## **Global Health Investigation**

HASPI Medical Anatomy & Physiology 17a
Based on the PBS series "Rx for Survival"
Internet Activity

| Name(s):  |       |  |
|-----------|-------|--|
| Period: _ | Date: |  |

## **Background**

## **Rx for Survival: The Global Health Challenge**

We live in an era where survival rates for the human population are higher than they have ever been. One of the major reasons for increased survival has been a result of the medical discoveries in the past 100 years. Vaccinations, modern drugs, and global health networks have reduced the impact of disease considerably. In this activity, you will explore the impact of disease and medicine on a global scale, as well as the researchers who work to improve health in parts of the world that are still in high need of aid.



### **Directions**

Go to the Following Website:

# www.pbs.org/wgbh/rxforsurvival/

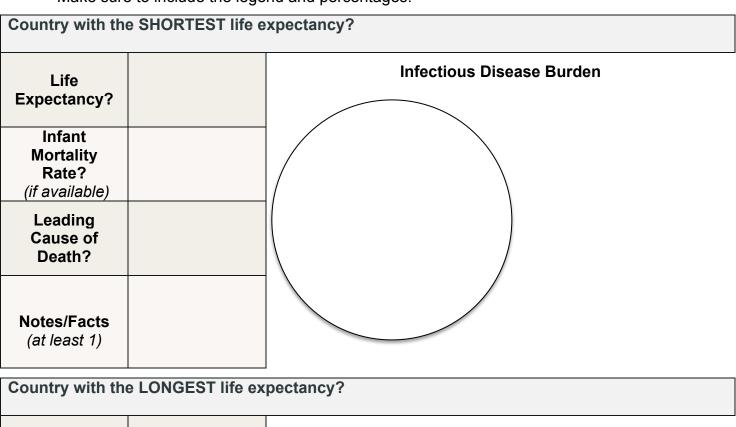
### **Deadly Diseases: What Diseases Remain a Global Risk?**

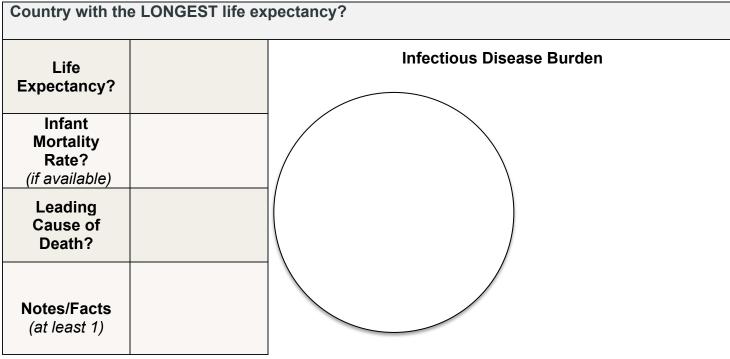
- 1. Click on the "Deadly Diseases" link.
- 2. Choose 3 of the common global diseases, click on their links, and complete the following chart.

| Disease | Cause | Transmitted by: | Symptoms | Notes/Facts<br>(at least 2) |
|---------|-------|-----------------|----------|-----------------------------|
|         |       |                 |          |                             |
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#### The Global Health Atlas: What is the Current Status of Global Disease?

- 1. Return to the main page and click on the "Global Health Atlas" link. Launch the Global Health Atlas (you will need to have Flash Player installed on your computer).
- 2. Hover over each country to see the life expectancy. Find the countries with the shortest and longest life expectancy. Click on the "Country Snapshot" for these countries to obtain detailed information and complete the tables below.
- 3. Complete the following tables using the information found in the Country Snapshot for the country with the shortest life expectancy, the longest life expectancy, and the United States.
- 4. Click on the "Charts" tab at the top of the Country Snapshot to find a pie chart called "Infectious Disease Burden". Copy the pie chart into the circle for each respective country. Make sure to include the legend and percentages.





