

# NLM's Online Playground: K-12 Science and Health Education Resources (Middle/High School)



# NLM Health Outreach

“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



Note: We cannot answer questions about individual medical cases, provide second opinions or make specific recommendations about therapy. Those issues should be discussed with your healthcare provider.

# Locate Your NN/LM Office

**8 Regional Offices**

**Support Network members to achieve  
NN/LM mission**

**5-year contracts**



## **Mission**

**Provide K-12 educators, public library staff, health professionals, and the general public with equal access to and training on health and science resources**

**Join the NN/LM Network**

[URL](#) to locate your Regional Medical Library

# NLM K-12 Science and Health Education Topics

**Biology**

**Careers**

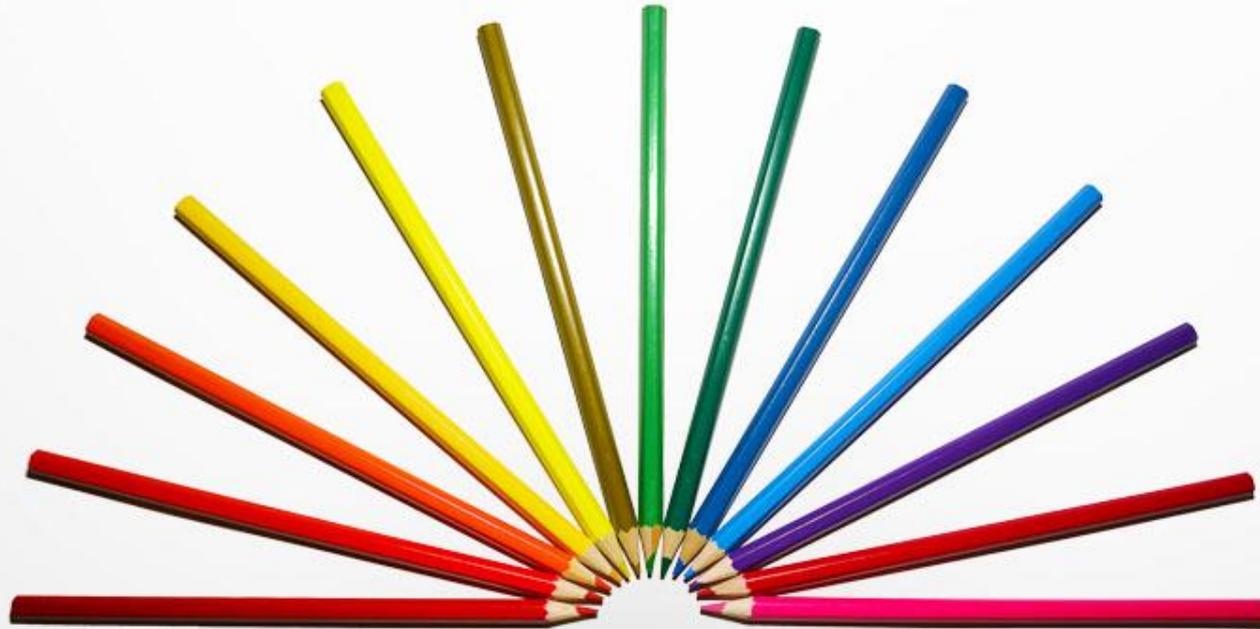
**Environmental Health  
Science/Chemistry**

**Forensics and Medical Technology**

**General Health**

**Genetics**





**MedlinePlus**



### 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

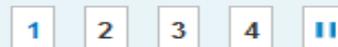
Articles and images for diseases, symptoms, tests, treatments

### Medical Dictionary from Merriam-Webster



Every community deserves good health.

Learn about **health disparities** during National Minority Health Month.



### Today's Health News

[Celebrity Cases May Help Spur Rise in Double Mastectomies](#)

[Painkiller Addiction Relapse More Likely for Some](#)

[U.S. Suicide Rate Up 24 Percent Since 1999: CDC](#)

[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



[Easy-to-Read Materials](#)



[Organizations and Directories](#)



[Health Information in Multiple Languages](#)



[MedlinePlus Connect for EHRs](#)



# Health Topics



Read about symptoms, causes, treatment and prevention for over 975 diseases, illnesses, health conditions and wellness issues. MedlinePlus health topics are regularly reviewed, and links are updated daily.

