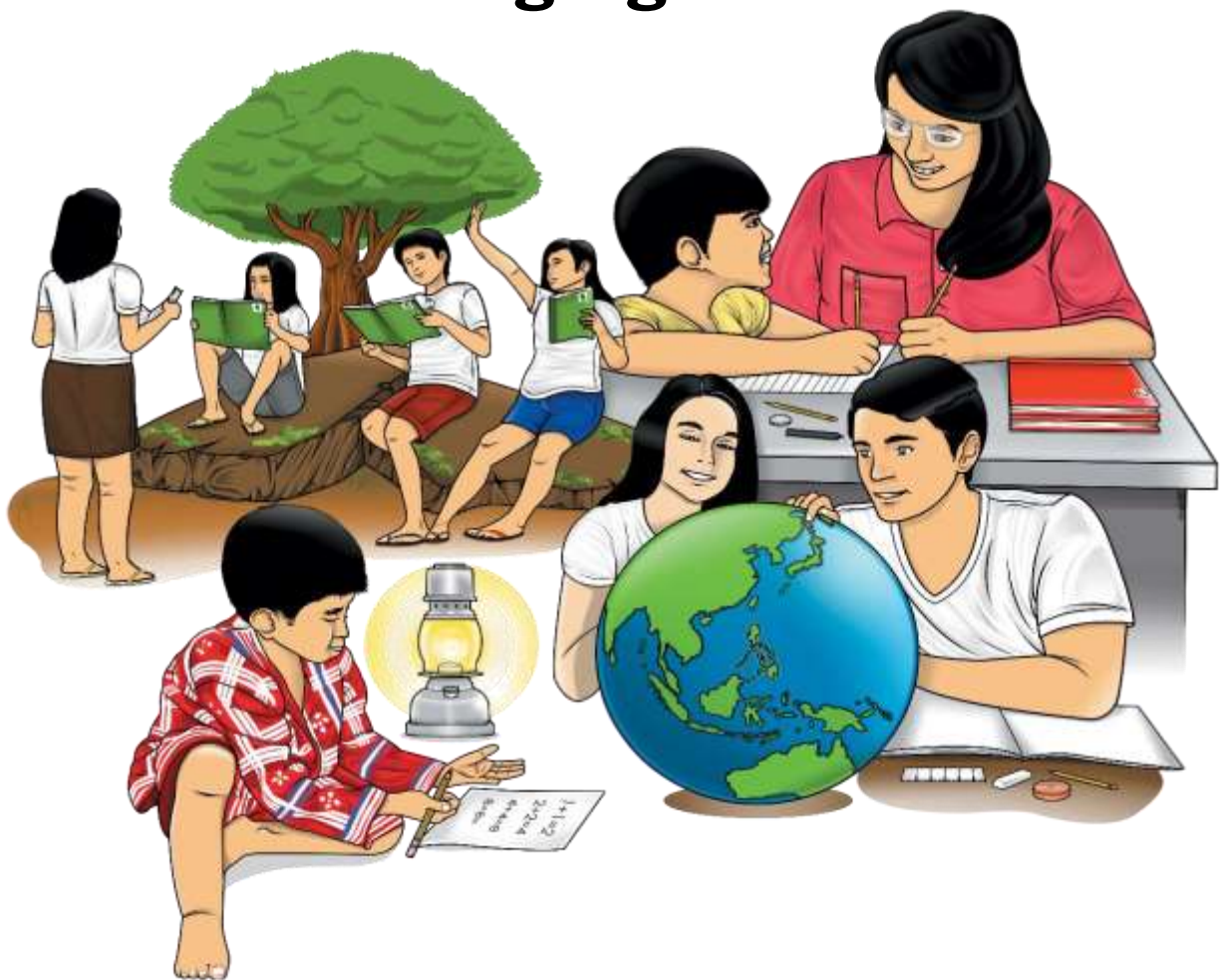


Health

Quarter 3 - Module 4: Nature of Emerging and Re-emerging Diseases



Health – Grade 8
Alternative Delivery Mode
Quarter 3 – Module 4: Nature of Emerging and Re-emerging Diseases

First Edition, 2020

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Health

Quarter 3 – Module 4: Nature of Emerging and Re-emerging Diseases

Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.



