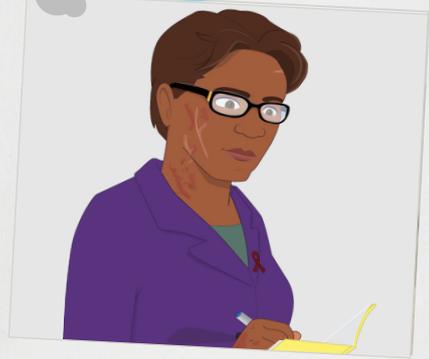
Chief

Bacteria

Claire

Detective

Buddy the Dog

Characters you will meet playing MIApp

Activity 1 Infection control

Note: Teachers can select either Activity 1a Bingo or Activity 1b Balloon bounce to complete this introduction.

Activity 1 a Bingo

Outline:
This fun activity introduces communicable disease to students and explores how communicable diseases can spread from one person to another or from animals to people.

Resources/Equipment:
- Printed bingo cards for each student – recommend A5
- Printed number card (one up to 35 to correspond with number of students in the class)
- Pens – one per student

Teacher information:
1. Hand out bingo cards to each student, students will need a pen to mark their bingo grid.
2. Hand out a number card to each student, emphasise they are not to share their number with anyone until the game starts.

Note:
- Two number cards within the group are marked with a symbol representing a communicable disease
- Do not tell students about the mark
- Use professional judgement when distributing number cards. Select two students who will remain confident when identified as infected with a communicable disease for the purposes of the activity
3. Instruct students to stand up and find a place in the classroom.
4. On the command to begin, students move around the room, asking one classmate at a time, for their number. They mark each number off the grid. When a student has five numbers in a row (horizontal, diagonal, or vertical), the student calls out: "Bingo!" At confirmation of bingo everyone returns to their seat.

For example:

3	8	25	32	2
10	6	16	4	19
21	24	27	11	28
17	30	20	1	18
7	5	12	34	32

KEY MESSAGE: Remind students that two cards were randomly selected and utilised to demonstrate how communicable diseases are spread. At times, people are unaware that they are carriers of a communicable disease as they may not present with any symptoms, but they are infectious.

5. Review bingo cards. Students count how many people they made 'contact' with during the game. Calculate a class average of how many contacts each person encountered and record on whiteboard.
6. Identify the two numbers marked with a symbol. Ask students to check bingo grids and identify if they encountered the two numbers. Tally the number of contacts with the numbers and record on the whiteboard.
7. Explain how communicable diseases are spread – Communicable diseases are diseases that are spread through close contact with carriers or infected individuals and animals. Discuss.
8. Ask students to imagine that the two identified numbers on the bingo cards are random carriers of a communicable disease. Using the board tally of students who encountered these bingo cards, explain the risk of infection to the class. Discuss further spreading of the communicable disease.
9. Class discussion:
   - What ways could have spread the communicable disease in this game?
   - What other ways can communicable diseases spread?
   - What could be done to prevent and/or limit infection in this game?

Activity 1b Balloon bounce

Outline:
This fun activity is an alternative to Activity 1a and designed to introduce and demonstrate the spread of communicable disease.

Resources/Equipment:
· 3 inflated balloons
· Whiteboard and markers

Teacher information:
Round 1
1. Instruct students to stand.
2. Give three students at the front of the classroom an inflated balloon.
3. Instruct students to move the balloons to the back of the classroom without the balloons touching the floor or other surfaces. Three students at the back of the classroom should hold the balloons when a balloon reaches them.
4. Instruct students who touched the balloon to raise their hand. On the whiteboard, record the number of people who touched the balloons.
5. Explain that the balloons represent a communicable disease. Those students who touched the balloon could be infected with the disease.
6. Define communicable disease.
7. Class discussion
   · What ways caused the spread of the communicable disease in this game?
   · What other ways could a communicable disease spread?
   · What could have been done to prevent and/or limit the spread of the communicable disease in this game?

Option – do not complete Steps 5, 6 and 7 until after Round 2.

