



### Objectives

Students will be able to:

- Identify potential impacts of inequitable resource (educational, wealth, and health) distribution on HIV/AIDS.
- Draw correlations between education, health resources and HIV/AIDS status, and between culture and participation in HIV/AIDS vaccine trials.

### Class Time

One class period plus a short time the following period to discuss student homework

### Introduction

This activity is designed to demonstrate how differences in culture, resources, and HIV/AIDS in five regions of the world combine to impact work on the HIV/AIDS pandemic. Access to medical care and education, cultural characteristics, and wealth are all issues that will be explored to heighten students' global perspective on how difficult it is to launch an HIV vaccine trial.

### Materials






- Yarn or string (preferably in 5 different colors)
- Masking tape
- Ambassador's cards (provided)
- 15 sandwich bags
- Baggie label template to print out on Avery 8660 labels (provided)
- 28 oz. Hershey's Kisses (149 Kisses)
- 129 band aids (or xerox a sheet of band aids and cut them out)
- 400 red beads or beans
- UNAIDS Fact Sheets (optional)

### Procedure

#### Before class:

- Measure out the yarn for each region according to Region Information chart. It may be helpful to have a different color of yarn for each region.
- Count out numbers of Hershey Kisses, band aids, and red beads required for each region and put them in separate labeled bags.
- Read through supporting information and familiarize yourself with the general characteristics of each region. Be sure to understand the connections between education, women's rights, cultural and religious traditions, and wealth.
- Copy and cut ambassador cards.
- Just before the activity begins, arrange the yarn on the floor to represent the regions and tape in place.
- Keep baggies hidden in a larger paper bag but have it nearby to hand to students.
- Make large cards with each region's name to put on the floor. This makes it easier for students to identify the regions.

### Symbols

-  — video
-  — discussion
-  — hands-on
-  — on-line or web based
-  — homework

Lesson modified from "Food For Thought" the Population Connection

<http://www.populationconnection.org/education/library/references/dl/10>

## Essential Understandings

Pandemics are influenced by global health issues, cultural diversity, environmental contexts, educational levels and socioeconomic conditions. Selection of human subjects for experimental research must be done carefully based upon the goals of the research and consideration of risks and benefits to specific individuals and participating populations

## Prior Knowledge Needed

Basic understanding of global geography and HIV, basic understanding of Human Subject Trials and ethical considerations of choosing experimental population

## Common Misconceptions

- Health care is available to anyone who is sick
- Poor people don't go to school because they don't care about education
- People in other countries get HIV/AIDS because they are promiscuous
- Women are able to choose whether or not their sex partners use condoms

## Student Background

When determining a population to use for clinical trials, many factors must be considered, especially for a global problem like HIV vaccinations affecting a multitude of cultures. Researchers in the US are bound to the Basic Principles of Autonomy, Beneficence, and Justice, both here and internationally but these principles may have different connotations to different cultures.

[For example; in many cultures women have no say about their medical care or whether they would like to participate in a clinical trial. Husbands or senior male members of the family make these decisions for them. This must be considered when obtaining informed consent from female participants. The issue is community and familial consent and right of women to say “no”. While community consent is vital in some cultures, *the US Code of Federal Regulations requires individually signed consent for all trials using US government funds*. One novel way around this in one country was to obtain community consent from the tribal leaders. Potential volunteers were seen individually in private and separate informed consent sought with a signature. When people came out of the room where they were meeting privately with researchers, it was immediately apparent to everyone else in the waiting area if they had agreed to participate, because they had a band aid on their arm where blood was drawn to determine eligibility. That meant that confidentiality was being breached (inadvertently) but also that there was now the possibility of undue influence by others in the community who felt that trial participation was important. Wishing to curtail the problem of social harm and to protect confidentiality, the researchers gave everyone a band aid.]

