

Name_____

Diffusion and the AIDS Epidemic in the United States

Use the website <http://bcs.wiley.com/he-bcs/Books?action=resource&bcsId=5267&itemId=0470484799&resourceId=18408>

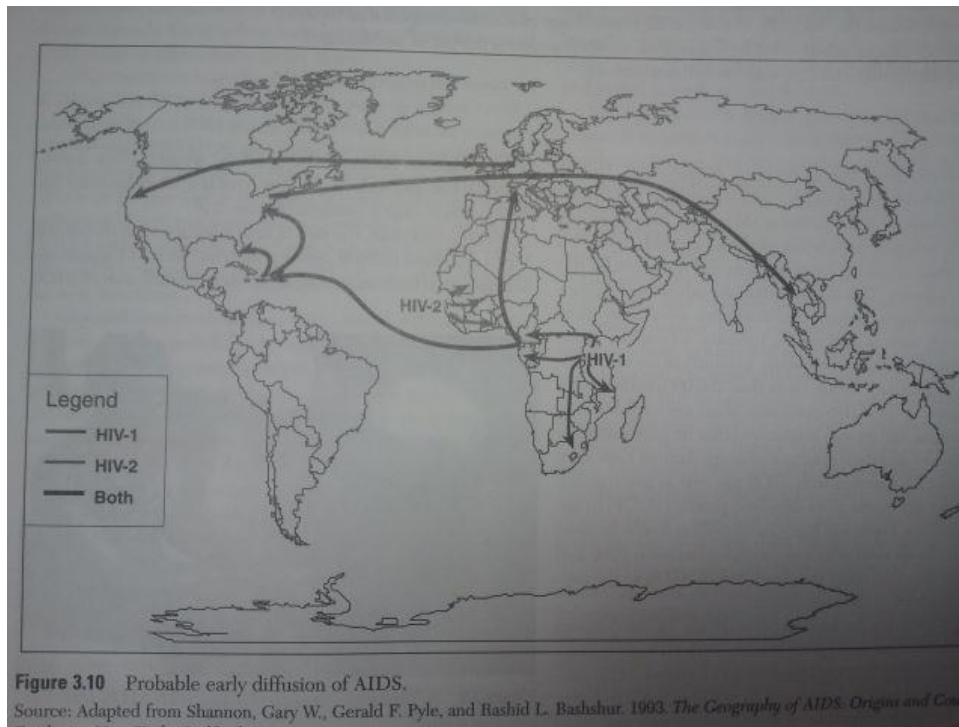
Activity 1

1. How many metro areas of population are added to your map in each year? (use the chart below)
What does this information tell you?

Year	Number of new metro areas appearing on Map within the Top 15	Number of new metro areas appearing on map not within the top 15	Total number of new metro areas appearing on the map (combine)
1986	2	0	2
1987	1	0	1
1988			
1989			
1990			
1991			
1992			
1993			
1994			
1995			
1996			
1997			
1998			
1999			
2000			
2001			
2002			
2003			

2. In the table, does the sequence of small and large metro areas over time provide evidence for hierarchical effects in the diffusion of AIDS? Explain:

Use Map for the following questions:



3. Miami, Florida, had a 1986 population of 1,769,500. Seattle, Washington, had a 1986 population of 1,751,000. Seattle crossed the 100 per 100,000 threshold in 1991; Miami did so in 1988. Why did Miami have such a high early rate of AIDS?
4. San Francisco, California, had a 1986 population of 1,588,000. San Jose, California, had a 1986 population of 1,401,600. Both are part of the Bay Area. San Jose crossed the 100 per 100,000 threshold 7 years after San Francisco. Why did San Francisco have such a high early rate of AIDS?
5. Go back to the national map and move the time slider slowly back and forth. Do you see any particular barriers blocking AIDS diffusion or pathways promoting it?

6. At first glance it might seem that some of the areas with high early rates of AIDS do not fit the hierarchical diffusion pattern of big cities first and small cities later. What about the location of these metro areas might explain their earlier-than-expected outbreaks? (Look a picture of hierarchical diffusion in your book or online for clues)

Activity 2

1. Look at the changes in the height of the curve as you slowly drag the slider bar. What has happened to the rate of AIDS for most of these metro areas over the 18-year interval?
2. Move the slider all the way to the right.
 - a. What is the relationship between the rate of AIDS and the distance from your initial source metro area in 2003?
 - b. Does the graph provide evidence of spatially contagious diffusion?
 - c. Remember, there will always be “outliers” or in this case, cities that don’t fit with the rest of the data. Maybe their rates are very low comparatively or very high...what could account for these outliers?