Round 2
1. Instruct students to sit and remain seated.
2. Repeat the process with the balloons, but this time moving them from the back to the front of the classroom.
3. Record the number of people who touched the balloons on the whiteboard.
4. Explain – by remaining seated student movement was restricted. Restricting movement has the potential to reduce the infection of a communicable disease. Restricting movement represents one level of prevention, limiting the spread of communicable disease.
5. Discuss – other prevention methods. Record suggestions on the board next to Round 2 results.
6. Class discussion
   · What can we do to stay safe and reduce the risk of exposure and/or spread of communicable diseases?
   · How effective was 'remaining seated' in reducing the number of potential infections in the activity?
   · What protection strategy does 'remaining seated' represent in the spread of a communicable disease like COVID 19?
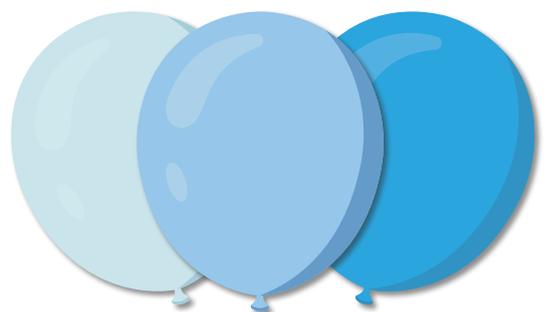
Activity 2 Communicable diseases

Outline:
Guide students to define communicable diseases.

Resources/Equipment:
- Worksheet: Communicable Diseases – one per student or small group

Teacher information:
1. Tell students:
   - Diseases are characterised as an illness or sickness with different signs and symptoms (see teacher support notes for additional information).
   - Diseases can be classified into several types.
   - One type of disease is a communicable disease.
2. Give three students at the front of the classroom an inflated balloon.
   - What is a communicable disease?
   - What is not a communicable disease?
3. Instruct students to complete worksheet: Communicable diseases. Students reflect on prior knowledge.
4. Provide students with opportunity to research missing knowledge by conducting a web search. Alternatively, hold a class discussion for students to share and confirm what they do and do not know regarding communicable diseases.
5. Students write a definition for communicable disease and develop a set of criteria to help recognise a communicable disease. Refer to the Teacher support notes for background information on communicable diseases.

Teacher support notes:

Criteria for recognising a communicable disease:

- caused by infectious agents (bacteria, viruses, parasites or fungi or their toxic products)
- they can be passed from one person to another or from animals to people
- transmission can occur directly (through contact with bodily discharge)
- transmission can occur indirectly (for example, by sharing a drinking glass)
- transmission can occur by means of vectors (such as mosquitoes)

Examples of communicable diseases include coronavirus, malaria, influenza and chickenpox

Source: https://www.aihw.gov.au/reports/australias-health/infectious-and-communicable-diseases

Extension Activity
Students create an infographic or a poster to promote the awareness of communicable diseases to other students.

Activity 3a and 3b Disease Sort

Outline:
This activity explores a range of common diseases and requires students to identify the type of disease, e.g., communicable or noncommunicable.

Note: There is an option for year 7/8 students and an option for year 9/10 students. Teachers can select if they want to conduct this activity in small groups or as a whole class activity.

Resources/Equipment:
- List of diseases - pre-cut into a set(s) of disease cards
- Teacher background information on diseases
- Activity 3b for year 9/10 will need coloured pens, pencils, or markers
- Reusable adhesive putty

Teacher information:
Year 7/8 option
- communicable
- noncommunicable

3a) Small group task
Diseases can be classified as communicable or noncommunicable. Pre-cut the list of diseases into individual disease cards. Instruct students to sort the disease cards into two groups (communicable or noncommunicable). Students explain why a disease fits with a classification.

OR

3b) Whole class activity
Split the whiteboard into two sections – write communicable and noncommunicable in each section. Pair students and distribute one disease card to each pair. Instruct the pair to classify the disease, either communicable or noncommunicable disease. Invite the pair to classify their card by placing on the whiteboard using reusable adhesive putty. Conduct a class discussion to review student classifications, make corrections if needed.

Year 9/10 option
Whole group, small group, or paired activity

1. Students split A4 page into two groups: communicable and noncommunicable diseases.
2. Conduct disease sort: communicable and noncommunicable diseases.
3. Tell students that noncommunicable diseases can be furthered classified – the way the disease is developed. Give examples:
   - Genetic, hereditary, or physiological diseases result from changes in a person's DNA e.g., Type 1 diabetes
   - Environmental diseases result from exposure to toxic chemicals, e.g., asbestosis
   - Behavioural diseases result from repetitive harmful behaviours, e.g., lung cancer
4. Using coloured markers (1, 2 and 3) as per below and circling the disease, instruct students to further classify noncommunicable diseases. For example, Type 1 diabetes = circled by coloured marker 1
   - Genetic – coloured marker 1
   - Environmental – coloured marker 2
   - Behavioural – coloured marker 3

   Remind students that noncommunicable diseases may have more than one cause.

5. Class discussion
   - How can knowledge of diseases keep us safe?
   - Can all diseases be prevented?
   - What actions reduce our risk of disease?

