There has been an outbreak of an infectious disease in your community! Implement the action plan to respond to the outbreak.

1. Read the disease profile page to understand the behavior of the disease that the action plan was created for.

2. Read the outbreak scenarios in this packet and, based on the disease profile, select one that you would like to use the action plan to respond to.

3. Use the Student Evaluation Rubric at the end of this packet to assess the effectiveness of the action plan.

Good luck!
Outbreak Scenarios

1. **Symptoms**: Affected people have a sudden onset of a high fever (<103 degrees), blistering rash that spreads all over the body, including in the ears and mouth within 12 hours of contact with the illness. After 3-4 days, the rash and fever subside and respiratory symptoms begin: cough, runny nose, sneezing, and a severe sore throat. The fast-rising fever can cause seizures in young children and dehydration in children and adults. The sore throat can make the dehydration worse, because it is painful to swallow liquids. There is a risk of death from dehydration.

   **Transmission**: The infection spreads through airborne droplets when people talk, sneeze, or cough and people breathe the droplets. The droplets also can land on surfaces that people touch and then touch their own nose or mouth. The disease can live on surfaces for up to 24 hours. People with the disease are contagious for 72 hours after the fever is gone.

   **Diagnosis**: Can be visually diagnosed when the rash is present. Can also be diagnosed with a lab test of saliva or skin where the rash is present.

   **Treatment**: Cannot be treated with antibiotics. Over-the-counter medicines can treat the fever and discomfort from the rash and sore throat. Pain medication can help people rehydrate. Sometimes hospitalization and intravenous rehydration are needed.

2. **Symptoms**: Affected people have a low-grade fever (99 - 101 degrees), severe headache, muscle pain, diarrhea, vomiting, stomach pain, and unexplained bleeding from the ears. Symptoms appear between 5-7 days after contact with the virus and last 7-10 days. There is a high risk of death from dehydration.

   **Transmission**: Highly contagious. The infection spreads through direct contact with blood, feces, or vomit. The disease can live on surfaces for 5-7 days. People with the disease are contagious only as long as they have symptoms. However, if infected people die while sick, their bodies are still contagious for up to 7 days.

   **Diagnosis**: Can be diagnosed with a lab test of saliva, blood, feces, or vomit.

   **Treatment**: Can be treated with antibiotics to shorten the duration of infection. Rehydration is very important and may be done intravenously. Bleach is the only known disinfectant to kill the disease on surfaces.

3. **Symptoms**: Affected people feel very sick with a high fever (<103 degrees) shaking and chills. Often people get a headache and sweat profusely. Occasionally, there may be vomiting and nausea. Muscle aches and joint pain are severe, and there is a risk of paralysis. There is a risk of death for very young children.

   **Transmission**: The infection spreads through an insect vector. The insect can transmit the disease to people and large livestock. A single bite can transmit the disease. An infected insect can carry the disease for 5-7 miles.

   **Diagnosis**: Can be diagnosed with a lab test of blood.
**Treatment:** Can be treated with antibiotics to shorten the duration of infection. Pain medication helps with the muscle pain. Prescription pain medication may be needed.

4. **Symptoms:** Affected people feel very sick with a mid-grade fever (101-103 degrees) and a severe sore throat. Often people have rapid swelling of the neck and suffocation from a blocked airway is a risk. This disease also can cause swelling of the brain, spine, and death. The risk of death is high for young children. Symptoms do not appear for 2-3 days, but people are contagious as soon as they contact the disease.

**Transmission:** The infection spreads through airborne droplets when people talk, sneeze, or cough and people breathe the droplets it. The droplets also can land on surfaces that people touch and then touch their own nose or mouth. The disease can live on surfaces for up to 3 days. People with the disease are no longer contagious once the symptoms are gone.

**Diagnosis:** Can be diagnosed with a lab test of blood.

**Treatment:** Can be treated with antibiotics. There is a vaccine for this disease.

Which disease (1-4) will your group respond to? _________

What is the name you would like to give this disease? ___________________________
Apply the Action Plan

There is an outbreak of symptoms of a disease in your community! A patient with those symptoms has just been confirmed as having __________________________ disease.

Using the flow chart in the Action Plan, who will need to be notified to activate the plan?

List the reactive and proactive measures from the Action Plan that should be put into place:

Which of each of these will be the most effective in response to an outbreak of this disease? Why?

Who will need to be involved in implementing that measure?

Will any of the measures on the plan not work for an outbreak of this disease? Which ones? Why?

STOP HERE! DO NOT GO ON TO PAGE FIVE WITHOUT A CONTEXT CART
Context Matters!

Where is the location of the outbreak? _______________________________

Does the activation of your plan work in the location of the outbreak? Why or why not?

What reactive measures from the list will work in the location of your outbreak?

What factors should be considered in your location for these measures to be effective (e.g. cost, population, sanitation, cultural beliefs)?

What proactive measures from the list will work in the location of your outbreak?

What factors should be considered in your location for these measures to be effective (e.g. cost, population, sanitation, cultural beliefs)?

What other factors are considered on the action plan that might be important in responding to an outbreak of this disease in this location?

Will the deactivation procedure work in this location? Why or why not?
## Student Evaluation Rubric

<table>
<thead>
<tr>
<th></th>
<th>You plan did a great job with...</th>
<th>It would have helped if you had included...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activation of Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reactive Measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive Measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Considering Context</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deactivation of Plan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>