What I Need to Know

This module was designed and written with you in mind. It is here to help you learn the cause and effect, and the symptoms of Emerging and Re-emerging diseases. The scope of this module permits it to be used in many different learning situations. The language used recognizes the diverse vocabulary level of students. The lessons are arranged to follow the standard sequence of the course. But the order in which you read them can be changed to correspond with the textbook you are now using.

As you explore the topic, you will see your personal responsibility and healthful practices in the prevention and control of communicable diseases.

The module contains:

- **Lesson 1: Emerging and Re-emerging Diseases**

After going through this module, you are expected to:

1. analyzes the nature of emerging and re-emerging diseases (H8DD – III d- e – 20)
 - a. describe the signs and symptoms of emerging and re – emerging diseases;
 - b. identify the disease based on the symptoms shown; and
 - c. compose a jingle about the emerging and re – emerging diseases and its prevention.



What I Know

Directions: Read the following questions carefully. Choose the best answer. Write only the letter of your choice in your activity notebook.

1. Which of the following is caused by spirochete bacteria known as *Leptospira Interrogans*?
A. AH1N1 B. avian Influenza C. leptospirosis D. SARS
2. Which refers to a rare infection caused by *Neisseria meningitidis*?
A. AH1N1 B. avian influenza C. meningococemia D. SARS
3. What disease is common among wild aquatic birds and can infect domestic poultry?
A. AH1N1 B. avian influenza C. leptospirosis D. SARS
4. Which of the following disease is NOT caused by a virus?
A. AH1N1 B. chikungunya C. leptospirosis D. SARS
5. What disease is spread through close contact with infected person and droplet secretion?
A. dengue B. chikungunya C. leptospirosis D. SARS
6. Which of the following is NOT a symptom of swine flu?
A. coughing B. fever C. headache D. purple rashes
7. Which of the following diseases is commonly spread by the feces – to – mouth route and inhalation of virus?
A. AH1N1 C. foot and mouth disease
B. chikungunya D. leptospirosis
8. What is the other name for *Aedesalbopictus*?
A. Asian tiger mosquito C. swine flu
B. bird flu D. yellow fever mosquito
9. Which of the following is TRUE about AH1N1?
A. AH1N1 is also called Swine flu
B. AH1N1 is caused by spirochete bacteria.
C. AH1N1 Influenza is spread by eating pig and other pig products.
D. AH1N1 Influenza is spread by mosquitoes.
10. Which of the following is NOT a symptom of Meningococemia?
A. headache B. high fever C. purple rash D. constipation
11. What is the cause of Hand, Foot and Mouth Disease?
A. *aedesalbopictus* C. bacteria
B. *aedes Aegypti* D. virus

12. Which of the following statements is TRUE?
- A. SARS is caused by a virus.
 - B. Meningococemia is a contagious disease.
 - C. Leptospirosis is caused by spirochete bacteria.
 - D. All the above.
13. What does DOH stand for?
- A. Duties of Health
 - B. Department of Health
 - C. Direct Operation on Health
 - D. Department Operation on Health
14. Which of the following is TRUE regarding COVID-19?
- A. It is spread through air droplets from human to human, and potentially through inanimate objects contaminated with the virus.
 - B. It is spread through eating infected pigs and poultry.
 - C. It is caused by H1N1 virus.
 - D. It came from a laboratory in China.
15. What do people need to do to prevent from getting Chikungunya?
- A. Use mosquito repellent on exposed skin.
 - B. Penetrate gaps in tire swings so water channels out.
 - C. Dodge mosquito nibble by wearing pants and long-sleeved shirts.
 - D. All of the above.

Lesson 1

Emerging and Re-emerging Diseases

Infectious diseases emerging throughout history have included some of the most feared epidemics of the past. New infections continue to emerge today, while many of the old epidemics are with us still but through scientific research, preventive measures and treatment are available to control and combat its spread.



