PUBLIC HEALTH ACTIVITIES FOR EDUCATORS, GUIDANCE COUNSELORS AND CAREER AMBASSADORS

Take the Public Health Career Quiz on Page 3
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TAKE THE PUBLIC HEALTH CAREER QUIZ

1. Which of the following best describe the difference between public health and personal health care?
   a. The community is the patient of public health, not the individual
   b. Public health ensures workplace safety, personal health care does not
   c. Public health focuses on keeping the population healthy, rather than treating individuals who are sick
   d. All of the above

2. Circle the two public health careers below.
   a. Physical Therapist
   b. Occupational Therapist
   c. Certified Public Accountant
   d. Environmental Health Specialist
   e. Epidemiologist (Disease Detective)

3. Circle three of the 10 greatest achievements in public health.
   a. A cure for the common cold
   b. Healthier mothers and babies
   c. Fluoridation of Water
   d. Vaccinations
   e. Promoting fitness centers

4. Which public health activity does NOT make communities healthier or safer.
   a. Monitoring the water and food supply
   b. Working with local grocery stores to carry fresh and organic foods
   c. Working with police to arrest students for eating junk food
   d. Lobbying for laws to protect the environment

5. Circle the ways to develop valuable work skills by volunteering in public health today.
   a. Call Area Health Education Centers to find out about the CT Youth Health Service Corps.
   b. Ask your friends to join you an your efforts to make your community healthier and safer.
   c. Ask a teacher to help your class gather an emergency preparedness packet. Go online to: http://www.getreadyforflu.org/clocksstocks/GetSetHighSchoolKit.pdf
   d. Help reduce energy costs in your school go to Live Green, Win Green
   e. All of the above
**ARE YOU READY FOR AN EMERGENCY AT HOME?**

The best way to be ready for an emergency or disaster is to get prepared before one ever happens. To make sure your family is ready answer the questions below to develop an emergency plan. Then use materials from [http://www.ready.gov/america/index.html](http://www.ready.gov/america/index.html) to gather specific contents for your emergency preparedness kit.

1. Does our family have a “just-in-case plan” for emergencies? □Yes □No
2. Discuss different types of emergencies and how to respond to each.
3. Do we know who to call if one of us is lost or we become separated? □Yes □No
4. Have you chosen a safe spot to meet somewhere in the neighborhood? □Yes □No
5. Do we have a preparedness kit stocked with food, water and other supplies? □Yes □No
   clean water
6. Does our family know when it is better to stay inside the house rather than □Yes □No
   a. go outside?
   
   *Different emergencies sometimes mean inside is better (such as during a tornado) than outside (such as during a fire). If you are inside an unfamiliar*
   
   *building in an emergency, look for the exit signs.*
7. Do we have a list of local emergency numbers other than 911? □Yes □No
8. Do we have emergency preparedness information available at home? □Yes □No
   a. At home create a pocket card that has all the phone numbers you might need.
Additional Items to Consider Adding to an Emergency Supply Kit:

- Prescription medications and glasses
- Infant formula and diapers
- Pet food and extra water for your pet
- Important family documents such as copies of insurance policies, identification, and bank account records in a waterproof, portable container
- Cash or traveler’s checks and change
- Emergency reference material such as a first aid book or information from www.ready.gov
- Sleeping bag or warm blanket for each person. Consider additional bedding if you live in a cold-weather climate.
- Complete change of clothing including a long sleeved shirt, long pants and sturdy shoes. Consider additional clothing if you live in a cold-weather climate.
- Household chlorine bleach and medicine dropper – When diluted nine parts water to one part bleach, bleach can be used as a disinfectant. Or in an emergency, you can use it to treat water by using 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe or bleaches with added cleaners.
- Fire Extinguisher
- Matches in a waterproof container
- Feminine supplies and personal hygiene items
- Mess kits, paper cups, plates and plastic utensils, paper towels
- Paper and pencil
- Books, games, puzzles or other activities for children
Family Emergency Plan

Ready


Make sure your family has a plan in case of an emergency. Before an emergency happens, sit down together and decide how you will get in contact with each other, where you will go and what you will do in an emergency. Keep a copy of this plan in your emergency supply kit or another safe place where you can access it in the event of a disaster.

