

# Global Health Summit

INTEGRATED  
CURRICULUM UNIT  
ON HIV/AIDS



UNIT  
OVERVIEW

# Global Health Summit

## CONTENTS



	Page
<b>Unit Overview</b>	<b>1</b>
<b>Subunit 1 Overview</b>	<b>3</b>
Lesson 1.1 English Language Arts	5
Lesson 1.2 Biology	9
Lesson 1.3 World Geography	17
<b>Subunit 2 Overview</b>	<b>25</b>
Lesson 2.1 Health Science	27
Lesson 2.2 Biology or Health Science	33
Lesson 2.3 English Language Arts or Health Science	39
<b>Subunit 3 Overview</b>	<b>49</b>
Lesson 3.1 English Language Arts	51
Lesson 3.2 World Geography	61
Lesson 3.3 English Language Arts	69

---

**ConnectEd: The California Center for College and Career**  
2150 Shattuck Avenue, Suite 1200  
Berkeley, CA 94704  
510-849-4945  
FAX: 510-841-1076  
[www.ConnectEdCalifornia.org](http://www.ConnectEdCalifornia.org)

**National Consortium on Health Science and Technology Education**  
2410 Woodlake Drive  
Okemos, MI 48864-3997  
[www.nchste.org](http://www.nchste.org)

**Contributing Teacher Team:**  
Northridge High School  
Layton, UT

Copyright © 2007 by ConnectEd:  
The California Center for College and Career. All rights reserved.

# Global Health Summit

## UNIT OVERVIEW

### **Essential Question for This Unit**

What is the responsibility of the United States to address health crises in the developing world?

### **Unit Summary**

This unit focuses on the impact that HIV/AIDS continues to have around the world. Students look at the biology of the disease and then delve into the social and personal implications of addressing a deadly pandemic.

In Subunit 1, students come to understand how widespread and devastating the disease is by reading and discussing personal accounts of HIV-positive and AIDS patients from different regions of the world. After learning about the structure and action mechanisms of HIV in biology class, students map the infection rates of nations throughout the world to get a clear picture of the magnitude of the problem.

The second subunit emphasizes current methods of prevention and treatment of AIDS in the individual, as well as research in the field of HIV/AIDS. Students learn about the paths of HIV transmission and discuss the best prevention methods for these paths. They then investigate the biology of antiretroviral drugs and the reasoning behind taking several drugs at once to combat AIDS. The last lesson in the subunit asks students to consider the ethical issues surrounding drug trials in developing nations.

Subunit 3 teaches students about the current large-scale efforts to combat the AIDS pandemic. The subunit starts by examining how much developed nations have donated to help combat the problem through individual donor nation contributions or participation in international aid organizations. Students are then asked to research developing nations to find out what national and local programs are already in place and whether they are working. They will put this information to use when creating the best plan for a country that they have researched, which is the culminating experience of this unit.

### **Culminating Event**

World leaders have convened a summit to discuss better solutions to the AIDS pandemic, especially in the hardest hit areas of the developing world. The country that students researched in Lesson 3.2 has asked for a proposal to create an HIV/AIDS program targeted toward its needs. Students are asked to write a report including background information and the current HIV/AIDS situation of that country, as well as provide a plan that would best handle AIDS education, prevention, and treatment. Students will share their proposal with the class during a PowerPoint presentation and will create a sample pamphlet for one of the proposed intervention programs.

### **Key Questions/Issues**

- What does it feel like to have AIDS? How are AIDS patients treated around the world? (English Language Arts)
- How does HIV infect the body? (Biology)
- What is the difference between being HIV positive and having AIDS? How does HIV make you sick? (Biology)
- How widespread is AIDS around the world? Which areas are hit the hardest by the disease? (World Geography)
- What are the ways that HIV is spread? (Health Science)
- How can HIV infection be prevented? (Health Science)
- What is the current best practice for treating AIDS? How does it work? (Biology or Health Science)
- How are drug trials conducted ethically in developing nations? (English Language Arts or Health Science)
- What are wealthy nations currently doing to help the developing world combat AIDS? How does donated money get to the places that need it the most? (English Language Arts)

- What is the developing world currently doing in their own countries to combat AIDS? (World Geography)
- What are the barriers hindering the prevention and treatment of AIDS in the developing world? (World Geography)
- What is the best plan for combating AIDS in specific countries? (English Language Arts)

### ***Learning Scenario to Kick Off the Unit***

Your cousin, who has just graduated from college, has decided to spend the summer traveling through South Africa. To your great excitement, she invites you to join her for a travel adventure. When you broach the subject with your parents, they have two conditions that you must meet in order to get their permission. First, your parents are very concerned about the high HIV/AIDS incidence rates in sub-Saharan nations. They want assurances that you know how HIV is transmitted and that you won't put yourself at risk. Second, your parents want you to be more than a tourist. They want you to give back to the country you are visiting, either by volunteering or making a substantial donation to an AIDS organization of your choosing. They want proof that you put a lot of thought into choosing the organization, and that the organization's programs work effectively.

What do you tell your parents about HIV/AIDS?  
What is the best thing you can do to help with the AIDS crisis in the developing world?

### ***Biomedical/Healthcare and Education Partner Roles***

- A school librarian/media specialist can assist the English Language Arts and World Geography instructors with teaching research skills, particularly in using print and other media resources.
- A computer technology or graphic arts instructor can assist with the layout and production of reports, PowerPoint slides, and flyers.
- Possible invited speakers to discuss the impact of AIDS in the local and global community include international aid organization representatives, local AIDS activists, someone who is HIV positive or has AIDS, public health educators and policymakers, elected officials, and AIDS researchers.
- Additional individuals can be invited to participate as speakers or to help evaluate the culminating event. These include:
  - Pharmacologist
  - Psychologist
  - Registered Nurse
  - Social Worker
  - Pathologist
  - Epidemiologist
  - Ethicist
  - Patient Advocates

### **SUBUNITS AND MAJOR TOPICS (ACROSS ACADEMIC AND TECHNICAL SUBJECT AREAS)**

<b>Subunit 1</b> <i>A Serious Situation</i>	<b>Subunit 2</b> <i>Treating the Problem</i>	<b>Subunit 3</b> <i>Finding the Right Solution</i>
ENGLISH LANGUAGE ARTS · BIOLOGY · WORLD GEOGRAPHY	HEALTH SCIENCE · BIOLOGY · ENGLISH LANGUAGE ARTS	ENGLISH LANGUAGE ARTS · WORLD GEOGRAPHY
<ul style="list-style-type: none"> <li>• Personal narratives of AIDS patients from around the world</li> <li>• Structure and life cycle of HIV</li> <li>• Mapping HIV infection rates</li> <li>• Social impact of HIV/AIDS</li> </ul>	<ul style="list-style-type: none"> <li>• Paths of HIV transmission</li> <li>• HIV/AIDS prevention strategies</li> <li>• Current HIV/AIDS treatment strategies and how they work</li> <li>• Ethics of HIV/AIDS treatment testing in developing nations</li> <li>• Writing reasoned arguments on ethical issues</li> </ul>	<ul style="list-style-type: none"> <li>• Current contributions of developed nations to the fight against the global AIDS crisis</li> <li>• Barriers against successful prevention and treatment of HIV/AIDS in developing nations</li> <li>• Researching and evaluating current HIV/AIDS programs in specific developing nations</li> <li>• Creating the best possible HIV/AIDS program for a specific country</li> </ul>