

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

## Pathogen Cards Assignment

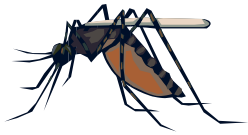
Research your assigned pathogen for the following information:

- Type of pathogen
  - Is it a virus or bacteria?
  - Brief description of the pathogen
- How is it transmitted?
- Is there a part of the body it attacks particularly? If so, which part(s)?
- What is incubation period? How long is the incubation period for your pathogen?
- What diseases does it cause? What are the symptoms of infection?
- What is the duration of illness?
- What is virulence? How virulent is your pathogen? How deadly?
- Is there a vaccine for your pathogen? If so, who discovered it, and when? Can the vaccine be taken even after infection?
- What behaviors will help someone to avoid infection by your pathogen?
- If you are infected, what is the treatment, if any?

After you have found all the information, make a trading card of your pathogen with the following information (see Yellow Fever sample card).

- Name of pathogen
- Picture of pathogen and/or the transmission vector
- Brief description of pathogen (virus or bacteria, type, shape, and so on) and an indication of its power (virulence and fatality rate)
- Offenses
  - Attacks**—transmission and description of infection target, if any
  - Outcome**—name and brief description of the associated disease resulting from infection
  - Incubation**—time from infection to presentation of symptoms (days, weeks, months, or years)
  - Duration**—typical length of infection
- Defenses
  - Vaccine**—name and brief description of developed vaccine, if any; list whether the vaccine can be administered both before and after infection, or only before.
  - Behavioral**—preventative behaviors to avoid infection
  - Treatment**—description of treatment if infected

You can choose a different layout for your own pathogen card, but the card must include all the required information somewhere.

| <b>YELLOW FEVER VIRUS</b>  |   |
|--|---|
| <p>Yellow fever virus is a single-stranded RNA virus endemic to tropical regions of Africa, South and Central America, and the Caribbean. <b>Power:</b> Without vaccination, yellow fever has a fatality rate that can exceed 50%.</p>   |   |
|    |   |
| OFFENSES   | DEFENSES  |
| <p><b>Attacks</b><br/>Transmitted to humans through the infected saliva of certain types of mosquitoes, the yellow fever virus primarily attacks the liver.</p> <p><b>Outcome</b><br/>Acute phase: fever, muscle, backache, headache, shivers, loss of appetite, and nausea and/or vomiting.<br/>Toxic phase (15% of infected): jaundice, abdominal pain, bleeding, leading to kidney failure.</p> <p><b>Incubation Duration</b><br/>3–6 days      3–14 days</p> | <p><b>Vaccine</b><br/>Yes, yellow fever vaccine, which was developed in 1937 by Max Theiler, provides 10 or more years of immunity. The vaccine provides 95% immunity just 1 week after vaccination.</p> <p><b>Behavioral</b><br/>Get vaccinated. Use insect repellents and insecticide, wear protective clothing.</p> <p><b>Treatment</b><br/>No cure. Treatment is symptomatic only: fluid replacement, correction of hypotension, and blood transfusions when necessary.</p> |