

NLM's Online Playground: K-5 Science and Health Education Resources



Lydia N Collins, MLIS
Consumer Health Coordinator



The National Library of Medicine

“The National Library of Medicine (NLM), on the campus of the National Institutes of Health in Bethesda, Maryland, has been a center of information innovation since its founding in 1836.



U.S. National Library of Medicine



In addition, the Library coordinates a 6,000-member National Network of Libraries of Medicine that promotes and provides access to health information in communities across the United States.”

[URL](#) for the National Library of Medicine

MEDLINEPLUS FOR K-5





Health Topics

Find information on health, wellness, disorders and conditions



Drugs & Supplements

Learn about prescription drugs, over-the-counter medicines, herbs, and supplements



Videos & Tools

Discover tutorials, health and surgery videos, games, and quizzes



Medical Encyclopedia

Articles and images for diseases, symptoms, tests, treatments

[Medical Dictionary from Merriam-Webster](#)

Good habits start early.
Teach your child to have **healthy teeth for life.**

1 2 3 4 ▶

- ### Today's Health News
- [CDC Reports Link Between Zika Virus and Microcephaly](#)
 - [Skin Infections Common in High School Wrestlers, Study Finds](#)
 - [U.S. Dementia Rates Seem to Be Falling, Study Finds](#)
- [More health news](#)

Clinical Trials

Search [ClinicalTrials.gov](#) for drug and treatment studies.

Stay Connected

Sign up for MedlinePlus email updates 

NIH MedlinePlus Magazine

Read the **latest issue**



[URL for MedlinePlus](#)



Home → [Health Topics](#) → [Anatomy](#)

Anatomy



On this page

Basics

- [Summary](#)
- [Start Here](#)

Learn More

- [Related Issues](#)
- [Specifics](#)

See, Play and Learn

- [Images](#)
- [Videos and Tutorials](#)
- [Games](#)

Research

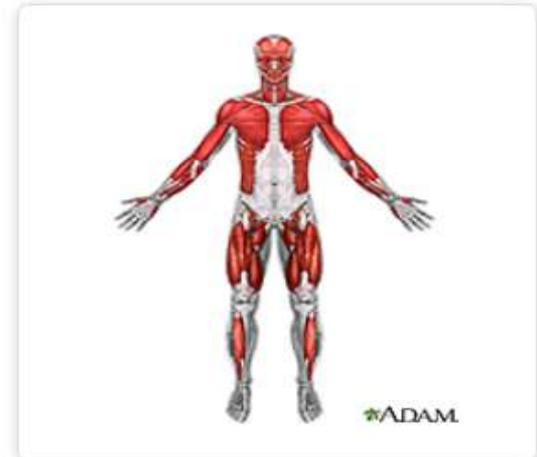
- No links available

Resources

- No links available

For You

- [Children](#)
- [Teenagers](#)
- [Men](#)
- [Women](#)



Summary

Anatomy is the science that studies the structure of the body. On this page, you'll find links to descriptions and pictures of the human body's parts and organ systems from head to toe.

Start Here

Get Anatomy updates by email 

URL Anatomy



BODY PARTS

How well do you know your anatomy?

Play Artificial Anatomy's Body Parts to test your retention.

Here's how you play.

When you see a mystery image on the left of your screen, you'll be prompted to identify the body part. Use your mouse to find and select the proper body part from the full size anatomical model. Don't forget to look for additional answers by turning Jerome*. There are 10 parts in all. See how many parts you can place.



▶▶ Let's go!

* Who's Jerome?

Contact | Resources | Credits and Copyright

[URL](#) for Body Parts Tutorial (National Museum of American History)



Home → [Health Topics](#) → [Germs and Hygiene](#)

Germs and Hygiene



On this page

Basics

- [Summary](#)
- [Start Here](#)
- [Latest News](#)
- [Prevention and Risk Factors](#)

Learn More

- [Related Issues](#)
- [Specifics](#)

See, Play and Learn

- [Games](#)

Research

- [Statistics and Research](#)
- [Clinical Trials](#)
- [Journal Articles](#)

Resources

- [Find an Expert](#)

For You

- [Children](#)
- [Teenagers](#)
- [Women](#)
- [Patient Handouts](#)



Get Germs and Hygiene updates by email 

Summary

When you cough or sneeze, you send tiny germ-filled droplets into the air. [Colds](#) and [flu](#) usually spread that way. You can help stop the spread of germs by

- Covering your mouth and nose when you sneeze or cough. Sneeze or cough into your elbow, not your hands

MEDICAL ENCYCLOPEDIA

[Cleaning supplies and equipment](#)

[URL for Germs and Hygiene \(MedlinePlus\)](#)



Search here...

Kids Home

How the Body Works

Puberty & Growing Up

Staying Healthy

Recipes & Cooking

Staying Safe

Health Problems

Illnesses & Injuries

Health Problems of Grown Ups

People, Places & Things That Help

Feelings

Q&A

Movies & More

Quizzes



KidsHealth > Kids > Q&A > Q&A > What Are Germs?

Text Size Print

▶ What's in this article?

see more [+]

Listen

Our bodies are pretty amazing. Day after day, they work hard — digesting food, pumping blood and oxygen, sending signals from our brains and much more.

Lee este artículo en Español

But there is a group of tiny invaders that can make our bodies sick — they're called germs.

Some kids may think that germs are bugs or cooties or other gross stuff. Actually, germs are tiny organisms, or

KidsHealth

Be honest: Do you always

Partner Message:

8 NEW MOVIES!



[URL for What Are Germs? \(Nemours Foundation\)](#)



Home → [Health Topics](#) → [Child Nutrition](#)

Child Nutrition



On this page

Basics

- [Summary](#)
- [Start Here](#)
- [Latest News](#)
- [Diagnosis and Tests](#)

Learn More

- [Related Issues](#)
- [Specifics](#)

See, Play and Learn

- [Health Check Tools](#)

Research

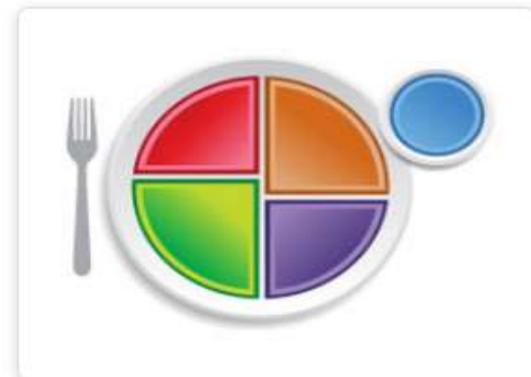
- [Statistics and Research](#)
- [Clinical Trials](#)
- [Journal Articles](#)

Resources

- [Reference Desk](#)
- [Find an Expert](#)

For You

- [Children](#)
- [Teenagers](#)
- [Patient Handouts](#)



Summary

A healthy diet helps children grow and learn. It also helps prevent [obesity](#) and weight-related diseases, such as diabetes. To give your child a nutritious diet

- Make half of what is on your child's plate fruits and vegetables

Get Child Nutrition updates by email 

[URL](#) for Child Nutrition



Home → Latest Health News → Article



New School Lunch Program Lets Kids Select More Nutritious Meals

Changes include more variety, and servings of fruits and vegetables, researchers say

By Mary Elizabeth Dallas
Monday, January 4, 2016



MONDAY, Jan. 4, 2016 (HealthDay News) -- Move over, mystery meat -- students are choosing more nutritious school lunches under the Healthy Hunger-Free Kids Act, new research suggests.

"We found that the implementation of the new meal standards was associated with the improved nutritional quality of meals selected by students," according to study author Donna Johnson, from the University of Washington's Nutritional Sciences Program.

"These changes appeared to be driven primarily by the increase in variety, portion size and the number of servings of fruits and vegetables," the researchers wrote in a report published Jan. 4 in *JAMA Pediatrics*.

The 2010 Healthy Hunger-Free Kids Act updated nutritional standards for the National School Lunch Program and the School Breakfast Program. The revised guidelines took effect for the 2012-13 school year.