What's In

Directions: Answer the following questions in your activity notebook.

1. What are the most common communicable diseases that you know? Write at least three examples.
A. _____
B. _____
C. _____
2. How can we prevent and control these diseases? Suggest ways based on experience or own observation.
A. _____
B. _____
C. _____
3. What are newly developed diseases nowadays that you know? Give at least three.
A. _____
B. _____
C. _____



What's New

Activity 1. LOOP – A – WORD

Directions: Look for five (5) words related to developing and existing diseases in the grid below. The words may be hidden in horizontal and diagonal directions. Write the words in your activity notebook.

D	A	C	U	T	E	A	E	U	G	E	N	E	L	T
Y	H	Q	V	F	O	D	H	A	D	N	L	E	E	O
M	I	R	C	G	N	R	I	S	E	A	R	A	P	N
A	N	P	X	D	I	S	E	A	S	E	O	G	T	K
E	I	H	S	Y	M	N	J	A	V	N	A	T	O	C
R	E	S	P	I	R	A	T	O	R	Y	H	N	S	H
O	V	K	I	N	F	L	U	E	N	Z	A	C	P	I
M	C	L	E	U	O	I	S	S	O	H	V	N	I	K
A	X	D	W	I	O	H	Y	G	S	E	I	I	R	U
F	W	S	Q	O	T	N	P	R	L	U	A	N	O	N
H	S	A	A	P	D	J	L	F	E	Q	N	O	S	G
Y	F	Z	X	R	K	L	E	Q	E	K	M	R	I	U
T	V	Z	O	I	G	J	K	D	P	N	K	A	S	N
I	N	M	O	U	T	H	B	C	J	A	Y	S	N	Y
M	E	N	I	N	G	O	C	O	C	C	E	M	I	A

WORDS THAT YOU FOUND:

- 1.
- 2.
- 3.
- 4.
- 5.

Guide Questions:

1. What are the words you have formed?
2. What can you associate with the words that you have formed?



What is It

According to World Health Organization (WHO), **emerging diseases** are those due to newly identified and previously unknown infections which cause public health problems either locally or internationally.

Re-emerging diseases are diseases due to the reappearance and increase in number of infections which are already known but had formerly fallen and was no longer considered a public health problem.

The following are the Emerging and Re – emerging diseases, their symptoms, and prevention:

1. **Leptospirosis** - is caused by spirochete bacteria known as *Leptospira interrogans*. This disease is spread by the urine of infected animals, both domesticated and wild. The bacteria can survive in the water and soil for months. Signs and symptoms of leptospirosis can range from general to specific symptoms which include:

- | | |
|---------------|-------------------------|
| 1. chills | 4. abdominal pain |
| 2. high fever | 5. conjunctival redness |
| 3. headache | 6. muscle pains |

In the Philippines, the most common cause of contacting leptospirosis is wading through flood waters with exposed areas such as abraded skin or open wounds. The Department of Health (DOH) warns about wading through floods in the rainy season as rates of leptospirosis spike during this time.

If with skin abrasions, cuts, or open wounds, and wading the flood is unavoidable, then it is advisable to seek medical consult and be prescribed with the right antibiotics to prevent and treat leptospirosis.

2. **Meningococemia** - is a rare infection caused by the *Neisseria meningitidis* bacteria. There are many bacteria other than *Neisseria* that can cause meningitis.

The symptoms of meningococemia include:

- | | |
|---------------|--------------------------|
| 1. vomiting | 6. high fever |
| 2. headache | 7. drowsiness |
| 3. coughing | 8. convulsions |
| 4. dizziness | 9. purple rashes |
| 5. stiff neck | 10. unstable vital signs |

Children are most vulnerable to this disease because of their low resistance, but it can also affect people of all ages. This disease is dangerous. In fact, about 5 to 15% of people affected die within the period of 24 to 48 hours. However, early detection and treatment with penicillin increase the chances of survival.