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<thead>
<tr>
<th>Out of Town Contact Name</th>
<th>Telephone Number</th>
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<thead>
<tr>
<th>Neighborhood Meeting Place</th>
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<th>Regional Meeting Place</th>
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<th>Evacuation Location</th>
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Fill out the following information for each family member and keep it up to date.

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of Birth</th>
<th>Social Security Number</th>
<th>Important Medical Information</th>
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Write down where your family spends the most time: work, school and other places you frequent. Schools, daycare providers, workplaces and apartment buildings should all have site specific emergency plans that you and your family need to know about.

<table>
<thead>
<tr>
<th>Work Location One</th>
<th>School Location One</th>
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<tbody>
<tr>
<td>Address</td>
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<tr>
<td>Phone Number</td>
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<th>Work Location Two</th>
<th>School Location Two</th>
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<td>Address</td>
<td>Address</td>
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<tr>
<td>Phone Number</td>
<td>Phone Number</td>
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<td>Evacuation Location</td>
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<th>Work Location Three</th>
<th>School Location Three</th>
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<td>Address</td>
<td>Address</td>
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<tr>
<td>Phone Number</td>
<td>Phone Number</td>
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<tr>
<td>Evacuation Location</td>
<td>Evacuation Location</td>
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<tr>
<th>Other place you frequent</th>
<th>Address</th>
<th>Phone Number</th>
<th>Evacuation Location</th>
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Important Information

<table>
<thead>
<tr>
<th>Doctor(s)</th>
<th>Name</th>
<th>Telephone Number</th>
<th>Policy Number</th>
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<th>Other</th>
<th>Name</th>
<th>Telephone Number</th>
<th>Policy Number</th>
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<th>Pharmacist</th>
<th>Name</th>
<th>Telephone Number</th>
<th>Policy Number</th>
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<th>Medical Insurance</th>
<th>Name</th>
<th>Telephone Number</th>
<th>Policy Number</th>
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<thead>
<tr>
<th>Homeowners/Rental Insurance</th>
<th>Name</th>
<th>Telephone Number</th>
<th>Policy Number</th>
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<thead>
<tr>
<th>Veterinarian/Kennel (for pets)</th>
<th>Name</th>
<th>Telephone Number</th>
<th>Policy Number</th>
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Dial 911 for Emergencies
HOW STUDENTS CAN GET INVOLVED TODAY

Area Health Education Center (AHEC) - Youth Health Service Corps in CT
Your pathway to a health career http://www.nwctahec.org/NWCTAHECmap.htm

CT Public Health Association (CPHA) Mentoring Organization Registry  Connect with a workplace ambassador http://www.cpha.info/
Contact: cyndistern@mac.com or kristin.sullivan@ct.gov

EnvironMentors An environment-based mentoring program aimed at preparing high school students for college programs and careers in science and environmental professions.
http://ncseonline.org/o2education/EnvironMentors/

Internship/ Volunteer location information for the New Haven Area
http://www.southernct.edu/public_health/bachelorsofscience/internships/

Win up to $20,000 from CT Light and Power to green your school. Enter the Live Green, Win Green competition. http://www.clpenvironments.com/LiveGreenWinGreen.php

Look up your local health department online and call or e-mail. Volunteering is a great resume builder and a way to get to know health careers first-hand! https://www.han.ct.gov/local_health/localmap.asp

Young Epidemiology Scholars Competition: Students win $50,000; Teachers $25,000
http://www.collegeboard.com/yes/fs/at-a-glance.html
PUBLIC HEALTH CLASSROOM ACTIVITIES

I. Disease Detective Activities:

*Outbreak at Waters Edge*

- **Time:** one class period
- **Type of class:** Forensics, Environmental Science, Biology, Career Exploration classes

The need for public health professionals has never been greater. This interactive online activity introduces students to the variety of public health and environmental health professionals that work together to investigate and stop disease outbreaks.


II. Air Quality Index Exercises

*Check your Air Quality Index each day in your area*

- **Time:** One Class Period
- **Type of Class:** Environmental Science, Health, Biology

There are many kinds of air pollution. The Environmental Protection Agency (EPA) calculates the Air Quality Index (AQI) everyday. Predict weather information and corresponding air quality for the next day. Those with asthma will especially appreciate knowing ahead of time the air quality of the day.


