



## AIDS Comparison Contrast Essay

Readings: "The American AIDS Epidemic Is Still a Concern"  
"The Extent of the American AIDS Epidemic Is Exaggerated"  
"The Global AIDS Epidemic Is a Serious Problem"  
"The African AIDS Epidemic Is Exaggerated"  
(essays in Reader)

President Bush has pledged his support to combatting AIDS in Africa. Yet, from our readings we can see that there is some disagreement about the seriousness of AIDS, both as an American and as a global problem. In this essay you are going to contrast the opposing viewpoints and explain why you feel one side or the other (AIDS is or is not a serious concern) is more convincing.

For a variety of reasons, it is difficult to find reliable worldwide data about AIDS. These reasons include underdiagnosis, underreporting, and the use of different definitions of AIDS in different countries. Another complicating factor in assessing the spread of the disease is the time interval, estimated to be 7-13 years, between HIV infection and the development of AIDS. It's even difficult to decide exactly which data to work with. *The World Almanac and Book of Facts*, for example, provides the following worldwide data from the World Health Organization (WHO) for 1995:

Cumulative Reported AIDS Cases	1,169,811
Actual Number of AIDS Cases (estimated)	4,500,000
Cumulative HIV / AIDS Cases (estimated)	18,500,000

The data given for this paper is the cumulative reported AIDS cases, worldwide, because they represent actual counts, rather than estimates. Bear in mind, as you work on the paper, that this choice of data severely underestimates the scope of the problem. That is, in 1995 the World Health Organization estimated that the actual number of AIDS cases was about four times the reported number, and that the number of HIV / AIDS cases was sixteen times the reported number of AIDS cases. The World Health Organization also estimates that about 70% of the AIDS cases in the world are in Africa. [Note: the data are given at the end of this exercise.]

## Initial Mathematical Work

- To make your calculations a little more manageable, use the following data table, where the number of reported AIDS cases is given in thousands:

Reported AIDS Cases, Worldwide	
year	count (in thousands)
1980	0.2
1985	27.9
1990	438.5
1995	1,169.8

- Analyze the data - construct a chart, draw a graph, begin to think about what the data tell you.
- Generalize. Since the graph of the data seems to be a curve, it is reasonable to use a quadratic model. For the model, let

$$t = \text{years since 1980} \quad P(t) = \text{the reported AIDS cases}$$

Use the data for the years 1985, 1990, and 1995 to construct a quadratic model. Round the coefficients in the model to the nearest tenth.

- Test the accuracy of the model - graph the model and see how closely it fits the data. Use the model to compare known data points to values predicted by the model. Evaluate the accuracy of the model and assess the effectiveness of the model as a predictor of the future.
- Make predictions - use the model to make predictions about the future. Predict the number of reported AIDS cases for the years 2010 and 2020. According to your model, when will the number of reported AIDS cases reach 10 million (that is, 10,000 thousand)? How accurate are your predictions? Why?

## Writing Your Paper

Please review comparison and contrast in The Practical Stylist (pp. 73-75, 161-64). As you are reading the essays, use the discussion questions to identify points of comparison that would give you the structure for point-by-point organization.

Your thesis will, of course, state an idea that is worthy of discussion (Avoid the “so-what” thesis: There are many different opinions about AIDS). It will make a judgement, specifically, about which pair of essays presents more convincing arguments. It may state the points of comparison that you are using to organize your essay. Your opening paragraph that leads to this thesis may appeal to the reader in any way you find appropriate—personal anecdote, vivid description, or strong background material are all possibilities that you may consider.

You will also include a discussion of your mathematical predictions for the spread of AIDS worldwide. Summarize the mathematical work that you did to develop your mathematical model. Present your predictions, and support them with graphs and charts. Do you believe your

predictions? Why, or why not? What implications do your predictions have for the central task of this essay – judging the plausibility of arguments about the seriousness of AIDS? How do your predictions relate to your conclusion?

Be certain to identify your sources in this essay, with authors' names and page numbers in parenthetical references. Remember that any borrowed words or phrases need to be in quotations and that paraphrases or ideas also need to be credited to their source.

In a comparison/contrast essay such as this, be especially attentive to transitions and topic sentences so that the reader can follow your discussion easily.

You don't need to sum up your points in the conclusion. Reaffirm your thesis and move to a discussion of the significance of your findings. What should be done? How important is this issue? Why should your reader think seriously about it?

**Data:**

Reported AIDS Cases, Worldwide	
year	count
1980	205
1985	27,941
1990	438,454
1995	1,169,811

Note: The data for this paper are from the World Health Organization, as reported in the *World Almanac and Book of Facts, 1996*.