## Homework

### Option 1: HIV Vaccine Trials: Global Contexts

Have students write 1 paragraph on each of the following:

- What potential impacts do levels of education, wealth, and health have on the distribution of HIV/AIDS? Use a particular example or examples from the lesson.
- What criteria should scientists use when determining where in the world to conduct an HIV vaccine trial?
- What ethical and cultural considerations must researchers make before choosing populations to conduct such trials? Draw correlations between education, health resources and HIV/AIDS status, and between culture and participation in HIV/AIDS vaccine trials.

### Option 2: Comparing the regions: Where Should Vaccine Trials be Conducted?

Have students fill out Student Handout 5-1, with accompanying questions.

## Facilitating the Activity

### Begin the Global Awareness Activity

**Tell students that five regions of the world** will be compared in this activity so they can see how the economic, educational, and cultural differences influence how and where clinical trials occur internationally.

**Appoint 5 students** to be the “ambassadors” for the world regions. Have them stand in their yarn region.

**Populate the regions** with the rest of the students, according to the chart (or the World Ambassador card). Note: If you have too few students, you can use chairs to substitute for the missing citizens. If you have too many students, appoint the extra students to a “United Nations Advisory Committee.” Instruct the members of the Committee to pay close attention, as you will be calling on them for their opinions as a neutral party later in the activity. They should be thinking in terms of whether the inequities in each region’s share of population/health care/income are problems, and if so, what policies could lead to solutions. This committee can be funded with a small amount of kisses and band aids to use as they see fit during the discussion time.

**Identify each region** for the class.

**Explain that the dimensions of their regions are to scale**, and the number of students within each region is proportional to its actual population; the idea is to give an accurate sense of the population density in each area. Note that, according to UN definitions, Mexico is part of Latin America.

**Read the Demographic statistics (A-C)** from the World Ambassador card. Have each ambassador read A-C on his or her card. Some discussion questions:

What are some reasons for the differences in the number of children born per woman in each region?

What do indicators like short life expectancy say about the standard of living in a region? How would this influence a person’s decision in participating in a clinical trial?

**Read the Quality of Life statistics (D-F)** from the World Ambassador card. Have each ambassador read D-F on his or her card.

Which regions have more localized populations? How would this affect HIV/AIDS research and the recruitment of human subjects for clinical trials? Would certain segments of the population be easier or harder to recruit and follow through the trial?

What is the difference between the number of boys in school and the number of girls in school? How does education contribute to the societal and self worth of a person? How does the percentage of school age children enrolled in school reflect the importance or availability of education in your region?

Is there a correlation between the percentage of people living in urban/rural areas, and the average number of children a woman has? Based on B and D, what can you infer about the desire for large families in some regions?

**Read the HIV statistics (G-H)** on the World Ambassador card. Have each ambassador read G-H on his or her card. Be sure to highlight that the statistics for H (percentage of adults infected with HIV/AIDS in 2003) are from *one country* within that ambassador's region.

What is the population of your community, town, or region? How does this compare with the number of AIDS-related deaths for the different regions of the world?

What percentage of adults are HIV+? What happens to a country that loses a large segment of its adult working/ child caring population? Who cares for children? Who supports the families? How does this affect the stability of the country?

Note that the percentage of people living with HIV/AIDS can vary widely between countries within a region. For example, in Asia, 1.5% of adults in Thailand are infected, and <1% in the Philippines. In Africa, 37.3% of adults in Botswana are infected, and 4.1% in Uganda.

**Give out the baggies with the red beads** (each red bead = 100,000 people with HIV/AIDS). Have the ambassador read the statistics labeled on the bag. For all of the visual aids, start with the region that has the fewest items (beads, band aids or candies) and continue to the region with the most.

How does the number of red beads compare with the population of that region? Which region has the highest percentage of people living with HIV/AIDS?

**Give out the baggies containing band aids** (each band aid = \$40 spent on health care). Read the statistics for each region.

How much money is spent per capita (explain this means average per person) on health care? Compare this statistic to the life expectancy in that region.