The Department of Health (DOH) recommends that the following measures must be observed:

1. Avoid crowded places.
2. Maintain a clean environment.
3. Wash hands frequently with soap and water.
4. Avoid close contact with meningococemia patients.
5. Increase resistance by maintaining a healthy lifestyle – including a nutritious, well – balanced diet, regular exercise, adequate rest and sleep, and avoiding tobacco and alcohol.
6. Do not share utensils, cups, water bottles, lipstick, cigarettes, musical instruments with mouthpieces, mouth guards, or anything else that has been within the mouth of a tainted individual.



Courtesy of Charles V Sanders. (The Skin and Infection: A Color Atlas and Text, Sanders CV, Nesbitt, LT Jr [Eds], Williams & Wilkins, Baltimore, 1995).

3. **AH1N1 Influenza** – is caused by H1N1 influenza virus. The **Spanish flu** in 1918 is one of the deadliest pandemics in human history. It was caused by H1N1 influenza virus and infected approximately 500 million people globally, subsequently causing 50-100 million deaths. In 2009, a new strain of H1N1 caused the **Swine flu**, which spread among humans globally and it was labeled as a pandemic. However, please note that this new strain was not a zoonotic disease because it was not transferred from pigs to humans, rather it is spread through airborne droplets from an infected human to another, and possibly through contact with contaminated inanimate objects also known as fomites.

You can protect yourself from getting infected with the disease by having a flu vaccine or flu shot yearly. People infected with swine flu can be contagious one day before they show any symptoms, and for seven days after they get sick.

Most symptoms are the same as regular flu. These include the following:

- | | |
|------------|-------------------------|
| 1. chills | 5. headache |
| 2. fever | 6. sore throat |
| 3. cough | 7. body aches |
| 4. fatigue | 8. stuffy or runny nose |

Vaccines are available to prevent infection with AH1N1.

4. **Hand Foot and Mouth Disease (HFMD)** - is caused by Coxsackievirus A virus. It is transmitted person to person by the feces-to-mouth (fecal-oral) route. However, they also can be transmitted by contact with oral and respiratory droplets, and thus can be inhaled. Once infected, symptoms usually show up in three to six days. Symptoms include the following:
1. tiredness
 2. low fever
 3. an itchy rash with red spots, lumps, and/or small blister on the hands, and feet
 4. small, raw, canker – like sores on the tongue and inside of the cheeks that make the mouth painful

There is no specific treatment, but the discomfort can be eased at home by doing the following:

1. Eat or drink cold beverages/food (ice pops, ice cream, water, etc.)
2. Avoid acidic foods and beverages, salty foods, and spicy foods.
3. Eat soft foods that can easily melt in your mouth.
4. After meals, rinse your mouth with warm water.
5. Topical oral anesthetic helps relieve the pain of the mouth.
6. To help relieve general discomfort, take the pain medications such as paracetamol, mefenamic acid or ibuprofen.

Prevention of the disease include the following practices:

1. Wash your hands properly especially after using the toilet and before eating.
2. Do not share glasses, silverware, or toys that have been in another person's mouth.

5. **Severe Acute Respiratory Syndrome (SARS)** - is an infection caused by a virus called SARS – associated with corona virus (SARS – CoV). It can spread through close contact with infected person and through droplet secretion.

The signs and symptoms include the following:

1. high fever
2. headaches
3. body aches
4. difficulty in breathing
5. overall feeling of discomfort
6. diarrhea
7. dry cough after two to seven days

To avoid SARS, see to it that you do not share drinking glasses and eating utensils with the infected person. Avoid close contacts such as kissing, hugging, touching, and even talking too close. Be sure you are within three feet away when talking to someone with SARS.

6. **Chikungunya** - is a viral disease transmitted to humans by the bite of infected *Aedes Aegypti* mosquitoes. Its incubation period is 2 - 12 days, but usually it may be from 3 to 7 days only. Those with acute chikungunya fever may experience it for a few days to a couple of weeks but the feeling of fatigue may last for several weeks.

An infected person may also suffer from joint pains or arthritis which may last to several weeks to several months.