## Find topics A-Z

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [XYZ](#) [List of All Topics](#)

### Body Location/Systems

-  [Blood, Heart and Circulation](#)
-  [Bones, Joints and Muscles](#)
-  [Brain and Nerves](#)
-  [Digestive System](#)
-  [Ear, Nose and Throat](#)
-  [Endocrine System](#)
-  [Eyes and Vision](#)
-  [Immune System](#)
-  [Kidneys and Urinary System](#)
-  [Lungs and Breathing](#)
-  [Mouth and Teeth](#)
-  [Skin, Hair and Nails](#)
-  [Female Reproductive System](#)
-  [Male Reproductive System](#)

### Disorders and Conditions

- [Cancers](#)
- [Diabetes Mellitus](#)
- [Genetics/Birth Defects](#)
- [Infections](#)
- [Injuries and Wounds](#)
- [Mental Health and Behavior](#)
- [Metabolic Problems](#)
- [Poisoning, Toxicology, Environmental Health](#)
- [Pregnancy and Reproduction](#)
- [Substance Abuse Problems](#)

### Diagnosis and Therapy

- [Complementary and Alternative Therapies](#)
- [Diagnostic Tests](#)
- [Drug Therapy](#)
- [Surgery and Rehabilitation](#)
- [Symptoms](#)
- [Transplantation and Donation](#)

### Demographic Groups

- [Children and Teenagers](#)
- [Men](#)
- [Population Groups](#)
- [Seniors](#)
- [Women](#)

### Health and Wellness

- [Disasters](#)
- [Fitness and Exercise](#)
- [Food and Nutrition](#)
- [Health System](#)
- [Personal Health Issues](#)
- [Safety Issues](#)
- [Sexual Health Issues](#)
- [Social/Family Issues](#)
- [Wellness and Lifestyle](#)

[URL](#) for Health Topics

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[Home](#) → [Drugs, Herbs and Supplements](#)

## Drugs, Herbs and Supplements

### Drugs

Learn about your prescription drugs and over-the-counter medicines. Includes side effects, dosage, special precautions, and more.

**Browse by generic or brand name:**

A B C D E F G H I J K L M N O P Q R S T  
U V W X Y Z 0-9

For FDA approved labels included in drug packages, see [DailyMed](#).

### Herbs and Supplements

Browse dietary supplements and herbal remedies to learn about their effectiveness, usual dosage, and drug interactions.

[All herbs and supplements](#)

Prescription and over-the-counter medication information is from AHFS® Consumer Medication Information, copyrighted by the [American Society of Health-System Pharmacists \(ASHP\), Inc.](#), Bethesda, Maryland; Copyright © 2016. All Rights Reserved.

[URL](#) for Drugs, Herbs and Supplements



#### Related Topics

- [HIV/AIDS Medicines](#)
- [Antibiotics](#)
- [Antidepressants](#)
- [Blood Pressure Medicines](#)
- [Blood Thinners](#)
- [Cancer Alternative Therapies](#)
- [Cancer Chemotherapy](#)
- [Cold and Cough Medicines](#)
- [Complementary and Alternative Medicine](#)



[Home](#) → [Videos & Tools](#)

## Videos & Tools



Watch health videos on topics such as anatomy, body systems, and surgical procedures. Test your knowledge with interactive tutorials and games. Check your health with calculators and quizzes.



### Health Videos

View videos of anatomy and body systems and how diseases and conditions affect them.



### Surgery Videos

Find videos of operations and surgical procedures.



### Health Check Tools

Check your health with interactive calculators, quizzes and questionnaires.



### Games

Boost your health knowledge by playing interactive health games.

### Search all Videos & Tutorials

Search all Videos &amp; Tutorials

GO

[Understanding Medical Words](#)[Evaluating Health Information](#)[To Your Health: NLM update](#)[NIHSeniorHealth Videos](#)

[URL](#) for Videos and Tools



[Home](#) → [Latest Health News](#)

## Latest Health News



Health news from HealthDay, plus recent press announcements from major medical organizations.