**Give out the baggies containing the Hershey's kisses** (each candy = \$350 per capita Gross National Income). Read the statistics for each region.

How does the need for HIV/AIDS care in each region compare with the amount of beads, band aids and Hershey's Kisses in their bags?

What options do those regions with few resources have when evaluating solutions to their HIV/AIDS epidemic? How might countries in these regions react to US researchers wanting to implement HIV vaccine trials with their population?

What ethical considerations must US researchers make before choosing populations to conduct such trials? What are some issues of Justice that might arise? Beneficence? How might Respect for Persons be honored? (The Student Handout from Activity 4.4 might be useful for this discussion).

Why do many international organizations, such as the HIV Vaccine Trials Network, find it so important to partner with a local group in the country receiving resources? What might that local group provide?

## More about the Lesson:

### Extensions

Have students research countries in more depth. The movie *A Closer Walk* provides insight into HIV in different areas of the world. Find out more information in the form of the Director's Journals found on their website: [http://www.acloserwalk.org/about\\_the\\_director/directors\\_journals.php](http://www.acloserwalk.org/about_the_director/directors_journals.php)

Additional information on specific countries can also be found at: <http://www.pbs.org/wgbh/pages/frontline/aids/atlas/world.html>

Have students conduct web-based searches using the phrase "medical care in (country)"

Another excellent global simulation called *Unfair Race* was created for the PBS series *Rx For Survival*. The activity can be found at: [http://www.pbs.org/wgbh/rxforsurvival/campaign/givetime/pdf/Rx\\_Unfair\\_Race.pdf](http://www.pbs.org/wgbh/rxforsurvival/campaign/givetime/pdf/Rx_Unfair_Race.pdf)

### Adaptations

Simplify the information on the cards, and present more of the information orally.

### Assessment Suggestions

- Assess participation of students in class discussion
- Students address learning objectives through written homework requirement
- Embedded discussion questions could be written out for groups/individuals to answer

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## Sources

- The World Health Report 2003  
<http://www.who.int/whr/2003/en/>
- 2005 World Population Sheet  
[http://www.prb.org/pdf05/05WorldDataSheet\\_Eng.pdf](http://www.prb.org/pdf05/05WorldDataSheet_Eng.pdf)
- UNAIDS/WHO AIDS Epidemic Update: December 2005  
[http://www.unaids.org/epi/2005/doc/report\\_pdf.asp](http://www.unaids.org/epi/2005/doc/report_pdf.asp)
- 2004 Report on the Global AIDS Epidemic - Tables of Countries Specific HIV/AIDS Estimates and Data  
[www.unaids.org/bangkok2004/GAR2004\\_html/GAR2004\\_14\\_en.htm](http://www.unaids.org/bangkok2004/GAR2004_html/GAR2004_14_en.htm)
- Lesson modified from “Food For Thought” the Population Connection  
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## Region Information Chart

	North America	Latin America	Europe	Africa	Asia
<b>Yarn Length -feet (meters)</b> 65 Participants 26 Participants	35 (10.7) 25 (7.6)	36 (11) 25 (7.6)	38 (11.6) 27 (8.2)	43 (13.1) 30 (9.1)	44 (13.4) 31 (9.4)
<b>2006 Population in millions</b> With 65 Participants (1 = 100 million) With 26 Participants (1 = 250 million)	332 3 1	566 6 2	732 7 3	924 9 4	3,968 40 16
<b>Region's Percent of World Land Area</b>	15	16	18	24	25
<b>Per Capita Annual Health Care Costs (US \$)</b> 1 Band Aid = \$40	\$3525 88 band aids	\$217 5 band aids	\$1287 32 band aids	\$116 3 band aids	\$43 1 band aid
<b>Per Capita GNI PPP*</b> 1 Hershey's Kiss = \$500	\$41,285 83 kisses	\$4,496 9 kisses	\$23,987 48 kisses	\$1,030 2 kisses	\$2,119 4 kisses
<b>Number of people with HIV/AIDS</b> (1 red bead= 100,000)	1.2 million 12 beads	2.1 million 21 beads	720,000 7 beads	26.3 million 263 beads	9.9 million 99 beads

Sources:

Population Reference Bureau, "2006 World Population Data Sheet." PRB, Washington, DC.