Signs and symptoms of Chikungunya include the following:

1. nausea
2. headache
3. vomiting
4. swelling of joints
5. stiffness of joints
6. rash and fever
7. fatigue (weakness)
8. myalgia (muscular pain)
9. debilitating arthralgia (joint pain)

Prevention of chikungunya includes the following:

1. Dodge mosquito nibble by wearing pants and long – sleeved shirts.
2. Use mosquito repellent on exposed skin.
3. Penetrate gaps in tire swings so water channels out.
4. Secure your windows and doors with screens to keep mosquitoes out.
5. Change the water in pet dishes and replace the water in bird baths weekly.
6. Get rid of mosquito breeding sites by emptying standing water from flower pots, drums, and pails.

Anyone with chikungunya fever should limit his/her exposure to mosquito bites in order to avoid spreading the infection further. The individual ought to remain inside or under a mosquito net.

Chikungunya Virus (CHIKV) is transmitted by the bite of an infected mosquito. Mosquitoes are infected and serve as reservoirs once they bolster on an individual infected with CHIKV.

Aedes aegypti (the yellow fever mosquito), a family holder breeder and daytime biter, is the essential vector of CHIKV to humans. *Aedes albopictus* (the Asian tiger mosquito) may also play a part in human transmission. Other wild animals like monkey may also serve as reservoirs of the virus.

7. Avian Influenza – is a type of flu that normally happens in birds. The pathogen is the A H7N9 virus which appears to have derived from several avian influenza viruses common among wild aquatic birds worldwide and can infect domestic poultry and other bird and animal species. In rare cases, it has spread from infected birds to humans. Even though bird flu is rare in humans when it does happen it is usually severe. It is transmitted by exposure to infected poultry. To date, there is no evidence of sustained human-to-human transmission.

Signs and symptoms of avian influenza include the following:

1. fever
2. cough
3. difficulty of breathing
4. headache
5. muscular pains or myalgia
6. generalized weakness or malaise

If untreated it can lead to complications such as pneumonia, acute respiratory distress syndrome (ARDS) and even multi-organ failure.

During avian flu outbreak, avoid contact with birds to prevent being infected. Seek medical consult once with symptoms.

8. **COVID – 19** - Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness.

The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes, so it's important that you also practice respiratory etiquette (for example, by coughing into a flexed elbow). COVID-19 affects different people in different ways. Most infected people will develop mild to moderate illness and recover without hospitalization.

Most common symptoms: fever, dry cough, tiredness.

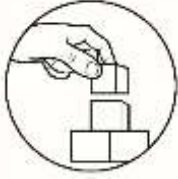
Less common symptoms: aches and pains, sore throat, diarrhea, conjunctivitis, headache, loss of taste or smell, a rash on skin, or discoloration of fingers or toes.

Serious symptoms: difficulty breathing or shortness of breath, chest pain or pressure, loss of speech or movement.

Seek immediate medical attention if you have serious symptoms. Always call before visiting your doctor or health facility. People with mild symptoms who are otherwise healthy should manage their symptoms at home. On average it takes 5–6 days from when someone is infected with the virus for symptoms to show, however it can take up to 14 days.

Prevent infection and to slow transmission of COVID-19, do the following:

1. Wash your hands regularly with soap and water, or clean them with alcohol-based hand rub.
2. Maintain at least 1-meter distance between you and people coughing or sneezing.
3. Avoid touching your face.
4. Cover your mouth and nose when coughing or sneezing.
5. Stay home if you feel unwell.
6. Refrain from smoking and other activities that weaken the lungs.
7. Practice physical distancing by avoiding unnecessary travel and staying away from large groups of people.
8. Be well informed about the COVID-19 virus, the disease it causes and how it spread.



What's More

Activity 1. Fill Me!

Directions: Describe the symptoms and preventive measures of the following diseases. Write your answer in your activity notebook.

Emerging and Re – emerging Diseases	Symptoms	Preventive Measures
Hand, Foot and Mouth Disease	1. 2.	1. 2.
Meningococemia	1. 2.	1. 2.
Chikungunya	1. 2.	1. 2.
COVID-19	1. 2.	1. 2.