Disease sort

The Australian Government define communicable diseases as diseases that can spread from one person to another or from animals to people (AIHW, 2020).

Noncommunicable diseases are not spread from person to person.

Communicable	Noncommunicable
Chicken Pox	Haemophilia
Measles	Asthma
COVID 19	Breast Cancer
Influenza	Heart Disease
Meningococcal	Skin Cancer
Gastroenteritis	Diabetes
Ross River virus	Lung Cancer
	Salmonella
	Cystic Fibrosis
	Leukemia
	Down Syndrome

Year 9/10
- Genetic, hereditary, or physiological diseases result from changes in a person's DNA, e.g., Type 1 diabetes
- Environmental diseases result from exposure to toxic chemicals, e.g., asbestosis
- Behavioural diseases result from repetitive harmful behaviours, e.g., lung cancer

Communicable	Noncommunicable
HIV/AIDS	Haemophilia (G)
Measles	Asthma (G, E, B)
Herpes	Cystic Fibrosis (G)
MD	Type 1 Diabetes (G)
COVID 19	Breast Cancer (G)
Influenza	Down Syndrome (G)
Chicken Pox	Salmonella (E)
Chlamydia	Scurvy (E)
Gastroenteritis	Type 2 Diabetes (B)
Malaria	Lung Cancer (B, E)
Whopping Cough	Skin Cancer (E)
Rubella	Heart Disease (G,B)
Tuberculosis	Asbestosis (E)
Ross River virus	

Note: There are many ways in which diseases can be classified. Some diseases cannot be clearly classified according to their source, therefore, they may fit into more than one classification.

Activity 4 Skills for staying safe

Outline:
This activity encourages students to consider ways (strategies or actions) to prevent and reduce communicable infection. Students identify ways to prevent the spread of communicable disease and rank the ways according to perceived effectiveness.

Resources and equipment:
- A3 plain paper cut into strips
- Pens or markers

Teacher information:
1. Review and remind students of the number of potential infections represented in Activity 1.
2. Explain that strategies, actions, or ways are used to limit the spread of communicable infection and disease. Some ways are more effective than others.
3. In small groups, students brainstorm and write down ways to stay safe and prevent the spread of communicable disease. One way per strip of paper. Encourage students to write down as many as they can. Students discuss their ways.
4. Working together, students place the strips of paper in a ladder or tower formation. As the bottom is the most stable part of the tower, students agree to place the most effective way here. As the top is less stable, students agree and place the least effective way here. Students are reminded that all ways are safe. Thus, and despite being at the top of the tower, the way is a safe strategy or action to remain safe.
5. Students must agree on the effectiveness of each way to ensure the most effective way is at the base of the tower and the least effective way is at the top.

Strips of paper in ladder or tower formation
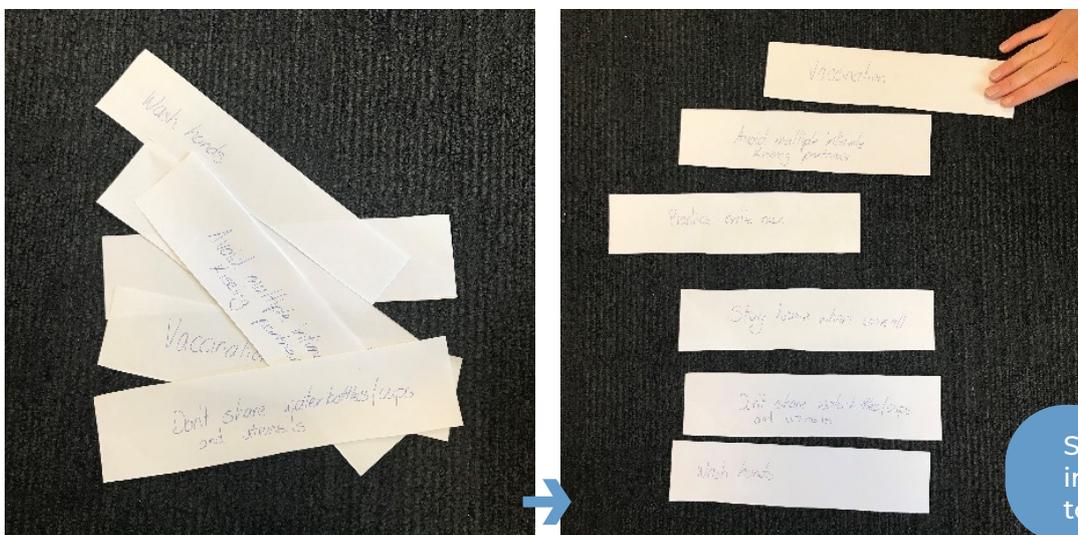
NOTE – Teachers must vet any unsafe or inappropriate suggestions that are not factual and/or present the wrong health message.