[www.prb.org](http://www.prb.org)

The World Bank, World Development Indicators 2006. The World Bank, 2004.

[www.worldbank.org](http://www.worldbank.org)

UNAIDS, "AIDS Epidemic Update: December 2005." UNAIDS/WHO.

Specific Country Figures (2005)

<http://www.cia.gov/cia/publications/factbook/geos/br.html>

\*GNI PPP=Per capita Gross National Income adjusted for the "purchasing power parity". It standardizes the value of the money across the globe in terms of what it can actually buy.

**Comparing the Regions:  
Where Should Vaccine Trials be Conducted?**

REGION	Reasons FOR conducting a trial in this area	Reasons for CONCERN if a trial were conducted in this area
North America		
Latin/ South America		
Europe		
Africa		
Asia		



Which region do you think is most suitable for a vaccine trial?

Why?

What special concerns must be addressed for that region?

## Region and Country Cards

<b>World Ambassador Card/Facilitator Card</b> Suggested order for reading statistics (and number of students per region) in a class of 24 students: World → North America (1) → Latin America (2) → Europe (3) → Africa (3) → Asia (15)	
<b>Demographics</b>	I am the World Ambassador. Here are some statistics that shape the world. A. World population is estimated at: 6 billion, 300 million B. The world's women bear an average of: 2.8 children C. Our life expectancy at birth is: 67 years.
<b>Quality of Life</b>	D. The percentage of the world's people living in urban areas is: 47% E. Of the world's 12-17 year olds, 63% of the boys and 55% of the girls are enrolled in school. F. On average, there is one medical doctor per 688 people
<b>HIV/AIDS statistics + visual aids</b>	G. Number of AIDS-related deaths in 2005. 3.1 million H. Percentage of the world's adults (ages 15-49) infected with HIV/AIDS: 1.2% *I. Number of people with HIV/AIDS in each region: each red bead = 100,000 people *J. Per capita spent on health care in 2001: each band aid = \$40 *K. Per capita Gross National Income: each candy = \$350  *This information is not included on the other Ambassador cards, and there are no "world" statistics. When handing out the bags of beans, band aids and candy, start with the region with the least amount and continue to greatest.

### North American Ambassador Card

I am the North American Ambassador.

Here are some statistics that shape my region of the world:

A. North America's population is estimated at: 323 million

B. North American women bear an average of: 2.0 children

C. Our life expectancy at birth is: 77 years

D. The percentage of our people living in urban areas is: 79%

E. Of our 12-17 year olds, 99% of the boys and 98% of the girls are enrolled in school.

F. On average, there is one medical doctor per 374 people.

G. Number of AIDS-related deaths in North America in 2005: 18,000

H. Percentage of adults (ages 15-49) from the United States infected with HIV/AIDS in 2003: .6%

### Latin/South American Ambassador Card

I am the Latin and South American Ambassador.

Here are some statistics that shape my region of the world:

- A. Latin and South America's population is estimated at: 540 million
- B. Latin and South American women bear an average of: 2.7 children
- C. Our life expectancy at birth is: 71 years
- D. The percentage of our people living in urban areas is: 75%
- E. Of our 12-17 year olds, 51% of the boys and 58% of the girls are enrolled in school.
- F. On average, there is one medical doctor per 576 people.
- G. Number of AIDS-related deaths in 2005: 90,000
- H. Percentage of adults (ages 15-49) from **Brazil** infected with HIV/AIDS in 2003: .7%

### European Ambassador Card

I am the European Ambassador.