Related MedlinePlus Health Topics

- [Child Nutrition](#)
- [School Health](#)

[URL for New School Lunch Program Article \(HealthDay\)](#)



[Home](#) → [Health Topics](#) → [Asthma in Children](#)

Asthma in Children

Also called: Childhood asthma



On this page

Basics

- [Summary](#)
- [Start Here](#)
- [Latest News](#)
- [Diagnosis and Tests](#)
- [Prevention and Risk Factors](#)
- [Treatments and Therapies](#)

Learn More

- [Living With](#)
- [Related Issues](#)
- [Specifics](#)
- [Genetics](#)

See, Play and Learn

- [Images](#)
- [Health Check Tools](#)
- [Videos and Tutorials](#)
- [Games](#)

Research

- [Statistics and Research](#)
- [Clinical Trials](#)
- [Journal Articles](#)

Resources

- [Reference Desk](#)
- [Find an Expert](#)

For You

- [Children](#)
- [Teenagers](#)
- [Patient Handouts](#)



Summary

Asthma is a chronic disease that affects your airways. Your airways are tubes that carry air in and out of your lungs. If you have asthma, the inside walls of your airways become sore and swollen.

Get Asthma in Children updates by email 

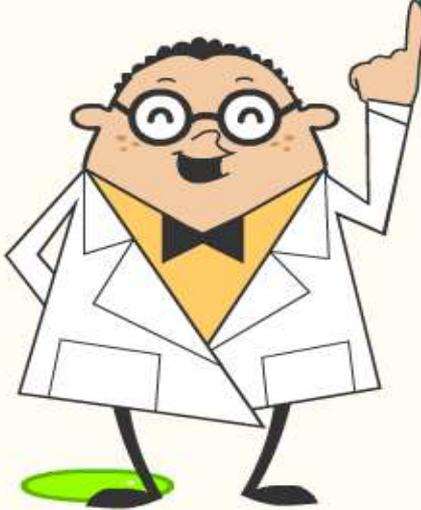
[URL for Asthma in Children](#)





Welcome to Lungtropolis

The city of easy breathing!



Become an Asthma Control Agent!

New to the program?
Register to become a new agent.

[Join Now!](#)

Don't want to register yet?
You can still play but you won't be
able to save your progress.

[Go Now](#)

Log in to play!

Username

Password

Forgot your
password?

[Click here.](#)

[Enter](#)

URL for Lungtropolis (American Lung Association)



[Home](#) → [Health Topics](#) → [Bullying](#)

Bullying

On this page

Basics

- [Summary](#)
- [Start Here](#)
- [Latest News](#)
- [Diagnosis and Tests](#)
- [Prevention and Risk Factors](#)

Learn More

- [Living With](#)
- [Related Issues](#)
- [Specifics](#)

See, Play and Learn

- [No links available](#)

Research

- [Statistics and Research](#)
- [Clinical Trials](#)
- [Journal Articles](#)

Resources

- [Find an Expert](#)

For You

- [Children](#)
- [Teenagers](#)



Summary

Bullying is when a person or group repeatedly tries to harm someone who is weaker or who they think is weaker. Sometimes it involves direct attacks such as hitting, name calling, teasing or taunting. Sometimes it is indirect, such as spreading rumors or trying to make others reject someone.

Get Bullying updates by email 

URL for Bullying



BAM! Body and Mind

BAM!
Body and Mind™

- DISEASES**
- FOOD & NUTRITION**
- PHYSICAL ACTIVITY**
- YOUR SAFETY**
- YOUR LIFE**

Xpert Opinion
 Ad Decoder
 BAM! Guide to Getting

[Bam! Body and Mind](#) > [Your Life](#)

BULLY ROUNDUP

Bully Beware

Bullies aren't all big and muscle-y. Bullies come in all shapes and sizes — and it's not like you can tell who they are by what they look like. You can only tell a bully by their actions — they make themselves feel powerful by threatening, embarrassing, or hurting others. If you have ever been around a bully or been picked on by a bully, you know how hurtful they can be. But, there are things you can do to stay out of a bully's way.



NEWSFLASH

- 1** Make friends and lots of them — there's safety in numbers. A bully is less likely to approach you if you're surrounded by pals. Try to be friendly and respectful to everyone—smile at someone if you make eye contact in the hallways, and if you dig someone's cool new shoes, tell them.
- 2** If a bully is talking smack about you, keep in mind all the good stuff you know about yourself. Do things that you are good at. Can you spell like a dictionary? Enter a spelling bee. Run like the wind? Join the track team. Sing like an angel? Choir is calling your name. Try something new; you may discover a talent you never knew you had. Take tennis lessons or

- Print page
- Get email updates
- Subscribe to RSS
- Listen to audio/Podcast



Contact Us:

- Division of Population Health/School Health Branch
Centers for Disease Control and Prevention
4770 Buford Highway, Northeast, Mailstop K-27
Atlanta, GA 30341
- 800-CDC-INFO (800-232-4636)
TTY: (888) 232-6348
- [Contact CDC-INFO](#)

[URL for Bully Roundup \(CDC\)](#)



Home → [Health Topics](#) → [Health Occupations](#)

Health Occupations

Also called: [Health careers](#), [Health professions](#), [Medical occupations](#), [Medical professions](#)

On this page

Basics

- [Summary](#)
- [Start Here](#)
- [Latest News](#)

Learn More

- [Specific Conditions](#)
- [Related Issues](#)

Multimedia & Tools

- [Videos](#)

Research

- [Financial Issues](#)
- [Clinical Trials](#)
- [Journal Articles](#)

Reference Shelf

- [Directories](#)
- [Organizations](#)
- [Statistics](#)

For You

- [Children](#)



Get Health Occupations updates by email 

GO

[MEDICAL ENCYCLOPEDIA](#)

Summary

Every day, around the clock, people who work in the health care industry provide care for millions of people, from newborns to the very ill. In fact, the health care industry is one of largest providers of jobs in the United States. Many health jobs are in hospitals. Others are in nursing homes, doctors' offices, dentists' offices, outpatient clinics and laboratories.

[URL](#) for [Health Careers \(MedlinePlus\)](#)



K-12

[GAMES & QUIZZES](#)[STUDENT RESOURCES](#)[TEACHER'S DESK](#)[HISTORY OF BLS](#)[FAQs](#)

Search K-12

GO

Classroom activities

**How do you spend your time?**

Students will learn how to create and interpret a pie chart displaying how they spend their time.

Overview ([PDF](#))
 Excel: Directions ([XLS](#)) Worksheet ([PDF](#))
 Print: Directions ([PDF](#)) Worksheet ([PDF](#))

**Graphing Prices**

Students will learn how to graph changes in price levels of goods in this real-world graphing exercise.

Worksheet ([PDF](#))

**The Price is Correct**

In this activity, students will learn about inflation and play a game to guess how the prices of common goods have changed over the past several years.

Worksheet ([PDF](#))

**Choosing a Career**

Students will research careers from among the 580 occupations listed in the Occupational Outlook Handbook.

Worksheet ([PDF](#))

CPI Inflation Calculator

\$
 in 1953
 Has the same buying power as:

 in 2013

Inflation Calculator

Students will use the Inflation Calculator to learn how the buying power of the dollar has changed over the years.

[URL](#) for K-12 Games and Quizzes; [URL](#) for Student Resources;
[URL](#) for Teacher's Desk (Bureau of Labor Statistics)



[Home](#) → [Health Topics](#) → [Environmental Health](#)

Environmental Health

On this page

Basics

- [Summary](#)
- [Start Here](#)
- [Latest News](#)

Learn More

- [Related Issues](#)
- [Specifics](#)

See, Play and Learn

- No links available

Research

- [Statistics and Research](#)
- [Clinical Trials](#)
- [Journal Articles](#)

Resources

- [Find an Expert](#)

For You

- [Children](#)
- [Teenagers](#)
- [Women](#)

Summary

Our environment affects our health. If parts of the environment, like the [air](#), [water](#), or [soil](#) become polluted, it can lead to health problems. For example, [asthma](#) pollutants and chemicals in the air or in the [home](#) can trigger asthma attacks.