KEY MESSAGE: The best way to protect yourself from some communicable diseases like MD, Chicken Pox, Rubella or COVID 19 is to be vaccinated.
Vaccines protect against the five strains of meningococcal infection (A, C, W, Y & B). Check first and if you are not vaccinated, talk to your parents or a school nurse about vaccination.

Activity 5 Exit Statement

Outline:
This activity consolidates lesson content to support students' sense-of-self in relation to the lesson's learning. Students complete an unfinished sentence, explaining why the learning is important to them.

Resources and equipment:
- Whiteboard
- Whiteboard markers

Teacher information:
1. Write on whiteboard: "I need to know how to keep safe from communicable disease because ...."
2. Instruct students to copy and complete the sentence.
3. Discuss student responses.
4. Remind students, communicable diseases and communicable infection are preventable. Applying ways to keep and remain safe can reduce potential infection or carriage of a communicable disease.

> **KEY MESSAGE:** The best way to protect yourself from some communicable diseases like MD, Chicken Pox, Rubella or COVID 19 is to be vaccinated.
>
> Vaccines protect against the 5 strains of meningococcal infection (A, C, W, Y & B). Check first and if you are not vaccinated, talk to your parents or a school nurse about vaccination.

Activity 6 Review communicable diseases

Outline:
This activity guides students to reflect on the definition and the criteria for identifying a communicable disease (created in Activity 2 – Lesson 1). Students identify why MD is categorised as a communicable disease.

Resources and equipment:
- Nil

Teacher information:
1. Student reflection – definition of communicable diseases and criteria created in Activity 2.
2. Class discussion – review definition and criteria. Write on whiteboard as a reminder.
3. Class discussion – but remind students its ok not know the answers to the following questions:
   - Who has heard of MD?
   - Is MD a communicable disease?
   - What do you know about MD?
4. Tell students that MD is categorised as a communicable disease. Discuss and create awareness that adolescents are an at-risk group for MD.

For more information about at-risk groups read Catching MD

> **KEY MESSAGE:** Teenagers and young adults from 15 to 25 years are an at-risk age group, primarily because of the socially interactive lifestyle they lead, which is more likely to involve intimate activities such as kissing and sharing drinks.

Teaching notes

Activity 7 MIApp Game

Outline:
The MIApp Game is downloadable from the Amanda Young Foundation website

Student game play is approximately 25 minutes.

Audio support is available, but headphones are a more suitable option for a classroom.

Resources and equipment:
- Computer access for the MIApp game
- Headphones if students choose to use audio

Teacher information:
1. Access The AYC website to gain access to MIApp. MIApp is available to download on PC or touchscreen tablet. It is recommended that student play individually, however, if required students can play in a pair.
2. Students are prompted to create a username, password, and avatar. To reduce the time taken to complete the game, teachers may choose to provide a guideline for creating a username and limit the time to personalise the avatar.

Activity 8 MIApp Reflection

Outline:
Students reflect on the knowledge gained from playing MIApp and complete a knowledge sort task.

Resources/Equipment:
- Knowledge Sort – Student Activity

Teacher information:
1. Students use the Knowledge Sort -Student Activity to categorise (5) knowledge learnt from game play:
   - Facts about MD
   - Symptoms of MD
   - Spread of MD
   - Seeking help when sick
   - Prevention of MD
2. Class discussion – key facts learnt during game play. Use below as a guide.

Symptoms
- The early symptoms can be like a cold or flu. However, a person with MD with feel extremely unwell and continue to decline even after standard interventions (e.g., taking paracetamol, resting, etc).
- Some of the most common symptoms include fever, vomiting, diarrhoea, headache, pain in your arms and legs, drowsiness, and confusion.

Facts
- Meningococcal is life-threatening but rare.
- Teenagers are a high-risk age group.

Spread
- The Meningococcal bacteria is spread thorough mucus and respiratory droplets from the throat, including via kissing, sharing things that you put in your mouth like a water bottle, and openly sneezing and/or coughing.
- Some people in the population are healthy carriers of MD but they remain healthy.
- This means that the organism lives at the back of a carrier's nose and throat without causing harm.
- Carriers may pass MD onto someone without realising and this can make the person sick.

Seeking help
- If you have these symptoms, seek immediate medical help, and tell someone you trust of the symptoms you are experiencing.