Here are some statistics that shape my region of the world:

- A. Europe's population is estimated at: 727 million
- B. European women bear an average of: 1.4 children
- C. Our life expectancy at birth is: 74 years
- D. The percentage of our people living in urban areas is: 73%
- E. Of our 12-17 year olds, 97% of the boys and 100% of the girls are enrolled in school.
- F. On average, there is one medical doctor per 285 people.
- G. Number of AIDS-related deaths in 2005: 12,000
- H. Percentage of adults (ages 15-49) from **France** infected with HIV/AIDS in 2003: .4%

### African Ambassador Card

I am the African Ambassador.

Here are some statistics that shape my region of the world:

- A. Africa's population is estimated at: 861 million
- B. African women bear an average of: 5.2 children
- C. Our life expectancy at birth is: 52 years
- D. The percentage of our people living in urban areas is: 33%
- E. Of our 12-17 year olds, 38% of the boys and 33% of the girls are enrolled in school.
- F. On average, there is one medical doctor per 1,742 people.
- G. Number of AIDS-related deaths in 2005: 2.5 million
- H. Percentage of adults (ages 15-49) in **Zimbabwe** infected with HIV/AIDS in 2003: 24.6%

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### Asian Ambassador Card

I am the Asian Ambassador.

Here are some statistics that shape my region of the world:

- A. Asia's population is estimated at: 3 billion, 830 million
- B. Asian women bear an average of: 2.6 children
- C. Our life expectancy at birth is: 67 years
- D. The percentage of our people living in urban areas is: 38%
- E. Of our 12-17 year olds, 62% of the boys and 53% of the girls are enrolled in school.
- F. On average, there is one medical doctor per 923 people
- G. Number of AIDS-related deaths in 2005: 583,000
- H. Percentage of adults (ages 15-49) in **Thailand** infected with HIV/AIDS in 2003: 1.5%

\*Information for data cards taken from 2003 World Population Data Sheet, The World Health Report 2003, and 2004 Report on the Global AIDS Epidemic (Table of Country-Specific HIV/AIDS Estimates and Data, end 2003)

## Extension to Activity 5

### North American Region

#### United States

Adults & Children with HIV:	950,000
Adults (ages 15-49) with HIV:	940,000
Women (ages 15-49) with HIV:	240,000
Children ages 0-14 with HIV:	10,000
Percentage of adults (ages 15-49) infected:	0.6
AIDS-related deaths in 2003:	14,000
Per Capita spent on health care in 2001:	\$4887

\*all data in 2003 unless noted\*

### North American Region

#### Canada

Adults & Children with HIV:	56,000
Adults (ages 15-49) with HIV:	55,000
Women (ages 15-49) with HIV:	13,000
Children ages 0-14 with HIV:	1,000
Percentage of adults (ages 15-49) infected:	0.3
AIDS-related deaths in 2003:	1,500
Per Capita spent on health care in 2001:	\$2163

\*all data in 2003 unless noted\*

### Latin/South American Region

#### Brazil

Adults & Children with HIV:	660,000
Adults (ages 15-49) with HIV:	650,000
Women (ages 15-49) with HIV:	240,000
Children ages 0-14 with HIV:	10,000
Percentage of adults (ages 15-49) infected:	0.7
AIDS-related deaths in 2003:	15,000
Per Capita spent on health care in 2001:	\$222

\*all data in 2003 unless noted\*

### Latin/South American Region

#### Mexico

Adults & Children with HIV:	160,000
Adults (ages 15-49) with HIV:	160,000
Women (ages 15-49) with HIV:	53,000
Children ages 0-14 with HIV:	n/a
Percentage of adults (ages 15-49) infected:	0.3
AIDS-related deaths in 2003:	5,000
Per Capita spent on health care in 2001:	\$370

\*all data in 2003 unless noted\*

### Latin/South American Region

#### Honduras

Adults & Children with HIV:	63,000
Adults (ages 15-49) with HIV:	59,000
Women (ages 15-49) with HIV:	33,000
Children ages 0-14 with HIV:	3,900
Percentage of adults (ages 15-49) infected:	1.8
AIDS-related deaths in 2003:	4,100
Per Capita spent on health care in 2001:	\$59