[More health news by date](#) [Health news by topic](#)Get the latest health news by email 

GO

**Wednesday, April 20****[Alcohol, Processed Meats May Raise Stomach Cancer Risk](#)** (HealthDay)

Excess weight also seems to boost chances of disease, and risk increases as three factors increase, researchers report

Related MedlinePlus Topics: [Alcohol](#), [Nutrition](#), [Stomach Cancer](#)

**[Breast Cancer Gene Might Lower Women's Fertility](#)** (HealthDay)

The BRCA1 mutation may speed the aging of a woman's ovaries, researchers report

Related MedlinePlus Topics: [Breast Cancer](#), [Female Infertility](#), [Genes and Gene Therapy](#)

**[Cow's Milk Allergy in Childhood May Lead to Weaker Bones](#)** (HealthDay)

But one expert contends that difference in bone density wasn't enough, on average, to worry about fractures

Related MedlinePlus Topics: [Bone Density](#), [Children's Health](#), [Food Allergy](#)

**[Gene Therapy May Offer Hope for 'Bubble Boy' Disease](#)** (HealthDay)

Preliminary research tries new approach to rebuild the immune system

Related MedlinePlus Topics: [Genes and Gene Therapy](#), [Immune System and Disorders](#)

**[Lonely, Isolated People May Be Prone to Heart Disease, Stroke](#)** (HealthDay)

Study found social isolation raised the risk by 30 percent

Related MedlinePlus Topics: [Heart Diseases](#), [Stroke](#)

**[Low-Dose Aspirin Tied to Better Cancer Survival in Study](#)** (HealthDay)

Improved odds seen for patients with colon, prostate or breast tumors, but research isn't definitive

Related MedlinePlus Topics: [Blood Thinners](#), [Cancer](#)

[URL](#) for Health News

[Home](#) → [Health Topics](#) → [Food Safety](#)

## Food Safety

### On this page

#### Basics

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

#### Learn More

- [Related Issues](#)
- [Special Reports](#)

#### See, Play and Learn

- [Games](#)

#### Research

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

#### Resources

- [Find an Expert](#)

#### For You

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



### Summary

Safe steps in food handling, cooking, and storage can prevent [foodborne illness](#). There are four basic steps to food safety at home:

- **Clean** - always wash your fruits and vegetables, hands, counters, and cooking utensils.
- **Separate** - keep raw foods to themselves. Germs can spread from one food to another.
- **Cook** - foods need to get hot and stay hot. Heat kills germs.
- **Chill** - put fresh food in the refrigerator right away.

In the grocery store, avoid cans that are bulging or jars that have cracks or loose lids. Check packages to be sure food hasn't reached its expiration date.



Get Food Safety updates by email 



### MEDICAL ENCYCLOPEDIA

- [Aflatoxin](#)
- [Cooking utensils and nutrition](#)
- [Food safety](#)
- [Genetically engineered foods](#)

[URL](#) for Food Safety

## Statistics and Research

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- [CDC Vital Signs: Making Food Safer to Eat](#) (Centers for Disease Control and Prevention)

## Clinical Trials

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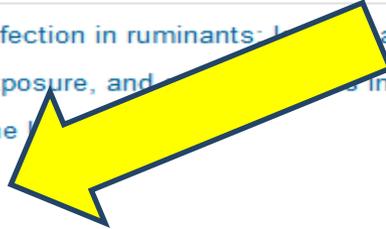
- [ClinicalTrials.gov: Food Safety](#)  (National Institutes of Health)

## Journal Articles

### References and abstracts from MEDLINE/PubMed (National Library of Medicine)

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- [Article: Listeria monocytogenes infection in ruminants: 1](#) [a link to...](#)
- [Article: Dietary mycotoxins, co-exposure, and](#) [in humans: Short review.](#)
- [Article: Arsenic Consumption in the](#)
- [Food Safety -- see more articles](#)



## Find an Expert

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- [Centers for Disease Control and Prevention](#)  
Available in Spanish
- [Food and Drug Administration](#)
- [Food and Nutrition Information Center](#)
- [USDA Meat and Poultry Hotline](#) (Department of Agriculture, Food Safety and Inspection Service)