Prevention
- Avoid behaviours that can spread saliva/mucus if you want to stop the spread.
- The best way to protect yourself from MD is to be vaccinated.
- Vaccines protect against the five (5) strains of MD (A, C, W, Y & B). If you are not vaccinated, talk to your parents, carers or a school nurse about vaccination.

Activity 9 Seeking help saves lives

Outline:
Students contemplate why seeking help saves lives with MD and other communicable diseases.

Resources and equipment:
· Nil

Teacher information:
Seeking help save lives with MD because the timing of response is critical.

1. Class discussion
   · Why is seeking help critical with MD?
   · Who should seek help?
   · How can we seek help?

WHY

HOW

KEY MESSAGE: Seeking help is critical in the fight against MD. Immediate or early response can save lives. Seeking help for a friend or family member is caring.

WHO

Activity 10 If only they knew….

Outline:
This activity uses Case File information from student game play. Students review Nakia's story to make recommendations to prevent the spread of MD – based on evidence collected in the Case File.

Resources and equipment:
· Case File Review Student Activity

Teacher information:
1. Class discussion
   · review story line of the MIApp game
   · identify characters in the game
   · Identify scenes, and storyline.
2. Remind students
   · Throughout the MIApp game information was collected and documented in the Case File
   · Case File notes helped Detective Pham, Chief Jones and themselves solve the mystery of Nakia's illness.
3. Instruct students to review Case File notes and prepare a report outlining ways to prevent the infection of another student.
4. Distribute Case File Review Student Activity. Students complete the Case File Review either individually or in small groups.

Note: This activity does not need to be completed as a written task. Teachers can choose to display the Case File Review images on the board and facilitate the review as a class or in small group discussions.

5. Summary discussion and review

   Teacher:
   · Highlights the importance of prevention strategies, early diagnosis, and treatment.

Students:
· List the ways Nakia could have limited her exposure to MD while on camp.
· What could Nakia have done prior to camp to prevent her infection?
· Identify the actions that resulted in a quick diagnosis of Nakia's illness.

Again - Highlight the importance of prevention strategies, early diagnosis, and treatment as ways to keep safe

KEY MESSAGE: MD is rare but life threatening. Early detection and medical treatment with antibiotics are essential.

Activity 11 Who can help?

Outline:
Students complete this activity and identify people they can seek help from to keep safe and healthy.

Resources and equipment:
· Worksheet: *Who can help?* Student Activity sheet per student

Teacher information:
1. Begin this activity with a conversation about the ways we can seek help in an emergency or in a time of need.
2. Lead into discussing how there are people who we can seek help from for ourselves or for others. Ask students to reflect on the people within our network or within our community who we can seek help.

Examples could be:

· Parents
· Carers
· Family
· Siblings
· Friends

· School Staff
· Teachers
· Other adults in your life; neighbours, close family friends, coach, chaplain

· Police
· Helplines
· Ambulance
· Doctors

3. Students reflect on their network and list the primary and secondary support people they could talk to if/when they are unwell or in time of need. Instruct students to list their network in the sections provided on the Who can help? Student Activity Sheet.
4. Students rank the people in order of significance from most important person to other persons who can support in an emergency or when seeking help.
5. Remind students those rankings may change for situation/context. For example, if at a sporting event the coach or the team manager might be the most important person to seek help because parents/carers are not available.
6. Instruct students to apply their knowledge of help seeking strategies to respond to the scenario: Sam's Story. Either print, read or display the scenario on a shared screen.
7. Discuss student responses.
8. Summary discussion
   · Re-iterate the importance of a network and knowing who can help in times of need
   · Networks or helpful people change from situation to situation
   · Consider using MD as an example.
9. Tell students, seeking help saves lives.

> **KEY MESSAGE:** While MD is rare it is life threatening, and a quick response is needed when symptoms appear. Telling people around you that you are not well is especially important and can save lives.

Activity 12 Scenarios

Outline:
Students review a set of scenarios and develop responses to attain and/or stay safe. For each scenario, students review and select the most effective response, justifying their selection.

Resources and equipment:
- Five scenario envelopes – one per scenario. Write the scenario or glue printed version on the outside of the envelope
- 25 response cards

Teacher information:
1. Place students into five groups and distribute each group with a set of five response cards (one scenario response per card).
2. Explain the activity
   - Each group receives an envelope with a scenario on the front – first envelope is considered the home scenario
   - Each group discusses and agrees on a course of action to safely respond to the home scenario
   - Group response to the scenario is written on a response card, with the card positioned/ posted inside the envelope.
3. Start activity
   - After home scenario response is posted in the envelope
   - Scenario envelopes are rotated – Group 1 envelope to Group 2, Group 2 to Group 3 etc
   - Allow groups to review, create a response and post the response
   - Repeat
   - Rotate scenarios until home scenario is returned to the group.
4. Groups receive home scenario envelope and remove scenario responses from the envelope. Students review and decide on the most effective response to the scenario.
5. Groups present the best scenario response to the class and justify their selection.