Activity 2. What Am I?

Directions: Read the situations below and answer the questions. Write your answers in your activity notebook.

1. Christian has sudden onset of fever, headache, nausea, vomiting and appearance of purple rashes on his abdomen. What disease is he suffering from?

2. During a typhoon there was a flood and Anna saved her livestock by wading into the water. Unbeknown to her she has a cut on her left foot. A week later, she started having headache, high fever, conjunctival redness, and abdominal pain. What do you think is the disease she is suffering from?

3. Hannah violated the quarantine and went to her friend's house to party. In the party social distancing, wearing of face mask, and face shield were not followed. About 5 days after, her friend called and said someone in the party tested positive for COVID-19, she was advised to self-quarantine. What are the signs and symptoms should Hannah lookout for?



What I Have Learned

Great Job! Now, let us check what you have learned in this module.

Has your understanding about the Emerging and Re – Emerging diseases widened after the discussion? Express your thoughts by answering the questions below. Write your answers in your activity notebook.

1. Among the emerging and re-emerging diseases, what do you think possess the greatest threat to public health today? In what ways has it affected you?

2. What can you do to control the spread of Emerging and Re-Emerging Diseases?

3. As pathogens such as viruses and bacteria mutate there is a possibility of another pandemic. What do you think government agencies, businesses, and other institutions around the world must do to prevent another pandemic to happen?



What I Can Do

Activity 1. Read, Analyze, and React (5 points each)

Directions: Read, analyze, and give your idea on the given situations below. Write your answers in your activity notebook.

1. There is an outbreak of Swine flu in your municipality. People stopped eating pork for the fear of getting the flu. Applying what you have learned from this module, what will you tell your family, friends, and neighbors about the transmission of Swine flu?

2. Your healthy parents were offered to be vaccinated against COVID-19. Knowing that you are taking health education class, they asked for your advice whether they should take it or not. What will you tell your parents?

Activity2. Write a Jingle!

Directions: Compose a two-stanza modified jingle about the emerging and re-emerging diseases and how to anticipate and control its spread. Using the tune of the song “Dance Monkey” by Tones and I, the jingle must run for a maximum of 2 minutes. You will be evaluated according to the rubrics below. Write the composition in your activity notebook.

Rubrics:

	5	4	3	2/1
Lyrics	The lyrics of the song is clear. The words used are appropriate.	The lyrics of the song is clear but some of the words are used inappropriately.	Most of the lyrics of the song are used inappropriately.	The lyrics of the song is not clear and the words are inappropriate.
Creativity	The song composed is original and consistently coincides with the tune of the song “Dance Monkey.”	The song composed is original and some lyrics coincide with the tune of the song “Dance Monkey.”	The song composed does not consistently coincide with the tune of the song “Dance Monkey.”	The song composed is not original and does not coincide with the song “Dance Monkey.”
Organization	The lyrics of the song is 90 – 100% organized.	The lyrics of the song is 80% organized.	The lyrics of the song is 70% organized.	The lyrics of the song is not organized at all.
Relevance to the topic	The lyrics of the song clearly expresses the theme.	The lyrics of the song relates to the theme but with minimal explanation.	The lyrics of the song vaguely expresses the theme.	The lyrics of the song does not relate to the theme.



Assessment

Directions: Read the following questions carefully. Choose the best answer. Write only the letter of your choice in your activity notebook.