\*all data in 2003 unless noted\*

### European Region

#### United Kingdom

Adults & Children with HIV:	51,000
Adults (ages 15-49) with HIV:	47,000
Women (ages 15-49) with HIV:	14,000
Children ages 0-14 with HIV:	4,000
Percentage of adults (ages 15-49) infected:	0.2
AIDS-related deaths in 2003:	<500
Per Capita spent on health care in 2001:	\$1835

\*all data in 2003 unless noted\*

### European Region

#### France

Adults & Children with HIV:	120,000
Adults (ages 15-49) with HIV:	120,000
Women (ages 15-49) with HIV:	32,000
Children ages 0-14 with HIV:	n/a
Percentage of adults (ages 15-49) infected:	0.4
AIDS-related deaths in 2003:	<1,000
Per Capita spent on health care in 2001:	\$2109

\*all data in 2003 unless noted\*

### European Region

#### Spain

Adults & Children with HIV:	140,000
Adults (ages 15-49) with HIV:	130,000
Women (ages 15-49) with HIV:	27,000
Children ages 0-14 with HIV:	10,000
Percentage of adults (ages 15-49) infected:	0.7
AIDS-related deaths in 2003:	<1,000
Per Capita spent on health care in 2001:	\$1088

\*all data in 2003 unless noted\*

These country statistics can be used to further explore the differences between individual countries within a region.

## European Region

### Russia

Adults & Children with HIV:	860,000
Adults (ages 15-49) with HIV:	860,000
Women (ages 15-49) with HIV:	290,000
Children ages 0-14 with HIV:	n/a
Percentage of adults (ages 15-49) infected:	1.1
AIDS-related deaths in 2003:	9,000
Per Capita spent on health care in 2001:	\$115

\*all data in 2003 unless noted\*

## African Region

### Uganda

Adults & Children with HIV:	530,000
Adults (ages 15-49) with HIV:	450,000
Women (ages 15-49) with HIV:	270,000
Children ages 0-14 with HIV:	84,000
Percentage of adults (ages 15-49) infected:	4.1
AIDS-related deaths in 2003:	78,000
Per Capita spent on health care in 2001:	\$14

\*all data in 2003 unless noted\*

## African Region

### Namibia

Adults & Children with HIV:	210,000
Adults (ages 15-49) with HIV:	200,000
Women (ages 15-49) with HIV:	110,000
Children ages 0-14 with HIV:	15,000
Percentage of adults (ages 15-49) infected:	21.3
AIDS-related deaths in 2003:	16,000
Per Capita spent on health care in 2001:	\$110

\*all data in 2003 unless noted\*

## African Region

### Botswana

Adults & Children with HIV:	350,000
Adults (ages 15-49) with HIV:	330,000
Women (ages 15-49) with HIV:	190,000
Children ages 0-14 with HIV:	25,000
Percentage of adults (ages 15-49) infected:	37.3
AIDS-related deaths in 2003:	33,000
Per Capita spent on health care in 2001:	\$190

\*all data in 2003 unless noted\*

## African Region

### Zimbabwe

Adults & Children with HIV:	1,800,000
Adults (ages 15-49) with HIV:	1,600,000
Women (ages 15-49) with HIV:	930,000
Children ages 0-14 with HIV:	120,000
Percentage of adults (ages 15-49) infected:	24.6
AIDS-related deaths in 2003:	170,000
Per Capita spent on health care in 2001:	\$45

\*all data in 2003 unless noted\*

## African Region

### South Africa

Adults & Children with HIV:	5,300,000
Adults (ages 15-49) with HIV:	5,100,000
Women (ages 15-49) with HIV:	2,900,000
Children ages 0-14 with HIV:	230,000
Percentage of adults (ages 15-49) infected:	21.5
AIDS-related deaths in 2003:	70,000
Per Capita spent on health care in 2001:	\$222