Activity 13 Advocacy for own and others' health

Outline:
Students conduct a WebQuest to identify organisations who advocate for good health and disease prevention within our community. Use the AYC as an example.

Resources and equipment:
- *WebQuest* – Student Activity
- Internet access for WebQuest

Teacher information:
Lexico defines advocacy as public support for or recommendation of a particular cause or policy.

Lexico defines self-advocacy as the action of representing oneself or one's views or interests.

1. Begin this activity with a discussion about advocacy. Explain that we as individuals can advocate for ourselves (speak up about our beliefs and values) as well as advocate for others (speaking up and acting on behalf of others).
2. Explain:
   - when we express our beliefs through voice or action, we are demonstrating self-advocacy, for example, if you were to refuse an offer of a cigarette from a friend because you believe it is bad for your health you are advocating for your own health. If you were to stand up to a bully who is teasing a friend, you are advocating for others.
   - when demonstrating strategies to stay safe from communicable diseases you are advocating for your own and others health.
3. Introduce the idea that there are many organisations that advocate for health and disease prevention in the community. Use The AYC as an example.
4. In pairs or individually, students conduct a WebQuest on a disease and find organisations that advocate for prevention and promote awareness of disease in Australia.
   WebQuest – Student Activity.
5. Students present findings either as:
   - oral presentation
   - written report/article
   - infographic.

Activity Worksheets

17	26	32	10	12
20	16	12	24	2
15	21	3	30	19
23	1	16	19	13
34	29	18	8	11

✂ -

32	24	26	21	30
23	15	17	10	2
4	26	35	13	19
18	1	16	25	27
6	29	3	8	31

29	23	34	29	2
6	19	28	11	31
21	32	6	2	29
8	8	27	13	2
16	9	17	12	28

23	34	25	11	24
10	32	4	21	1
29	27	7	22	12
9	12	21	6	29
11	16	35	11	3

Left blank intentionally

23	10	21	28	12
7	14	20	6	18
2	20	31	10	35
7	16	28	15	31
11	22	35	1	33

✂ -

19	22	7	32	24
7	19	35	5	31
13	20	3	1	19
17	22	4	29	18
3	13	17	5	28

Left blank intentionally

23	10	21	28	12
7	14	20	6	18
2	20	31	10	35
7	16	28	15	31
11	22	35	1	33

✂ -

19	22	7	31	24
7	19	35	5	31
13	20	3	1	19
17	22	4	29	18
3	13	17	5	28

Left blank intentionally

Bingo Number Cards
Student Activity

1	8	15	22*	29
2	9	16	23	30
3	10	17	24	31
4	11*	18	25	32
5	12	19	26	33
6	13	20	27	34
7	14	21	28	35

Activity 2 Communicable diseases

Brainstorm what is a communicable disease?

Communicable disease

Write a definition for communicable disease.

_____

_____

_____

_____

_____

_____

Create a list of criteria that could be used to identify a communicable disease.

_____

_____

_____

_____

_____

A noncommunicable disease cannot be passed from _____ to _____.

Left blank intentionally

Chicken Pox	Haemophilia	Asthma
Salmonella	Cystic Fibrosis	Breast Cancer
Measles	Leukemia	Lung Cancer
Meningococcal	Down Syndrome	Diabetes
Influenza	Ross River virus	Skin Cancer
COVID 19	Gastroenteritis	Heart Disease

HIV/AIDS	Haemophilia	Asthma
Salmonella	Cystic Fibrosis	Breast Cancer
Measles	Down Syndrome	Lung Cancer
Malaria	Whopping Cough	Scurvy
Influenza	Rubella	Gastroenteritis
Tuberculosis	Meningococcal	Skin Cancer
COVID 19	Herpes	Heart Disease
Type 1 Diabetes	Chlamydia	Ross River Virus
Chicken Pox	Type 2 Diabetes	Asbestosis