Some environmental risks are a part of the natural world, like [radon](#) in the soil. Others are the result of human activities, like [lead poisoning](#) from paint, or exposure to [asbestos](#) or [mercury](#) from mining or industrial use.

NIH: National Institute of Environmental Health Sciences

Start Here

- [Environmental Health Topics from A to Z](#)  (National Institute of Environmental Health Sciences)
Available in Spanish
- [Tox Town](#)  (National Library of Medicine)
Available in Spanish

Latest News



Get Environmental Health updates by email 

Related Health Topics

- [Air Pollution](#)
- [Drinking Water](#)
- [Electromagnetic Fields](#)
- [Hazardous Waste](#)
- [Indoor Air Pollution](#)
- [Molds](#)
- [Noise](#)
- [Occupational Health](#)
- [Oil Spills](#)

[URL](#) to Environmental Health



Learning and Teaching about the Environment

K-12 students and educators need access to quality homework resources, lesson plans and project ideas to learn and teach about the environment. [Environmental education \(EE\)](#) is a multi-disciplinary approach to learning about environmental issues that enhances knowledge, builds critical thinking skills and helps students make informed and responsible decisions.

Homework Help, Awards and Activities for K-12 Students



- [Homework resources](#)
- [Student awards and contests](#), including the President's Environmental Youth Award
- [Games, quizzes, and more](#)
- [Videos about the environment](#)

Additional Resources for Educators and Education Professionals

Classroom Resources and Project Ideas



- [Lesson plans, teacher guides and online resources for educators](#)
- [Community service project ideas](#)
- [Science fair project ideas](#)

Healthy Schools, Healthy Kids

News and Deadlines

- Congratulations to our latest [President's Environmental Youth Award](#) winners! Applications are now being accepted for the next cycle.
- Take a look at the newest [Campus RainWorks Challenge](#) winners.

Find Local Resources

To find local resources or more information on inviting EPA staff to visit your school, talk to your [Regional Environmental Education Coordinator](#).

[Order Materials](#)

[URL](#) for Learning and Teaching about the Environment (EPA)



The 5 Senses



U.S. National Library of Medicine

MedlinePlus
Trusted Health Information for You

Search MedlinePlus

[About MedlinePlus](#) [Site Map](#) [FAQs](#) [Contact Us](#)

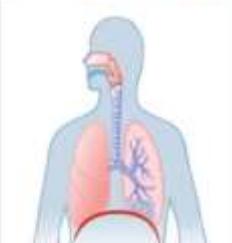
[Health Topics](#) [Drugs & Supplements](#) [Videos & Tools](#) [Español](#)

Home → Videos & Tools → Health Videos

Health Videos

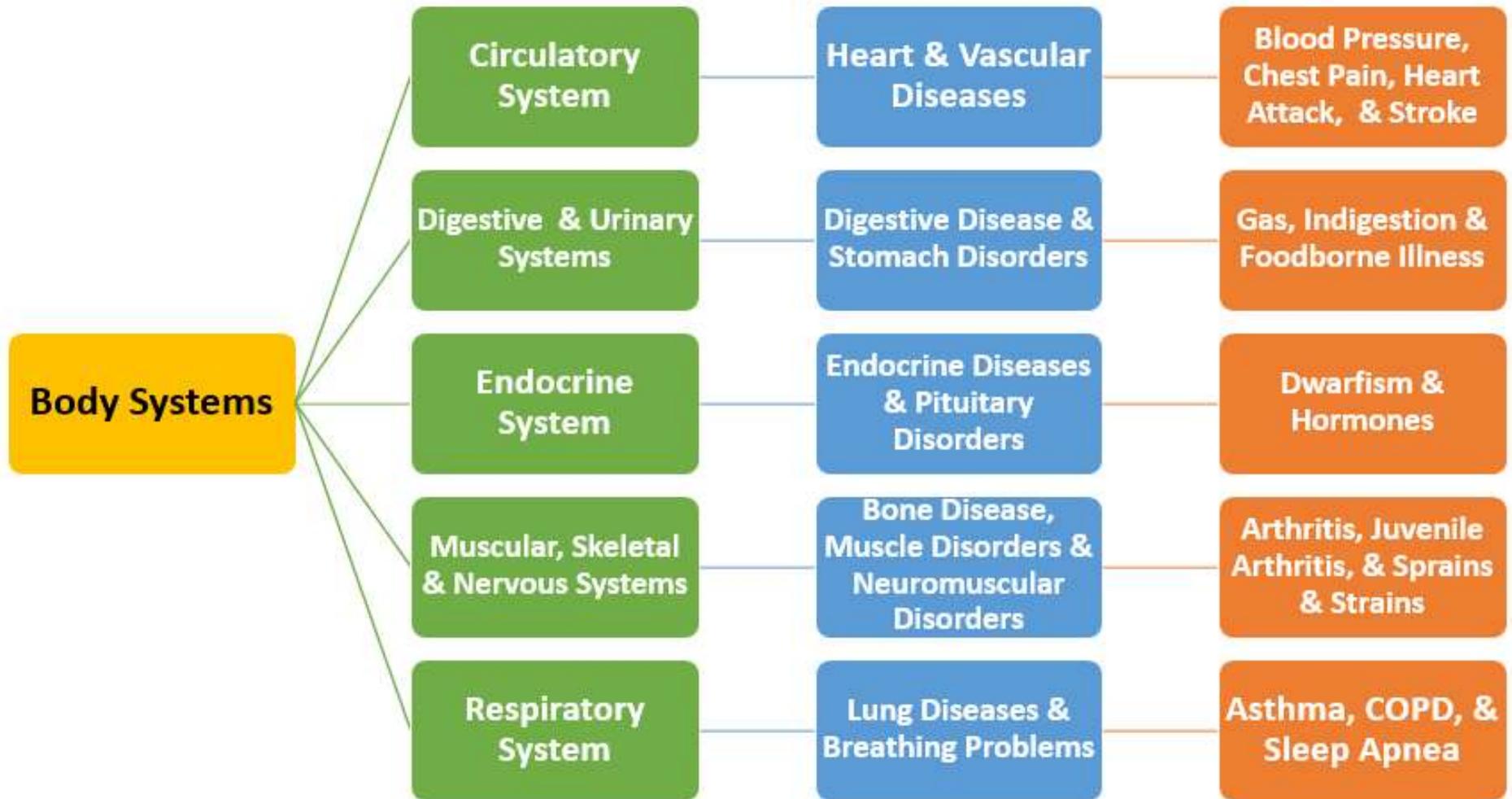
These animated videos show the anatomy of body parts and organ systems and how diseases and conditions affect them.

- Allergies
- Alzheimer disease
- Arrhythmias
- Atherosclerosis
- Athetosis resulting from basal ganglia injury
- Heartburn
- Herniated nucleus pulposus (slipped disk)
- Hypertension - overview
- Immune response
- Intracytoplasmic sperm injection



[URL](#) for Health Videos (MedlinePlus)





[URL](#) to Health Topics: Body Location/Systems (MedlinePlus)



Home → [Health Topics](#) → Evaluating Health Information

Evaluating Health Information



On this page

Basics

- [Summary](#)
- [Start Here](#)

Learn More

- [Related Issues](#)
- [Specifics](#)

See, Play and Learn

- [Videos and Tutorials](#)

Research

- [Statistics and Research](#)
- [Journal Articles](#)

Resources

- [Find an Expert](#)

For You

- [Seniors](#)
- [Patient Handouts](#)



Summary

Millions of consumers get health information from magazines, TV or the Internet. Some of the information is reliable and up to date; some is not. How can you tell the good from the bad?

First, consider the source. If you use the Web, look for an "about us" page. Check to see who runs the site: Is it a branch of the government, a university, a health organization, a hospital or a business? Focus on quality. Does the site have an editorial board? Is the information reviewed before it is posted? Be skeptical. Things that sound too good to be true often are. You want current, unbiased information based on [research](#).