| UNITED STATES life expectancy?   |  |    |                           |
|--|--|----|---------------------------|
| Life<br>Expectancy?  |  |    | Infectious Disease Burden |
| Infant<br>Mortality<br>Rate?<br>(if available)   |  |    |                           |
| Leading<br>Cause of<br>Death?  |  |    |                           |
| Notes/Facts<br>(at least 1)  |  |    |                           |
| Disease, Prosperity, and Education  1. In the Global Health Atlas, click on the "Health + Prosperity" tab at the top of the map.  2. Click on the "Respiratory Inf." tab at the bottom of the map. |  |    |                           |
| infections? Wha  | rtality rate the highe<br>t is the mortality rate            | e? |                           |
|  | rtality rate the lowes<br>t is the mortality rate            |    |                           |
|  | ne "HIV/AIDS" tab a<br>rtality rate the highe<br>ality rate? |    | тар.                      |
| Where is the mortality rate the lowest for HIV/AIDS? What is the mortality rate?   |  |    |                           |
|  | ne "Diarrheal Diseas   |    | om of the map.            |
| Where is the mortality rate the highest for diarrheal diseases? What is the mortality rate?  |  |    |                           |
| Where is the mortality rate the lowest for diarrheal diseases? What is the mortality rate?   |  |    |                           |
| 5. Click on the "Tuberculosis" tab at the bottom of the map. Where is the mortality rate the highest for tuberculosis? What is the mortality rate?   |  |    |                           |
| Where is the mortality rate the lowest for tuberculosis? What is the mortality rate?   |  |    |                           |

| 6. Click on the "Malaria" tab at the bottom of the m  | ap.            |
|---|----------------|
| Where is the mortality rate the highest for malaria? What is the mortality rate?  |                |
| Where is the mortality rate the lowest for malaria? What is the mortality rate?   |                |
| 7. Click on the "Measles" Tab at the bottom of the  | map.           |
| Where is the mortality rate the highest for measles? What is the mortality rate?  |                |
| Where is the mortality rate the lowest for measles? What is the mortality rate?   |                |
| 8. Click on the "GNI PPP" Tab at the bottom of the  | · map.         |
| What country has the highest average income? What is the average income?  |                |
| What country has the lowest average income? What is the average income?   |                |
| 9. Click on the "Health + Education" tab at the bott  | om of the map. |
| What country has the highest percentage of literacy? What is the percentage?  |                |
| What country has the lowest percentage of literacy? What is the percentage?   |                |
| Does there appear to be a connection between the mortality rates of some common infectious diseases, the average income, and literacy? Explain your answer. |                |
|   |                |
|   |                |
|   |                |

### Global Health Champions: Who's Working to Improve Global Health?

- 1. Close the Global Health Atlas and return to the main page.
- 2. Click on the "Global Health Champions" link.
- 3. Choose 3 of the researchers/projects that interest you and answer the following questions for each. Some of the stories have a written summary and a short video. You can choose to just read the summary OR watch the video to obtain the information.

| Global Health Champion 1  |                          |  |  |
|---|--------------------------|--|--|
| Who is the "global health champion" and what is their focus?  |                          |  |  |
| On what region are they focused?  |                          |  |  |
| What strides have they made to improve health in this area? Give numbers/statistics that demonstrate improvement. |                          |  |  |
|   | Global Health Champion 2 |  |  |
| Who is the "global health champion" and what is their focus?  |                          |  |  |
| On what region are they focused?  |                          |  |  |
| What strides have they made to improve health in this area? Give numbers/statistics that demonstrate improvement. |                          |  |  |
|   | Global Health Champion 3 |  |  |
| Who is the "global health champion" and what is their focus?  |                          |  |  |
| On what region are they focused?  |                          |  |  |
| What strides have they made to improve health in this area? Give numbers/statistics that demonstrate improvement. |                          |  |  |