\*all data in 2003 unless noted\*

## Asian Region

### India

Adults & Children with HIV:	5,100,000
Adults (ages 15-49) with HIV:	5,000,000
Women (ages 15-49) with HIV:	1,900,000
Children ages 0-14 with HIV:	120,000
Percentage of adults (ages 15-49) infected:	0.9
AIDS-related deaths in 2003:	n/a
Per Capita spent on health care in 2001:	\$24

\*all data in 2003 unless noted\*

## Asian Region

### Thailand

Adults & Children with HIV:	570,000
Adults (ages 15-49) with HIV:	560,000
Women (ages 15-49) with HIV:	200,000
Children ages 0-14 with HIV:	12,000
Percentage of adults (ages 15-49) infected:	1.5
AIDS-related deaths in 2003:	58,000
Per Capita spent on health care in 2001:	\$69

\*all data in 2003 unless noted\*

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## Asian Region

### China

Adults & Children with HIV:	840,000
Adults (ages 15-49) with HIV:	830,000
Women (ages 15-49) with HIV:	190,000
Children ages 0-14 with HIV:	n/a
Percentage of adults (ages 15-49) infected:	0.1
AIDS-related deaths in 2003:	44,000
Per Capita spent on health care in 2001:	\$49

\*all data in 2003 unless noted\*

## Asian Region

### Philippines

Adults & Children with HIV:	9,000
Adults (ages 15-49) with HIV:	8,900
Women (ages 15-49) with HIV:	2,000
Children ages 0-14 with HIV:	n/a
Percentage of adults (ages 15-49) infected:	<0.1
AIDS-related deaths in 2003:	<500
Per Capita spent on health care in 2001:	\$30

\*all data in 2003 unless noted\*

\*Information for data cards taken from 2003 World Population Data Sheet, The World Health Report 2003, and 2004 Report on the Global AIDS Epidemic (Table of Country-Specific HIV/AIDS Estimates and Data, end 2003)

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# Baggie Labels

Copy and attach to baggies  
or print onto Avery 8660 labels

## ASIA

\$43 = 1 band aid  
Per Capita Annual Health Care Costs  
1 band aid = \$40

## EUROPE

\$1,287 = 32 band aids  
Per Capita Annual Health Care Costs  
1 band aid = \$40

## AFRICA

\$116 = 3 band aids  
Per Capita Annual Health Care Costs  
1 band aid = \$40

## LATIN AMERICA

\$217 = 5 band aids  
Per Capita Annual Health Care Costs  
1 band aid = \$40

## NORTH AMERICA

\$3,525 = 88 band aids  
Per Capita Annual Health Care Costs  
1 band aid = \$40

## ASIA

\$2,119 = 4 kisses  
Per Capita Gross National Product  
1 Hershey's Kiss = \$500

## EUROPE

\$23,987 = 48 kisses  
Per Capita Gross National Product  
1 Hershey's Kiss = \$500

## AFRICA

\$1,030 = 2 kisses  
Per Capita Gross National Product  
1 Hershey's Kiss = \$500

## LATIN AMERICA

\$4,496 = 9 kisses  
Per Capita Gross National Product  
1 Hershey's Kiss = \$500

## NORTH AMERICA

\$41,285 = 83 kisses  
Per Capita Gross National Product  
1 Hershey's Kiss = \$500

## ASIA

9.9 million = 99 beads  
Number of people with HIV/AIDS  
1 red bead = 100,000

## EUROPE

720,000 = 7 beads  
Number of people with HIV/AIDS  
1 red bead = 100,000

## AFRICA

26.3 million = 263 beads  
Number of people with HIV/AIDS  
1 red bead = 100,000

## LATIN AMERICA

2.1 million = 21 beads  
Number of people with HIV/AIDS  
1 red bead = 100,000

## NORTH AMERICA

1.2 million = 12 beads  
Number of people with HIV/AIDS  
1 red bead = 100,000