Get Evaluating Health Information updates by email

Enter email address

URL for Evaluating Health Information

URL for Evaluating Internet Health Information Tutorial (NLM-MedlinePlus)



[Home](#) → [MedlinePlus Guide to Healthy Web Surfing](#)

MedlinePlus Guide to Healthy Web Surfing



What should you look for when evaluating the quality of health information on Web sites? Here are some suggestions based on our experience.

Consider the source -- Use recognized authorities

Know who is responsible for the content.

- Look for an "about us" page. Check to see who runs the site: is it a branch of the Federal Government, a non-profit institution, a professional organization, a health system, a commercial organization or an individual.
- There is a big difference between a site that says, "I developed this site after my heart attack" and one that says, "This page on heart attack was developed by health professionals at the American Heart Association."
- Web sites should have a way to contact the organization or webmaster. If the site provides no contact information, or if you can't easily find out who runs the site, use caution.

Focus on quality--All Web sites are not created equal

Does the site have an editorial board? Is the information reviewed before it is posted?

- This information is often on the "about us" page, or it may be under the organization's mission statement, or part of the annual report.
- See if the board members are experts in the subject of the site. For example, a site on osteoporosis whose medical advisory board is composed of attorneys and accountants is not medically authoritative.

[URL for MedlinePlus Guide to Healthy Web Surfing](#)

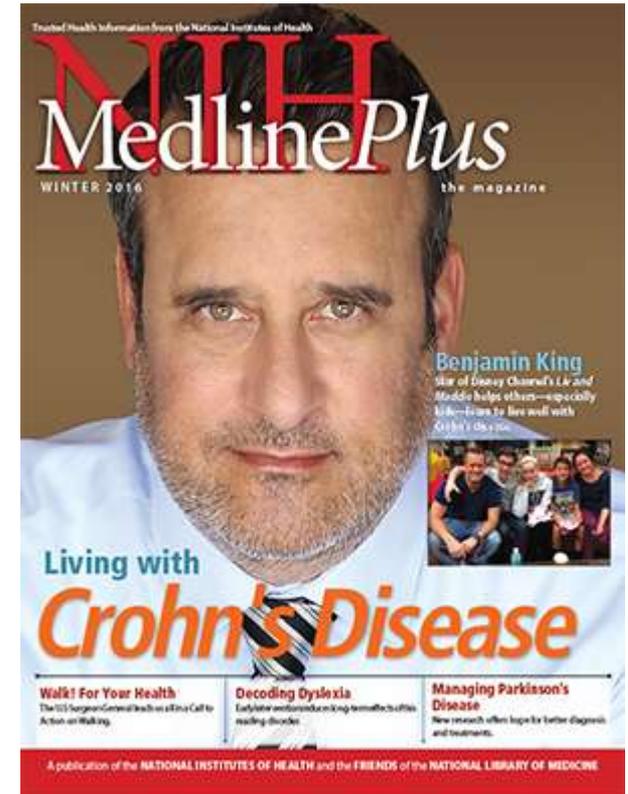


MedlinePlus Magazine

A quarterly
publication of the
Friends of the
National Library of
Medicine.

Get a *free*
subscription!

Organizations can order in
bulk



[URL](#) for MedlinePlus Magazine
[URL](#) to order in bulk

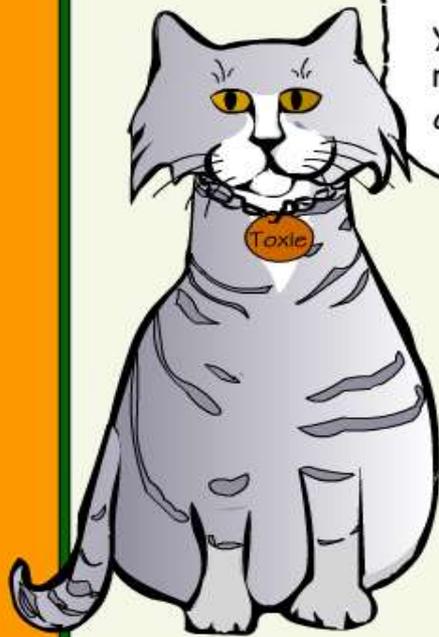


ENVIRONMENTAL HEALTH RESOURCES FOR K-5



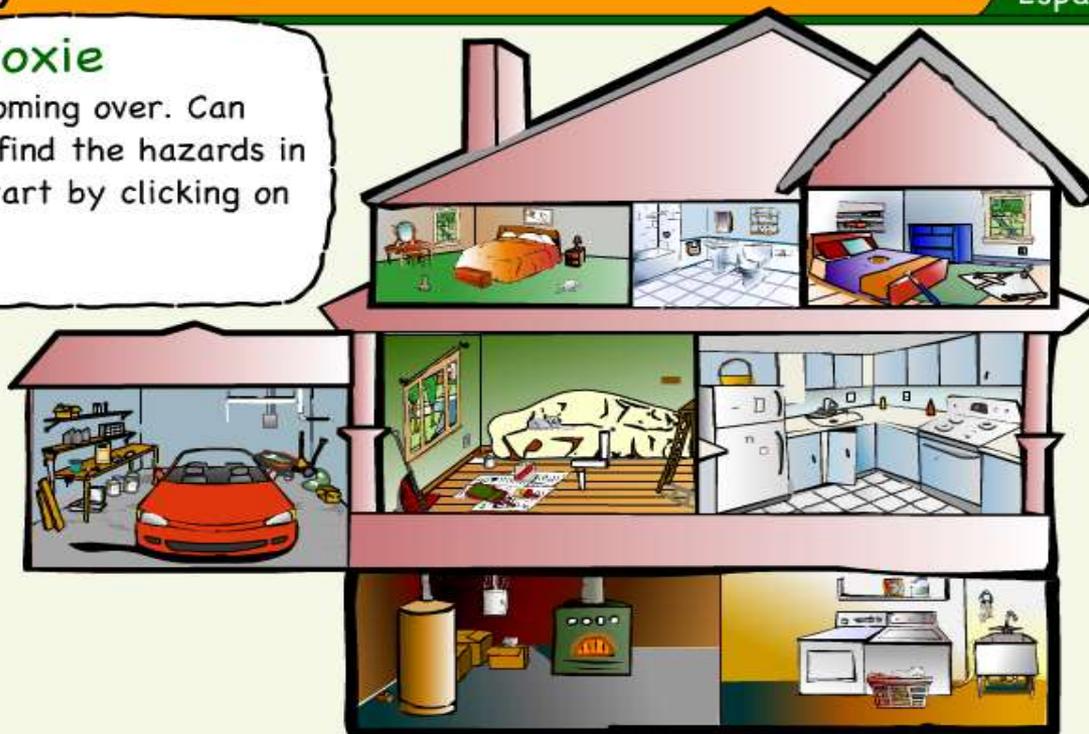
ToxMystery

Español



Hi, I'm Toxie

Thanks for coming over. Can you help me find the hazards in my house? Start by clicking on a room.



Sound is on



National Library of Medicine

Parent Resources

For Teachers

Getting Started



Getting started:

Close

You can click on the rooms in any order



Roll your mouse over things in the house, and if it moves, click on it.



When the question box pops up, click on the answer.



If you need a hint, press on Toxie.



The scorekeeper will let you know if you have found all of the

Here's a bedroom!
There are three hazards in this room.
You have found 2.



Good Luck!

[URL](#) for ToxMystery



ToxMystery Lesson Plan 1: Introduction to Common Household Chemical Hazards

Grade Level: 2-6

Description: This lesson plan will introduce students to potential environmental health hazards in their day-to-day environment. Students will be introduced to ToxMystery, a computer game activity, and either individually or in groups, they will find potential environmental health hazards in each room of the house that is presented by the game. They will then answer multiple choice questions posed by the game about the hazards they encounter and complete assigned activity sheets.