*Air Pollution: What’s the Solution?*

- **Time:** One Class Period
- **Type of Class:** Environmental Science, Health, Earth Science

This site utilizes real time data to guide students, grades 6 - 12, to discover the science behind outdoor air pollution. The project contains exciting applications of the Internet by having student’s access real time atmospheric data, weather data and other sources. Students will focus on the science behind air quality issues, look for relationships and trends among the data collected via real time sources, and will examine the health impact of air pollution.

[http://www.k12science.org/curriculum/airproj/ozonetomorrow.html](http://www.k12science.org/curriculum/airproj/ozonetomorrow.html)

III. The Relationship between Population, the Environment and Health

*World in the Balance: Global Trends Quiz*

- **Time:** One Class Period
- **Type of Class:** Environmental Science, Health, Earth Science

Populations in both rich and poor nations are on a course to change dramatically in the coming decades. These changes could radically impact economies as well as have enormous consequences for local and global environments. In this quiz, explore what may lie ahead.

IV. Teaching Units aligned to National Standards

**The Most Dangerous Woman in America: The Story of Typhoid Mary**

- **Time:** One Class Period
- **Type of Class:** Health, Biology, History

The program reviews the symptoms, virulence, transmission, and cause of typhoid fever, relates how epidemiologist George Soper tracked down Typhoid Mary Mallon as the source of the contagious disease, and covers her eventual arrest, and the forced testing that revealed she was carrying typhoid bacteria. Grade 9-12 classroom activities available at this site and aligned to national standards.


**Disease Outbreak Investigation**

- **Time:** Multiple lessons and units can be adjusted according to curriculum needs
  - Lesson 1: Food-Borne Outbreak
  - Lesson 2: Cholera and the Investigations of John Snow
  - Lesson 3: Case Study of a Leukemia Cluster in Woburn, Massachusetts
- **Type of Class:** Statistics, Biology, Environmental Science

An award-winning teaching module from the Young Epidemiology Scholar’s Competition. There are multiple lessons and units that can be easily incorporated into the curriculum needs of Statistics, Biology, and Environmental Science classes.


V. Celebrity Diagnosis

Michele Berman, MD and her physician husband, Mark Boguski, co-founded Celebrity Diagnosis with a dual mission: to report on common diseases affecting uncommon people and to provide the medical facts behind the headlines. She established one of the first medical practice websites in 1997. She and her husband have trained and taught at some of the top medical schools in the country including Harvard, Johns Hopkins, and Washington University in St. Louis.


VI. Epidemiology and Genetics

**Epigenomics**

- **Time:** One Class Period
- **Type of Class:** Biology, Statistics, Environmental Health

In the field of epigenetics, scientists study how chemical tags attach themselves to DNA or to the structures surrounding the DNA. These chemical tags can control gene expression, silencing or activating genes. Epigenetics is a highly relevant area, offering scientists new ways to investigate many fundamental questions about life, health, and disease. For example, how do exposures to nutrients, toxins, pollutants, and other environmental agents affect gene expression? The lesson’s goal is for students to be able to explain the difference between genetics and epigenetics.

VII. Genomics

Genomics Careers: Find Your Future
http://www.genome.gov/Careers/

The NIH National Human Genome Research Institute:
http://www.genome.gov/Education/

NIH Genetics Home Reference

Teach.Genetics and Learn.Genetics, with “Print and Go” Lesson Plans, etc.
http://teach.genetics.utah.edu/

ASHG – “Six things everyone should know about genetics”, and more
http://www.ashg.org/education/everyone_1.shtml (From k through post-doctorate)

VIII. Obesity: A Public Health Epidemic

* Bridges to Wellness
  * **Time:** Multiple lessons and units can be adjusted according to curriculum needs
  * Lesson 1: 3-A-Day of Dairy Nutrient Package
  * Lesson 2: Food Groups to Encourage
  * Lesson 3: Nutrition and Physical Activity
  * Lesson 4: Making Breakfast Count
  * **Type of Class:** Health

Bridges to Wellness personalizes nutrition information for students, helps you meet school wellness policy nutrition education goals and helps develop effective partnership with the school nutrition staff. The lessons provide 30-45 minutes of classroom instruction and 20-30 minutes of application and include step-by-step instructions, and reproducible handout and transparency masters.