- Which of the following disease is NOT caused by a virus?
A. AH1N1 B. chikungunya C. leptospirosis D. SARS
- Which of the following is NOT a symptom of Meningococemia?
A. headache B. high fever C. purple rash D. constipation
- What does DOH stand for?
A. Duties of Health C. Direct Operation on Health
B. Department of Health D. Department Operation on Health
- Which of the following diseases is commonly spread by the feces – to – mouth route and inhalation of virus?
A. AH1N1 C. foot and mouth disease
B. chikungunya D. leptospirosis
- Which of the following is caused by spirochete bacteria known as *Leptospira Interrogans*?
A. AH1N1 B. avian Influenza C. leptospirosis D. SARS
- What do people need to do to prevent from getting Chikungunya?
A. Use mosquito repellent on exposed skin.
B. Penetrate gaps in tire swings so water channels out.
C. Dodge mosquito nibble by wearing pants and long – sleeved shirts.
D. All of the above.
- What disease is spread through close contact with infected person and droplet secretion?
A. dengue B. chikungunya C. leptospirosis D. SARS
- Which refers to a rare infection caused by *Neisseria meningitidis*?
A. AH1N1 B. avian influenza C. meningococemia D. SARS
- What is the other name for *Aedesalbopictus*?
A. asian tiger mosquito C. swine flu
B. bird flu D. yellow fever mosquito
- Which of the following is TRUE regarding COVID-19?
A. It is spread through air droplets from human to human, and potentially through inanimate objects contaminated with the virus.
B. It is spread through eating infected pigs and poultry.
C. It is the caused by H1N1 virus.
D. It came from a laboratory in China.
- Which of the following is NOT a symptom of swine flu?
A. coughing B. fever C. headache D. purple rashes
- What disease is common among wild aquatic birds and can infect domestic poultry?
A. AH1N1 B. avian influenza C. leptospirosis D. SARS
- Which of the following is TRUE about AH1N1?
A. AH1N1 is also called Swine flu
B. AH1N1 is caused by spirochete bacteria.
C. AH1N1 Influenza is spread by eating pig and other pig products.
D. AH1N1 Influenza is spread by mosquitoes.

14. Which of the following statements is TRUE?
 A. SARS is caused by a virus.
 B. Meningococemia is a contagious disease.
 C. Leptospirosis is caused by spirochete bacteria.
 D. All the above.
15. What is the cause of Hand, Foot and Mouth Disease?
 A. *aedesalbopictus* B. *aedes Aegypti* C. bacteria D. virus



Additional Activities

Activity 1. Family First! Safety First!

Directions: In your activity notebook, copy and complete the chart by putting a check mark at appropriate column after each question. This activity will let us know if you are doing the necessary preventive measures in your family and in your respective homes.

Guide Questions	Always	Sometimes	Never
1. Does your family maintain a clean environment in your house?			
2. Does your family share utensils, cups, water bottles, lipstick, cigarettes, or anything else?			
3. Does your family use mosquito repellent on exposed skin?			
4. Does your family get rid of mosquito breeding sites by emptying standing water from flower pots, drums, and pails?			
5. Does your family get news on emerging and re-emerging diseases from reliable sources?			
6. Does your family avoid close contacts such as kissing, hugging, touching, and even talking too close to other people?			
7. Does your family sanitize everything in your house?			
8. Does your family wash their hands frequently with soap and water?			
9. Does your family wear face mask, and face shield and practice social distancing when going out?			

10. Does your family increase resistance by maintaining a healthy lifestyle – including a nutritious, well – balanced diet, regular exercise, adequate rest and sleep, and avoiding tobacco and alcohol?			
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Activity 2. Fit and Fam.

Direction: Based on the result of the activity, design or create a Family Health Program to follow and ensure that every member of the family will have a healthy lifestyle. Write this in your activity notebook.

Objectives	Activity	Frequency	Outcome
Ex. To maintain a clean environment	Clean the surroundings	2x a day	Cleaned and sanitized surroundings

In designing your plan, please be guided with the following rubrics:

Your Plan should be SMART

	3	2	1
Objectives	All objectives have a specific goal	Some of the objectives have a specific goal	None of the objectives have a specific goal
Activity	All activity is clearly stated	Some of the activity is clearly stated	None of the activity is clearly stated
Frequency	All activity can be achieved in a given period of time	Some of the activity can be achieved in a given period of time	Some of the activity can be achieved in a given period of time
Outcome	All the expected outcome is realistic	Some of the expected outcome are realistic	None of the expected outcome are realistic