National Science Educational Standards

Unifying Concepts and Processes:

- Understanding of evidence, models, and explanation
- Understanding of form and function

Science as Inquiry:

- Abilities necessary to do scientific inquiry
- Understanding about scientific inquiry

Science in Personal and Social Perspective:

- Personal health
- Types of resources
- Natural hazards
- Changes in environments
- Science and technology in society

History and Nature of Science

- Science as human endeavor
- Nature of science
- History of science

Learning Outcomes

Students will be able to:

- Compare and analyze appropriate uses for chemicals and other household products
- List and describe several chemicals and their potential dangers.

ToxMystery Fill-in-the-Blank



Word Box

Pesticide

Carbon Monoxide

Mothballs

Mercury

Solve the clues using the word box below and color each hazard BLUE.

1. I am a gas that you can't smell or taste. I can poison you if you breathe too much of me.

What am I? _____

2. I am used in sprays to kill bugs and fungus on houseplants. You should never touch, breathe, or swallow me.

What am I? _____

3. I contain poisonous fumes that are used to kill the moths that eat your clothes. Unfortunately, I can also harm humans, so be careful.

What am I? _____



Search

Go



Print this Page

What is Environmental Health ?

Environmental Health is the interrelationship between human health and the environment, either natural or manmade.

Learn More



1 2 3 4 5

The water we use every day has to be treated so it's clean and safe.

Read more about water treatment.



Air Pollution



Chemicals



Climate Change



Water Pollution



U.S. National Library of Medicine

Specialized Information Services

U.S. National Library of Medicine

National Institutes of Health

U.S. Department of Health and Human Services

What is Environmental Health? | About | Site Map
Copyright | Privacy | Freedom of Information Act | Accessibility
Videos and Players

Contact Us: tehip@teh.nlm.nih.gov

[URL](#) to Environmental Health Student Portal



Haz-Map



Hazardous Agents



Occupational Diseases



High Risk Jobs



Non-Occupational Activities



Industries



Job Tasks



Processes



Symptoms/Findings

[Haz-Map®](#): Information on Hazardous Chemicals and Occupational Diseases

by

Jay A. Brown, M.D., M.P.H.

[URL for Haz-Map](#)

NLM EXHIBITION PROGRAM



EXHIBITIONS

VIEW CATEGORIES BY: [MOST RECENT](#) [ALPHABETICALLY](#)

 find an exhibition near you

medicine & the arts



FRANKENSTEIN: Penetrating the Secrets of Nature



AND THERE'S THE HUMOR OF IT: Shakespeare and the Four Humors



THE LITERATURE OF PRESCRIPTION: Charlotte Perkins Gilman and "The Yellow Wallpaper"

[view more](#)



[view all](#)

science & society



PICK YOUR POISON: Intoxicating Pleasures & Medical Prescriptions



FROM DNA TO BEER: Harnessing Nature in Medicine and Industry

AIDS
IT AIN'T OVER YET

SURVIVING AND THRIVING: AIDS, Politics and Culture

[view more](#)

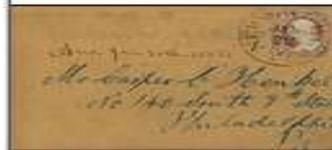


[view all](#)

patients & practitioners



PICTURES OF NURSING: The Zwerdling Postcard Collection



THE HENKEL PHYSICIANS: A Family's Life in Letters



HEALING THE NATION: Stories from the Civil War

[view more](#)



[view all](#)

the technology of medicine



VISIBLE PROOFS: Forensic Views of the Body



THE ONCE AND FUTURE WEB: Worlds Woven by Telegraph and Internet

[URL](#) for NLM's Exhibition Program





Courtesy CEPRODE

DISASTER PRE

The Central American Disaster Information Network (CANDHI) provides the technology needed to access databases, publications, and online resources on disaster preparedness, and to connect to a web site that provides news, maps, local weather updates, and alerts.

[Click here to learn more](#) ▶

◀ PREVIOUS TOPIC

NEXT TOPIC ▶

ONLINE ACTIVITIES & RESOURCES



Test your knowledge of the world of global health in online activities, and take this topic into the classroom with resources for students and teachers.

[View Games & Lessons](#) ▶

DOWNLOADS

Hear more about global health topics from leaders and advocates featured in the exhibition.

[Get Downloads](#) ▶

EXPLORE



MORE EXHIBITIONS



MORE EDUCATIONAL RESOURCES

Grade Level: 3-6 grades

Description: This lesson incorporates visual materials from the *Against the Odds* exhibition to engage visual learners and to encourage students to apply a successful public health program to their own lives. Students learn about Brazilian students who adopt an active, healthy lifestyle through the *Agita São Paulo* program. Students connect with students in Brazil through their photos and drawings promoting various physical activities. Students also develop their own ideas on how to adopt an active, healthy lifestyle for themselves. Finally, students create materials to inform others about and persuade them to improve their health with 30 minutes of daily physical activity.

Learning outcomes: Students will be able to:

- Locate the continent of South America and the country of Brazil on a map of the world.
- Identify at least three different physical activities they can do for 30 minutes a day.
- Write and/or illustrate a message that promotes the importance of 30 minutes of daily physical activity.

Time Needed: Two 30-minute periods

Background information:

- *Against the Odds* exhibition provides brief background information on Brazil's [Agita São Paulo public health program](#).

Materials:

- Chalkboard and/or flip chart and markers
- A world map and (optional) a transparency of a map of Brazil with its capital, Brasília, São Paulo, and Amazon River, along with an image of the [Brazilian flag](#).
- [Notes for teachers for the visual materials](#) from the Brazil's *Agita* program
- *Agita São Paulo* visual materials:
 - ⇒ Physical activity pyramid drawings by Brazilian students: [Activity Pyramid 1](#), [Activity Pyramid 2](#)
 - ⇒ Two photos of *Agita São Paulo* events: [Event Photo 1](#), [Event Photo 2](#)
 - ⇒ [Agita's mascot clock](#)
 - ⇒ [Physical activity poster](#)
- [Agita: Dance Your Way to Health](#) story
- [Agita in Your Life](#) worksheet
- Colored markers or crayons
- Magazines and scissors
- Construction paper for posters
- Tape or glue (for display of the physical activity posters created by the class)

Lesson 1 Procedures:

Think-Pair-Share warm up

1. Write down the following two questions on the board or flip chart to assess students' knowledge and assumptions about the relationship between physical activities and health:
 - a. List three things you do that help you stay healthy.
 - b. How do these things keep you healthy?
2. Have students work in pairs to answer the two questions on the board or flip chart
3. Ask pairs to share their answers and record student responses—e.g., healthy eating habits, exercising, playing outside, walking, resting, sleeping, etc.

[URL](#) for Against the Odds Online Exhibition



Lesson Plans

Middle School

The Four Humors: from Hippocrates to Shakespeare

[Learning Outcomes](#) [Background Information](#) [Vocabulary](#) [Materials](#) [Class 1](#) [Class 2](#)
[Evaluations](#) [Extension Opportunities](#) [Standards](#)

Grade Level:

5–8, in connection with the study of ancient civilizations

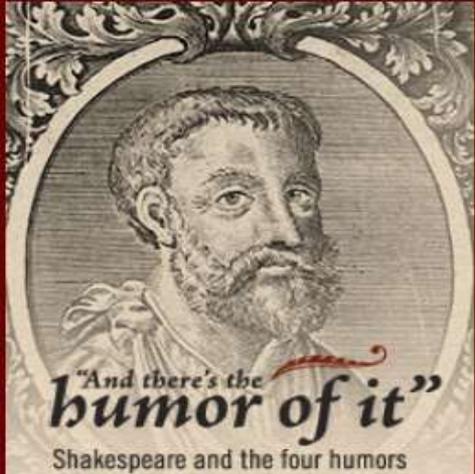
Time Needed:

two 45-minute periods

Description:

Students view primary and secondary sources related to the medical theory of the four humors and its influence on Shakespeare from the online exhibition, “*And there’s the humor of it*” *Shakespeare and the four humors*. In [Class 1](#), students learn about Hippocrates and Galen in the context of traditional Western medicine and humoral theory. Students also write on an exit slip their own thoughts on whether or how modern medicine considers the mind-body connection. In [Class 2](#), students examine the four humors as they relate to bodily fluids and temperaments that continued as an integral part of Western medicine’s view of the mind-body connection in Shakespeare’s time, using various primary visual sources. Afterwards, students consider the current understanding of the mind-body connection by reading two articles and writing an essay where they revise and elaborate on their exit slips written during [Class 1, Step 10](#).

