# **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.
- Choose 3 of the common global diseases, click on their links, and complete the following chart.

Disease	Cause	Transmitted by	Symptoms	Notes/Facts (at least 2)

### The Global Health Atlas: What is the Current Status of Global Disease? Our World in Data

- 1. Click on <u>The Global Health Status</u> reference sheets to complete the <u>Life Expectancy</u>, <u>Infant</u> <u>Mortality Rate</u>, and <u>Leading Cause of Death</u> in the data table describing the country with the shortest life expectancy, longest life expectancy and life expectancy in the United States.
- 2. Click on the <u>Interactive Charts on Life Expectancy</u>. Review the graphs provided and record a data trend that you find interesting, that you notice or that you wonder about in the data table titled *Interesting Data about Life Expectancy*.
- 3. Click on <u>The Disease Burden by Cause</u>. At the right, click on **+Add Country**. From the menu checklist, choose Chad, Monaco and United States, and select Chart at the bottom of the window.
- Represent the percent (%) of 2019 Total Disease Burden by Cause in injuries, noncommunicable diseases, and communicable diseases into the pie charts for each respective country below. Be sure to include a legend and percentages.

What is the Country	the SHORTEST life expectancy?	
Life Expectancy?	Infectious Disease Bur	den
Infant Mortality Rate?		
Leading Cause of Death?		
Interesting Data about Life Expectancy		

What is the Country with the LON	IGEST life expectancy?
Life Expectancy?	Infectious Disease Burden
Infant Mortality Rate?	
Leading Cause of Death?	
Interesting Data about Life Expectancy	

What is the Life	Expectancy in the	e United States?
Life Expectancy?		Infectious Disease Burden
Infant Mortality Rate?		
Leading Cause of Death?		
Interesting Data about Life Expectancy		

#### **Disease, Prosperity, and Education**

- 1. In Our World in Data (https://ourworldindata.org/), click on the "Browse by Topic" tab at the top of the page. Choose "Health."
- 2. Click "Coronavirus Pandemic," and use the charts and maps to answer the following.

Where is the mortality rate the highest for COVID-19? What is the mortality rate?

Where is the mortality rate the lowest for COVID-19? What is the mortality rate?

3. Click on "HIV/AIDS," and use the charts and m	aps to answer the following.
Where is the mortality rate the highest for HIV/AIDS? What is the mortality rate?	
Where is the mortality rate the lowest for HIV/AIDS? What is the mortality rate?	

4. Click on "Diarrheal Diseases," and use the charts and maps to answer the following. 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 "Polio," and use the charts and maps to answer the following.

Where is the mortality rate the highest for polio? What is the mortality rate?

Where is the mortality rate the lowest for polio?	
What is the mortality rate?	

6. Click "Malaria," and use the charts and maps to answer the following.

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 "Pneumonia," and use the charts and maps to answer the following. Where is the mortality rate the highest for pneumonia? What is the mortality rate?

Where is the mortality rate the lowest for pneumonia? What is the mortality rate?

8. Under Browse by Topic, choose "Poverty and Economic Development." Click "Poverty" from the menu. Use the charts and maps to discover the following.

What country has the highest rate of poverty? What is the poverty rate?

What country has the lowest rate of poverty? What is the poverty rate?

9. Under Browse by Topic, choose "Education and Knowledge." Click "Literacy" from the menu. Use the charts and maps to discover the following. (Interactive charts on Literacy)

What country has the highest literacy rate in adults? What is the percentage?	
What country has the lowest literacy rate in adults? 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. Return to the main page of "Rx for Survival." https://www.pbs.org/wgbh/rxforsurvival/index.html
- 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.	