Answer Key

15. D	What I Know Multiple Choice	What's New LOOP - A - WORD	Answers: (Answers are in any order) 1. ACUTE 2. AH1N1 3. DISEASE 4. RESPIRATORY 5. INFLUENZA 6. FOOT 7. MOUTH 8. LEPTOSPIROSIS 9. CHIKUNGUNYA 10. AVIAN
14. A			
13. B			
12. D			
11. D			
10. D			
9. A			
8. A			
7. C			
6. D			
5. D			
4. C			
3. B			
2. C			
1. C			
15. D	Assessment Multiple Choice	Answers: (Answers are in any order) 1. ACUTE 2. AH1N1 3. DISEASE 4. RESPIRATORY 5. INFLUENZA 6. FOOT 7. MOUTH 8. LEPTOSPIROSIS 9. CHIKUNGUNYA 10. AVIAN	
14. D			
13. B			
12. A			
11. D			
10. C			
9. B			
8. A			
7. C			
6. D			
5. C			
4. C			
3. D			
2. A			
1. D			

What's More
 Activity 2
 What Am I?
 1. Meningococemia
 2. Leptospirosis
 3. Cough, colds, difficulty of breathing, fever, loss of smell, loss of taste, abdominal pain, diarrhea.

What's More
 Activity 1. Fill Me!
 Directions: Write the symptoms of the following diseases. (In any order)

Emerging and Re-emerging Diseases	Symptoms	Preventive Measures
Hand Foot and Mouth Disease	Tiredness Low fever An itchy rash with red spots, lumps, and/or small blisters on the feet Small, raw, canker-like sores on the tongue and inside of the cheeks that make the mouth painful	1. Wash your hands properly after using the toilet. 2. Do not share glasses, silverware, or toys that have been in another person's mouth.
Meningococemia	Vomiting Headache Coughing Dizziness Stiff neck High fever Drowsiness Convulsions Purple rashes Unstable vital signs	1. Avoid crowded places. 2. Maintain a clean environment. 3. Wash hands frequently with soap and water.
Chikungunya	Nausea Headache Vomiting Swelling of joints Stiffness of joints Rash and fever Fatigue (weakness) Myalgia (muscular pain) Debilitating arthralgia (joint pain)	1. Dodge mosquito nibble by wearing pants and long-sleeved shirts. 2. Use mosquito repellants on exposed skin. 3. Penetrate gaps in tire swings so water channels out.
COVID-19	High fever Headaches Body aches Difficulty in breathing Overall feeling of discomfort Mild respiratory symptoms Diarrhea Dry cough	1. Do not share drinking glasses and eating utensils with the infected person. 2. Avoid close contacts such as kissing, hugging, touching, and even talking too close to a person. 3. Be sure you are within 1 meter away when talking to someone with COVID-19

References

Book

Mojica, Lucia A. Honing Your Skills through MAPEH – 8. Jo – es Publishing House Inc.

Online Articles

Bethesda. 2007 “Understanding Emerging and Re-emerging Infectious Diseases,” Accessed May 20, 2020, <https://www.ncbi.nlm.nih.gov/books/NBK20370>

“Emerging Infectious Diseases,” Accessed at May 20, 2020, <https://www.bcm.edu/departments/molecular-virology-and-microbiology/emerginginfections-and-biodefense/emerging-infectious-diseases>

Emerging Infectious Diseases. World health organization accessed February 16, 2021 from <https://www.who.int/docstore/world-healthday/en/documents1997/whd01.pdf>

Holm, Gretchen. 2019. “Meningococemia: Causes, Symptoms, and More”, Accessed May 20, 2020, <https://www.healthline.com>

Marissa S. and Elizabeth Boskey. 2018. "Hand, Foot, and Mouth Disease", Accessed May 20, 2020, <https://www.healthline.com>

Michael Stuart Bronze. 2020. "H1N1 Influenza (Swine Flu)", Accessed May 20, 2020, <https://emedicine.medscape.com>

Sandra G. Gompf. 2018. "Leptospirosis", Accessed May 20, 2020, <https://emedicine.medscape.com>

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