[URL](#) for “*And there’s the humor if it*” Online Exhibition



- Exhibition
- Education
 - Lesson Plans
 - Middle School
 - High School
 - Higher Education
 - Additional Resources
- Traveling Exhibition
- Credits
- Exhibition Program



*EVERY NECESSARY
CARE & ATTENTION*GEORGE WASHINGTON
& MEDICINEEDUCATION
Lesson Plans

Lesson Plans

- Primary Sources
- Then and Now

Higher Education Modules

Online Activities

Other Resources

GEORGE WASHINGTON: Primary Sources

grade level 5–8 | subject - history and social studies



George Washington and Primary Sources is prepared in connection with the study of U.S. history, specifically the Revolutionary War period and George Washington. Students define what primary and secondary sources are. They then use and analyze several primary and secondary sources from the online exhibition to learn about how George Washington worked to ensure the health and safety of others under his care—troops, as well as family, servants, and slaves living at his Mount Vernon estate.

GEORGE WASHINGTON AND MEDICINE: Then and Now

grade level 7–9 | subject - history and social studies, health education



George Washington and Medicine: Then and Now engages students in examining primary and secondary sources from the exhibition to learn about several health issues and treatments that George Washington dealt with in caring for those under his charge—troops, family, servants, and slaves. Students consider the knowledge and practice of medicine during the American Revolutionary and Early Republic eras. They investigate how those health issues are being understood and treated in our own time and present their findings in posters as well as in written essays.

[URL](#) for Every Necessary Care & Attention Online Exhibition





LIFE AND LIMB

THE TOLL OF THE AMERICAN CIVIL WAR

LESSON PLANS

Middle School Lesson Plan ►

The U.S. Civil War: Wounded Soldiers, Disabled Veterans is prepared for 5-8 grade classes. In this lesson, students examine several primary sources related to the Civil War, including photos and illustrations. They also use four sections from the Life and Limb: The Toll of the Civil War exhibition to consider causes and effects of the war-time medical practices that shaped the experiences of wounded soldiers, and the changing attitudes toward disabled veterans after the war.

High School Lesson Plan ►

The U.S. Civil War: Living With Battlefield Injuries is designed for 9-12 grade classes. The lesson focuses on students' using primary sources and their transcripts in order to develop deeper understanding of short- and long-term impact of non-fatal Civil War casualties on Americans. Students first explore the Life and Limb exhibition as an introduction on the topic. They closely examine transcripts of several Civil War documents such as excerpts from a soldier's memoir, Senate Bill 173, poems of that era, and illustrations and photos of soldiers. Afterwards, students work in small groups and create political cartoons that reflect their understanding of the experiences and treatments of wounded and disabled soldiers during and after the war.



[URL for Life and Limb Online Exhibition](#)

Home

Exhibition

Education

Lesson Plans

Higher Education

Online Activities

Additional Resources

Traveling Info

Credits

Exhibition Program

BINDING WOUNDS PUSHING BOUNDARIES

African Americans in Civil War Medicine

[HOME](#)

[EXHIBITION](#)

[EDUCATION](#)

[TRAVELING INFORMATION](#)

[CREDITS](#)

[EXHIBITION PROGRAM](#)

[Lesson Plans](#)

[Higher Education](#)

[Online Activities](#)

[Additional Resources](#)

Lesson Plans

[Elementary School](#) | [High School](#)

Elementary Lesson Plan:

African American Surgeons and Nurses in the U.S. Civil War

[Learning Outcomes](#)

[Materials](#)

[Evaluations](#)

[Background Information](#)

[Class 1](#)

[Extension Activities](#)

[Vocabulary](#)

[Class 2](#)

[National Education Standards](#)

Grade Level: 4-6

Time Needed: two to three 40-minute class periods

Description: Students learn about four African American surgeons and nurses who served in the Union during the American Civil War. In [Class 1](#), students consider African Americans' experiences of being limited by others in what they could do due to slavery and prejudice against them. Students closely examine Dr. Augusta's letter to President Lincoln, written in 1863, as a case study of an African American who became a doctor and worked with African American soldiers in the Union army. In [Class 2](#) (and 3 if needed), students read the biographical sketches of Dr. Augusta and one of three other Civil War African American doctors and nurses. Students reflect upon what they have read and learned, and then write about that reflection.

[URL for Binding Wounds Pushing Boundaries](#)





Changing *the face*
of Medicine

HOME

VISIT

PHYSICIANS

RESOURCES

ACTIVITIES

SHARE *your* STORY

Careers

Lesson Plans

Higher Education

Suggested Reading

* RESOURCES

The following resources have been assembled for students, teachers, and medical professionals to complement the exhibition.

* CAREERS

- ◆ Students and medical professionals—learn about steps you can take to join the field of medicine and to enhance your medical career. Explore links to Web sites that will provide you with all the information you need.

* LESSONS

- ◆ Teachers—bring the world of medicine into your classrooms. Lesson plans targeted for specific age groups within K-12 have been designed to enhance understanding of the physiology of the body and the field of medicine.

[URL](#) for Changing the Face of Medicine



Education

HOME • EXHIBITION • EDUCATION • CREDITS

TRAVELING INFO

Lesson Plans

- Activism and Healing
- Hawaiian Star Compass

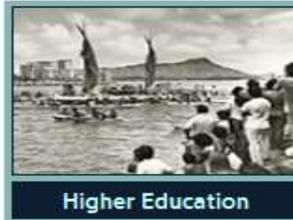
Higher Education

Online Activities

Other Resources



Lesson Plans



Higher Education



Online Activities



Other Resources

LESSON PLANS

[ACTIVISM AND HEALING: Kanaloa Kaho'olawe, a Hawaiian Island](#) grade level: 5–8 | subject—history and social studies

The lesson plan engages students in exploring *A Voyage to Health*. Students demonstrate their comprehension of the online exhibition by creating a class timeline that chronicles key events related to Kanaloa Kaho'olawe, one of the Hawaiian Islands. They then use the timeline as a case study in identifying causes and consequences of each event, as well as consider how the perspectives may differ among different groups. This timeline case study allows students to examine a wide range of issues, such as how interpretation of events is influenced by cultural perspectives, how historical events influence physical and human geography, how belief systems and government policies can conflict, and how citizen actions can influence public policy. The activities in this lesson plan can be used in a variety of social study areas, such as United States history, the regions and cultures of the United States, world geography and cultures, global and environmental issues, government, and civil rights.

[URL](#) for A Voyage to Health





ONLINE ACTIVITIES

Desire for Knowledge Different Perspectives

DESIRE FOR KNOWLEDGE

In the *Harry Potter* novels, young wizards and witches are required to attend school, just like their non-magical, or Muggle, counterparts. Wizarding classes at the Hogwarts School of Witchcraft and Wizardry are similar to the chemistry or biology classes taught in a non-magical school—at both types of schools, students learn about the properties of the natural world around them. Follow the clues below to discover more similarities between Harry's fictional world and ours:

1. Investigate the **Potions** section and find answers to:

A. What is the difference between the Sorcerer's Stone and the Philosopher's Stone?

DIFFERENT PERSPECTIVES

The curator states that "Several of Harry's mentors are bothered by the inequalities forced on these creatures and feel that wizards could benefit by learning about many different magical cultures." Explore the [Fantastic Beasts](#) section where this statement appears and consider the following key questions:

1. What do you think is the key message that the curator's statement expresses? (Hint: consider the quotes by Albus Dumbledore and Sirius Black excerpted from *Harry Potter and the Order of the Phoenix*.)
2. Who is the historic figure that is included as a sculpture in *Harry Potter*?
3. What was this historic figure's attitude towards different cultural perspectives and practices in healing?