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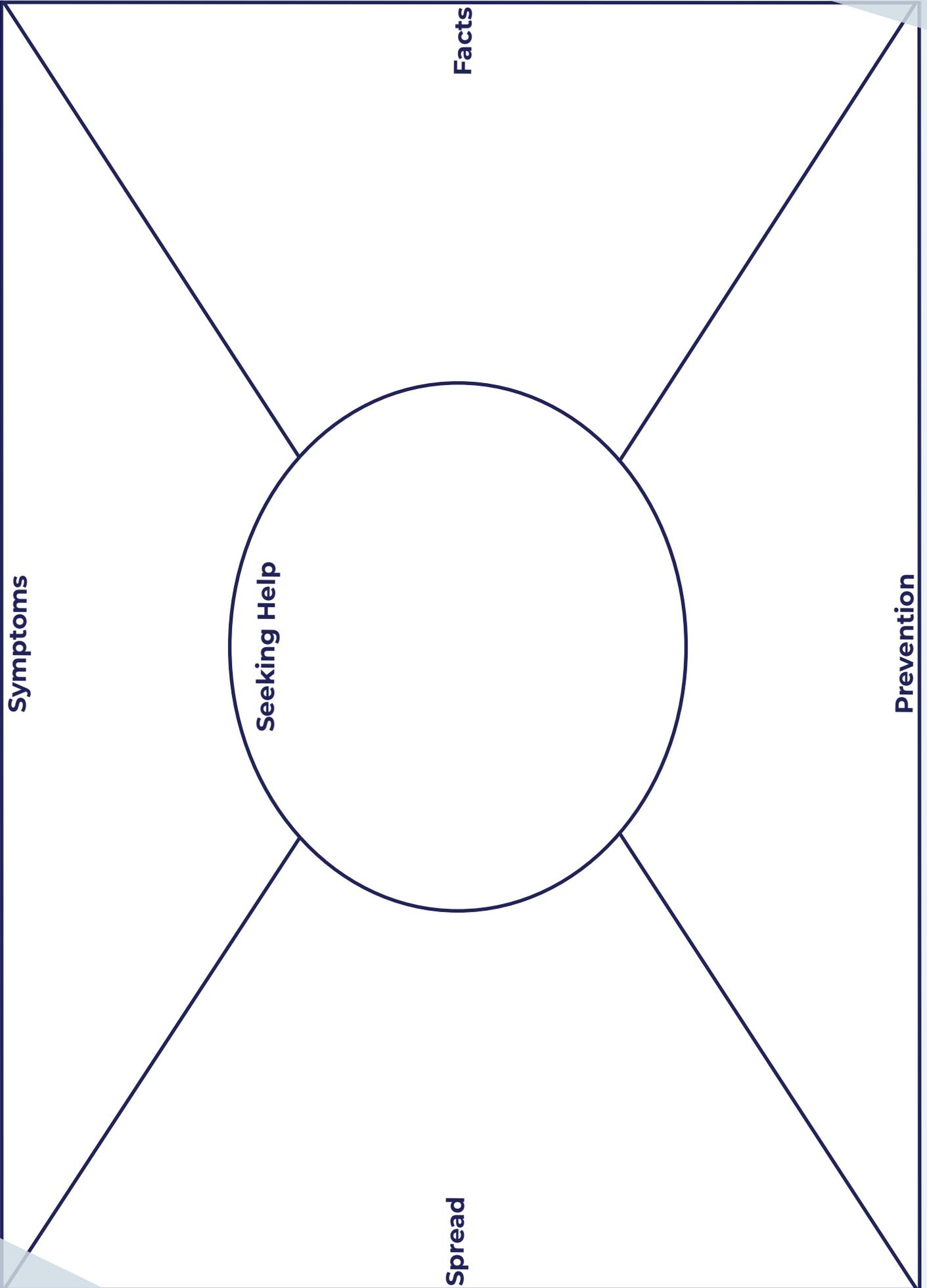
Facts

Symptoms

Seeking Help

Prevention

Spread

Left blank intentionally

Overview

Identify the information here that explains that Nakia could have contracted MD?

Case File #1

Overview People Activities Evidence Reports

CASE #10231

Nakia Thompson, Age 13

SYMPTOMS
*Condition continued to worsen, even after resting or taking medicine
*Tired
*Severe headache
*Fever

DETAILS
Arrived at hospital Monday morning. Had taken medication, but condition worsened rapidly.

MEDICAL NOTES
*Patient not vaccinated against any meningococcal strains (A, C, W, Y, or B).

*Awaiting lab results. Recommend follow-up on where/how patient caught illness.

COMMENTS
CLAIRE: "She took paracetamol and tried to rest. It didn't make a difference though, she kept getting worse."
CLAIRE: "...she said she was tired and had a terrible headache. Oh, and I think she had a fever."

People

What information did you find out about the other people in this case that led you to believe Nakia contracted MD?