* Obesity
  * **Time:** One class period
  * **Type of class:** Health, Biology

This activity introduces students to the role that hormones play in obesity. Learn how the body regulates weight by carefully controlling the storage and burning of fat and how a better understanding of these complex metabolic systems could lead researchers to treatments that curb obesity and improve public health.
VIII. Health Equity and Cultural Competency

*Place Matters: Researching our Neighborhoods*

**Time:** Four to seven lessons over three to five days, depending on class level and activities selected.

**Type of class:** Social Studies, Government, Geography, Sociology, City Planning and Urban Studies, Environmental Justice, Public Health.

We know that eating well and staying fit is important for health. But in fact, our economic and social environments are even bigger influences on health. Why is our street address or zip code such a powerful predictor of health? In these lessons, students research why residents of some neighborhoods live, on average, five, 10 or even 15 years longer than those in other neighborhoods. Students will gather and analyze data from their own neighborhood to identify features of their local economic, built, social, and service environments that promote or threaten the health of residents. They will learn how differences in neighborhood conditions tend to pattern along lines of class and race/ethnicity and give rise to corresponding differences in neighborhood health differences.


**PUBLIC HEALTH WEBSITES AND RESOURCES**

**Hartford Sites:**

Hartford Department of Health and Human Services:
http://www.hartford.gov/Human_services/default.htm

**State Sites:**

CT School Health Survey (Youth Risk Behavior Survey):

CT State Health Facts:
http://www.statehealthfacts.org/profileglance.jsp?rgn=8

**National Sites:**

America’s Health Rankings:
http://www.americashealthrankings.org/

Association of Public Health Schools: What is Public Health and Career Pathways
http://www.asph.org/document.cfm?page=842

Careers in Public Health http://www.101careersinpublichealth.com/
CDC Wonder:
http://wonder.cdc.gov/

Centers for Disease Control and Prevention:
http://www.cdc.gov/DataStatistics/

Child Trend Data Bank:
http://www.childtrendsdatabank.org/

Health Data Tools and Statistics:
http://phpartners.org/health_stats.html

Healthy Schools Healthy Youth:
http://www.cdc.gov/healthyyouth/

National Institutes of Health: Health Information:
http://health.nih.gov/

Youth Risk Behavior Surveillance System:
http://www.cdc.gov/HealthyYouth/yrbs/index.htm

**VOLUNTEER AND INTERNSHIP OPPORTUNITIES FOR STUDENTS**

**Northwestern CT Area Health Education Center (AHEC) - Youth Health Service Corps**
Your Pathway to a Healthcare Career
http://www.nwctahec.org/

**Collegiate Health Service Corps** Prepares college level health professions students to volunteer in settings that serve marginalized populations while increasing the volunteer’s awareness of careers in health care delivery and public health. The Connecticut colleges and universities currently participating in the CHSC include Quinnebaug Valley Community College, Three Rivers Community College, University of Connecticut, University of Hartford, Central, Eastern Southern and Western Connecticut State Universities. http://ctahec.uchc.edu/programs/chsc/index.html

**Internship/ Volunteer location information for the New Haven Area**
http://www.southernct.edu/public_health/bachelorsofscience/internships/
CT Public Health Association (CPHA) Mentoring Organization Registry
Get linked up with a career ambassador.
http://www.cpha.info/ contact: cyndistern@mac.com or Kristin.sullivan@ct.gov

**Medical Interpretation Certification**: The Connecticut AHEC Medical Interpreter Certificate is 40 hours of highly interactive practice sessions and role-plays. Each training program accommodates up to 15 participants.

http://ctahec.uchc.edu/programs/interpretation/index.html

**Summer research opportunities at the UConn Health Center**
http://grad.uchc.edu/prospective/programs/summer/index.html

**Summer Public Health Internship at Hartford Health and Human Services Department**
http://www.centralctahec.org/

**ACKNOWLEDGMENTS**

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