[URL for Harry Potter \(Online Activities\)](#)





EDUCATION

Online Activities

Nurses: Pictures of Service and Pride

Create a collage that celebrates the nursing profession

Many nurses serve with pride. Their work contributes to the well-being of communities and country, and increases the prestige of the nursing profession. Sometimes there are social, cultural, or political challenges that shape how nurses are able to serve. View the [postcards as a list](#).

LESSON PLANS

HIGHER EDUCATION

ONLINE ACTIVITIES

- Florence Nightingale Letters
- To Serve at Home and Abroad
- Nurses: Pictures of Service and Pride

OTHER RESOURCES

RELATED RESOURCES AT NLM

MOVE ↑

ENLARGE ↗

RESIZE ↘

MOVE the image by dragging the bar above the image to the location of your choice.
ENLARGE and **READ MORE** about the image by clicking on it.
RESIZE the image by dragging the bottom right corner of the image.



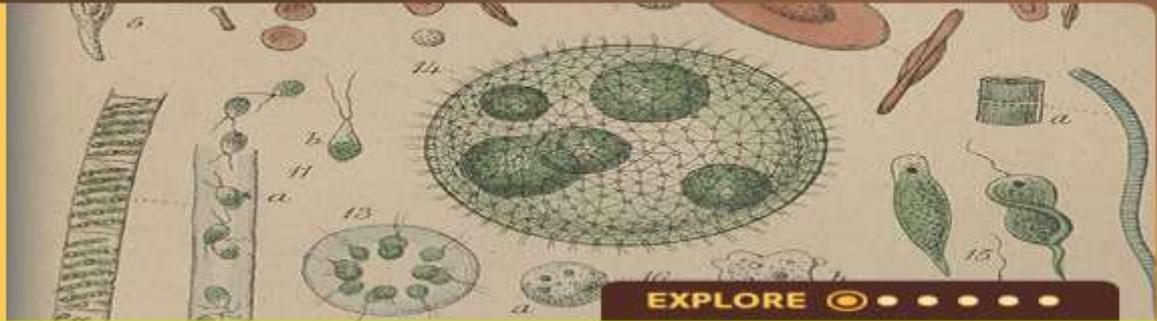
[URL](#) for Online Activities Nurses: Pictures of Service and Pride



MICROBES—tiny organisms too small to be seen with the naked eye—have altered human history. Life forms such as bacteria, yeasts, and molds can cause sickness or restore health, and help produce foods and beverages.

Scientists, in partnership with industry, have developed techniques to harness...

[CONTINUE to INTRODUCTION](#)



WEB RESOURCES

Biotechnology

- 
 Children's Museum of Indianapolis. "Biotech Lab." <http://www.childrensmuseum.org/exhibits/biotech-lab> (accessed April, 2014).
 "Biotech Lab" at the Children's Museum of Indianapolis is an exhibition whose companion website offers "[units of study](#)" for educators and an [onsite activity calendar](#).
- 
 DNA Learning Center. "Mechanism of Recombination, 3D animation with basic narration." Cold Spring Laboratory. <http://www.dnalc.org/view/15476-Genetic-engineering-inserting-new-DNA-into-a-plasmid-vector-3D-animation-with-with-basic-narration.html> (accessed December 4, 2013).
 "[Mechanism of Recombination](#)" provides an animated overview of the process by portions of DNA in one cell are cut and inserted into another.
- 
 National Human Genome Research Institute. "GenomicCareers: Find Your Future." National Institutes of Health. <http://www.genome.gov/GenomicCareers/index.cfm> (accessed December 4, 2013).
 "[GenomicCareers](#)" provide interactive videos and profiles of diverse careers available in the field of genomics. It offers various ways to explore different careers options by tracking one's interest and accessing interactive videos.

[view more](#)

URL for From DNA to Beer Biotechnology Resources



VISIBLE PROOFS

FORENSIC VIEWS
OF THE BODY



VISIT | EXHIBITION | GALLERIES | EDUCATION | RESOURCES

SUB SECTIONS

[K-12 Bibliography](#)

[Radio Interviews](#)

[Web Links](#)

Web Links

Education

[K-12 Activities](#)

Careers

[Career Information](#)

Professional Organizations

[Forensic Organizations](#)

[Legal Organizations](#)

[Medical/Scientific Organizations](#)

K-12 activities

[*The Case for Innocence*](#) is the companion Web site to a similarly-titled episode of the PBS series, *Frontline*. It explains the science behind DNA testing and profiles four compelling cases, during which DNA evidence had been ignored, discounted, or kept secret.

Grade Level: 9-12

[*Creating a DNA Fingerprint*](#) is an online activity that describes the uses of DNA fingerprinting. Students solve a series of mysteries using computer-simulated DNA fingerprinting techniques.

Grade Level: 9-12

[*Crime Scene Investigation*](#) asks students to use forensic techniques to solve a murder mystery featuring the characters from the game "Clue."

Grade Level: 9-12

[URL for Visible Proofs Educational Resources](#)



PICK YOUR POISON

INTOXICATING PLEASURES & MEDICAL PRESCRIPTIONS



EXHIBITION PROGRAM

The pain-relieving properties of opium had been known for centuries when the drug was first used in America for the treatment of sleeplessness and illnesses such as coughs, smallpox, cholera, malaria, syphilis, dysentery, and tuberculosis. By the 19th century, many doctors believed so fervently in the...

[CONTINUE to OPIUM](#)



EXPLORE

[HOME](#) • [EXHIBITION](#) • [EDUCATION](#) • [DIGITAL GALLERY](#) • [CREDITS](#)



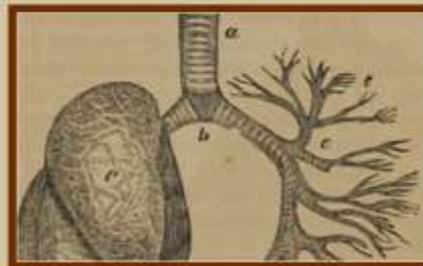
[TRAVELING INFO](#)

LEARN more



Advertisement for medicinal drops to relieve toothache, Lloyd Manufacturing Co., 1885
Courtesy National Library of Medicine

SEE the digital gallery



BOOK the traveling exhibition



[URL](#) for Pick Your Poison





SURVIVING & THRIVING

AIDS, POLITICS, AND CULTURE

"We condemn attempts to label us as 'victims,' a term which implies defeat, and we are only occasionally 'patients,' a term which implies passivity, helplessness, and dependence upon the care of others.

We are 'People With AIDS.'"

—Denver Principles, 1983

[EXPLORE THE EXHIBITION](#)



[FIND EDUCATIONAL RESOURCES](#)

AIDS
IT AIN'T OVER YET



[BOOK THE TRAVELING EXHIBITION](#)

[URL](#) for Surviving & Thriving: AIDS, Politics, and Culture



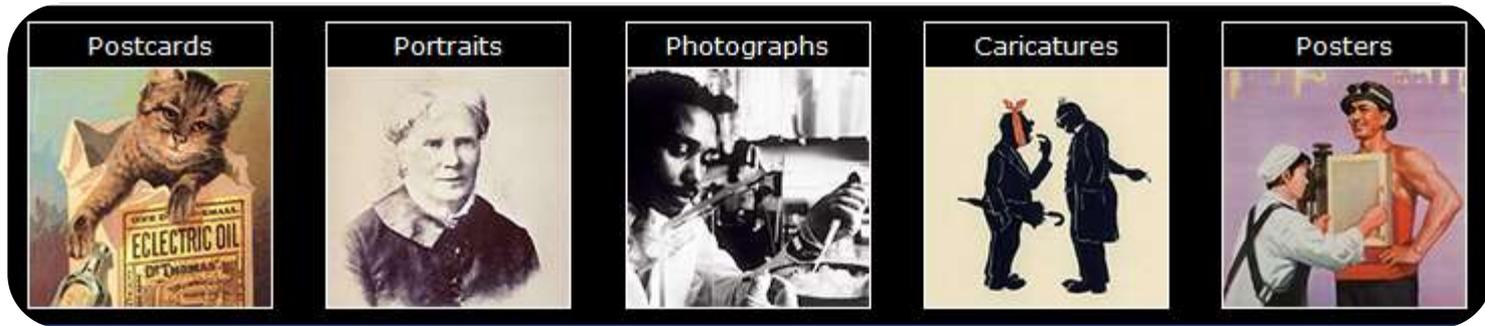
ADDITIONAL RESOURCES/SERVICES



Images from the History of Medicine

Images from the History of Medicine (IHM) provides access to over 70,000 images dated from the 15th to the 21st century in the collections of the History of Medicine Division (HMD) of the U.S National Library of Medicine (NLM).