Meningococcal Bacteria Case

People

265

CASE #10231

Claire   COMMENTS   Nakia   COMMENTS

Oskar   COMMENTS   Jamie   COMMENTS

SUBMIT FACTS ▶

CASE FILE

BUDDY APP

Actually, we can **link the meningococcal bacteria to someone at the camp**. Cirsten point to the person.

Activities

What were the activities that provided strong evidence that Nakia contracted MD?

Case File #1

Overview People Activities Evidence Reports

CASE #10231

COMMENTS
JAMIE: "Nakia and Claire were in that orange tent next to the cooler. It's pretty close quarters"
DETECTIVE PHAM: "Meningococcal bacteria can be transferred through respiratory droplets when people are in close contact for long periods of time."
DETECTIVE PHAM: "...saliva can be transferred if people share cutlery or a water bottle."

KNOWN ACTIVITIES
*Went to school camp over the weekend
  i. Went for walks by herself
  ii. Did not go swimming

*Spent time with her Claire (her friend)
  i. Shared tent (close quarters)
  ii. May have shared food

*Did not spend time with Oskar (Claire's boyfriend)
* Back via bus, sat next to friend (Claire)

Evidence

List the items of evidence that were most strongly linked to the spread of MD? Explain why these items were considered high risk for spreading MD.

Initial Report

Explain the symptoms Nakia displayed.

Final Report

List what evidence there was that Nakia had been infected with meningococcal. Why didn't Claire and Oskar have any symptoms?

Activity 11 Who can help?

Student Activity

Primary Support

Secondary Support

Activity 11 Who can help?
Student Activity

Seeking help - Sam's story

Sam attends a party.

At the party, Sam hangs out with people who are not known to Sam.

Sam shares alcoholic drinks with these people, drinking form the same bottles as the others. The next morning, Sam messages you.

Sam is feeling sick, complaining of a headache and sore neck. You advise Sam to rest and take Paracetamol.

An hour later, you call Sam to check in. Sam complains of feeling worse and that the Paracetamol didn't help.

What do you do to keep Sam safe?

Write down the steps you would take the get help for Sam and help Sam's parents understand what is wrong.

_____

_____

_____

_____

_____

_____

Write a sentence to explain what you would say to Sam's parents about what really happened last night?

_____

_____

_____

_____

Activity 12 Scenarios

Scenario one

Chris is performing in the interhouse dance competition. Chris has been instructed by the dance captain for the house to use a shared lipstick.

Chris is aware that one dancer in the troupe previously had glandular fever. Chris is concerned about the shared lipstick but wants to perform with the troupe.

What can Chris do to maintain own and others' health and safety?

Scenario two

Glen has been invited to Jackson's with two other mates to game on Saturday. The boys often take turns at each other's homes playing a range of online games. The boys will spend a few hours gaming, using the equipment in the host's home. Jackson has four wireless controllers, one each for his mates.

When at Jackson's, one mate shares that his little brother has gastro.

What can Glen do to maintain own and others' health and safety?

Scenario three

Jamie is at the shopping centre to purchase batteries for a calculator. Jamie has a major exam next week and needs the calculator to perform math functions. Jamie notices some friends from school, sitting at a table in the food hall.

Jamie approaches and sees that the friends are eating popcorn and assumes that the friends have been to see a movie. One friend doesn't look well. The friend has their head in their hands and is complaining of a headache.

What can Jamie do to maintain own and others' health and safety?

Scenario four

Stevie is at training and is getting a lift home with another player from the team. Stevie knows the family well but has forgotten to bring a mask to training. Stevie knows that masks are mandatory for all inside activity.

What can Stevie do to maintain own and others' health and safety?

Scenario five

Tracy is at a party with friends including Tracy's friend Dash. Most people at the party are sharing drinks. Tracy wants to socialise with friends but does not want to drink from the shared bottle. Tracy shares this view with mates and they allow Tracy to pour a drink from a new bottle.

The next day, Dash, who is Tracy's best friend, messages to say that their sister is in hospital with MD. Dash is really upset and worried for their sister.

What can Tracy do to maintain own and others' health and safety?

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Identify organisations who advocate for health and disease prevention within the community

1. List organisations that advocate and promote awareness of disease in Australia? (Some you many know of already, others you may have to search for)

   Select one organisation to investigate further.

2. Identify the organisation's name and purpose. Think about the disease and/or health condition and identify why it is important to create awareness about the disease/health condition.

3. Identify ways the organisation raises awareness about the disease/health condition.

Present findings either as:

- oral presentation
- written report / article
- infographic

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