The collection includes:



Copyright and Permissions do apply
Viewer discretion is advised.

[URL](#) for Imagers from the History of Medicine web site



Stay Connected with NN/LM MAR

- **Boost Box** - a monthly webinar to boost your knowledge of NLM products or other health information topics
- **Lunch with the RML** - a monthly webinar to share experiences and ideas with MAR staff and Network members
- **MAR-L Listserv** - Subscribe to weekly announcements to keep aware of breaking developments from NLM, funding opportunities, and other important information
- **The MARreport** - quarterly newsletter for the NN/LM Middle Atlantic Region
- **MARquee News Blog** - announcements, upcoming events, technology tips, etc.
- **Facebook** - "Like" us on the popular social networking site
- **Twitter** - Follow us on Twitter for information resources that you can use

(Add / Edit Text)

Enable Box Comments

Evaluating Online Resources

NLM and K-12 Professionals



Whether you work in a K-12 School, Community or Faith-Based Organization providing after school programming, NLM provides resources to help enrich your curriculum/program. The [National Library of Medicine \(NLM\)](#), the world's largest medical library and a component of the National Institutes of Health, produces a variety of web-based resources for use by K-12 health and science educators.

Educators are welcome to review and use the modules or lesson plans, in whole or in-part, for their students' interests, levels and academic goals. These [resources](#) are designed to engage students' interest in and foster their analysis of a variety of health and science related topics.

Locate online resources in the following topics:

- [General Health and Biology](#)
- [Forensics and Medical Technology](#)
- [Genetics](#)
- [Environmental Health and Chemistry](#)
- [Careers in Health Professions](#)
- [Health Resources for Teens](#)

To request training on NLM resources for K-12 Professionals contact

URL for K-12 Professionals Resource Guide

Remove Profile Boxes from Page

NN/LM MAR Consumer Health Coordinator



Lydia Collins

Contact Info

NN/LM MAR
 Health Sciences Library System
 University of Pittsburgh
 200 Scaife Hall
 3550 Terrace Street
 Pittsburgh, PA 15261
 412.624.1411

[Send Email](#)

Links:

[Profile & Guides](#)

Subjects:

[Consumer Health](#)

MedlinePlus Magazine



NN/LM MAR Training

NNLM MAR
Training & Educational
Opportunities



NN/LM MAR staff provide no-cost training sessions on health information resources, with an emphasis on free resources from the National Library of Medicine. Locate information about upcoming trainings and see past offerings.

- [NN/LM MAR Training & Educational Opportunities](#)
- [NN/LM MAR and the National Training Center upcoming courses](#)
View all upcoming courses offered by NN/LM MAR Coordinators and the National Training Center (NTC).
- [NN/LM MAR Current Class Offerings Descriptions](#)
View NN/LM MAR class descriptions (LibGuide) for classes that are currently being offered.

Welcome to NN/LM MAR Information for Public Libraries



The National Library of Medicine (NLM) Provides freely available resources on a variety of topics for use by Public Libraries to use in their communities. Locate resources by subject using the information compiled by the Consumer Health Coordinator at the National Network of Libraries of Medicine, Middle Atlantic Region (NN/LM MAR).

Highlighted Resources by Population/Topic:

[Adult/General/Senior Health](#)

[Health Resources for Teens](#)

[NLM's K-12 Resources](#)

[Consumer Health](#)

[Finding Health and Wellness @ the Library: A Consumer Health Toolkit for Library Staff 2nd edition](#)

[Affordable Care Act Information](#)

[Health Resources in Multiple Languages](#)

If you have any questions or would like training on the resources listed, please contact NN/LM MAR via e-mail, nnlmmar@pitt.edu or via telephone (800) 338-7657.

NN/LM MAR Consumer Health Coordinator



Lydia Collins

Contact Info

NN/LM MAR
Health Sciences Library System
University of Pittsburgh
200 Scaife Hall
3550 Terrace Street
Pittsburgh, PA 15261
412.624.1411
[Send Email](#)

Links:

[Profile & Guides](#)

Subjects:

[Consumer Health K-12](#)
[Professionals Outreach Health](#)
[Literacy Outreach to Soldiers,](#)
[Veterans and Military Families](#)
[Outreach to Underrepresented and](#)
[Minority Populations Outreach to](#)
[Seniors](#)

MedlinePlus Magazine

[URL](#) for Public Libraries Resource Guide



Join NN/LM

Members of the National Network of Libraries of Medicine (NN/LM) provide health professionals and the general public with health information resources and services.

Network Members receive a variety of benefits and services, including:

Membership Benefit Comparison

Benefits	Full Members	Affiliate Members
Eligibility for award funding for health information access and other projects	X	X
Training and educational opportunities for librarians, health professionals, and consumers	X	X
Opportunities to partner with other health sciences libraries or health-related information centers	X	X
Obtain educational and printed materials for NLM posters, brochures, bookmarks, and other publications	X	X
Opportunities to request an NLM Traveling Exhibition  to visit your library or organization	X	X
Opportunities to provide input on regional NN/LM programs and services	X	X
A certificate recognizing your institution, library or organization as a NN/LM member	X	X
Access to DOCLINE  , the interlibrary loan system used by health sciences libraries	X	

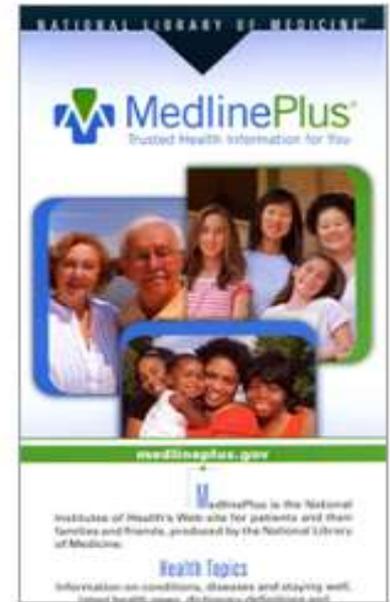
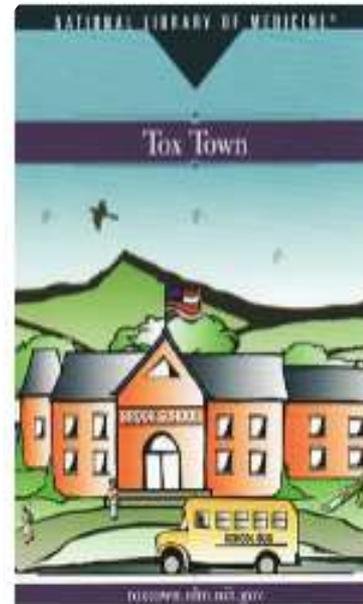
[URL](#) for NN/LM MAR Membership (DE, NJ, NY & PA)

[URL](#) for NN/LM to locate your Regional Medical Library for membership information



NLM Educational & Printed Materials

If you are an NN/LM network member you may order educational and printed materials online from your regional NN/LM office.



[URL](#) for Ordering Materials from NN/LM MAR (DE, NJ, NY & PA)



Thank You



Lydia N Collins
National Network of Libraries of Medicine,
Middle Atlantic Region
Consumer Health Coordinator
LYDIA@PITT.EDU

[URL](#) for NN/LM MAR

This project has been funded in whole or in part with Federal funds from the National Library of Medicine, National Institutes of Health, Department of Health and Human Services, under Contract No. HHS-N-276-2011-00003-C with the University of Pittsburgh, Health Sciences Library System.