## Children

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- [Food Safety](#) (Department of Agriculture)
- [Food Safety and Nutrition Information for Kids and Teens](#) (Food and Drug Administration)
- [Food Safety for Your Family](#) (Nemours Foundation)  
Available in Spanish
- [Once Baby Arrives](#) (Food and Drug Administration)
- [The 5-Second Rule](#) (Nemours Foundation)  
Available in Spanish

[URL](#) for Food Safety



# MedlinePlus Magazine

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

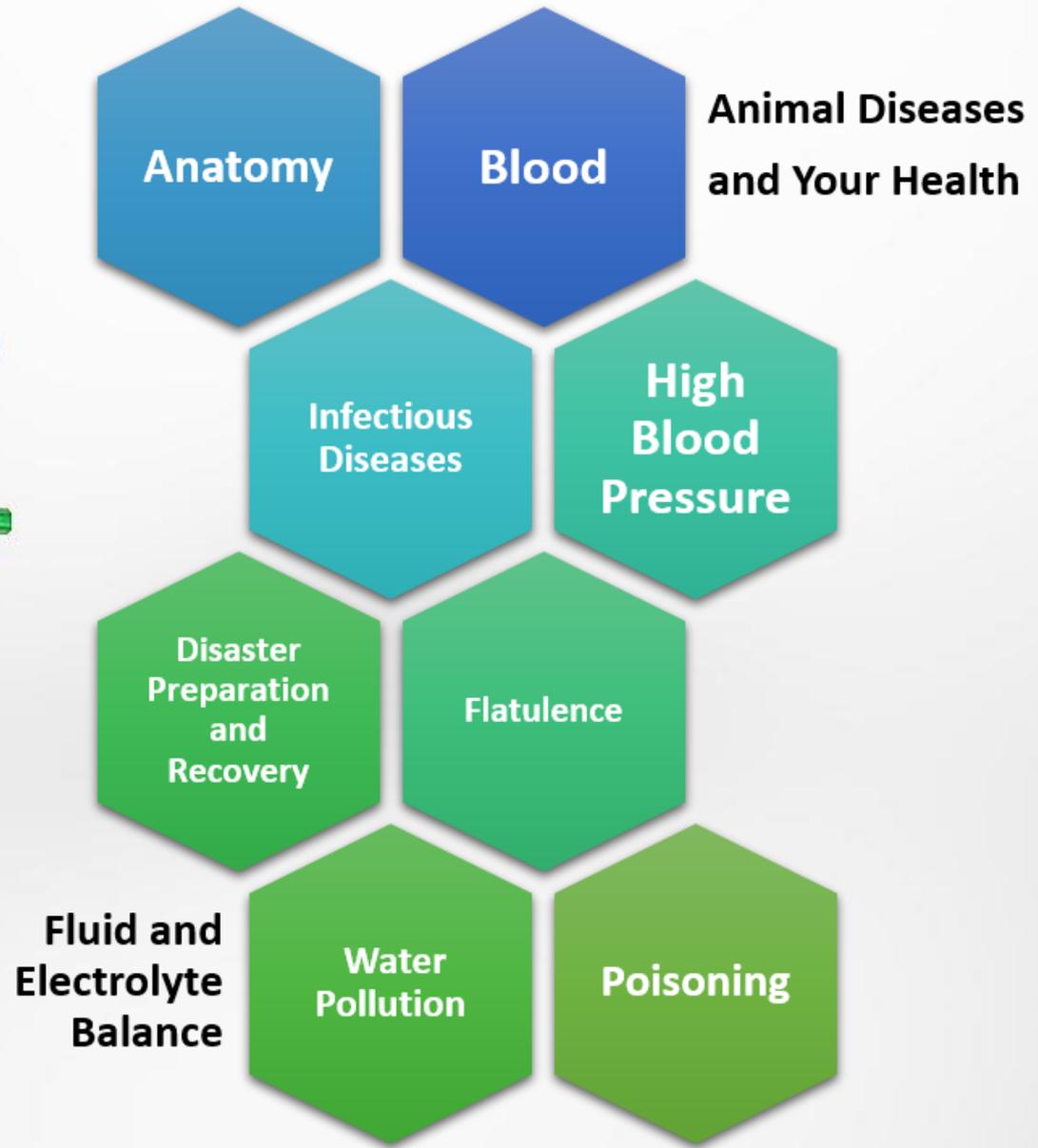
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Organizations can order in bulk



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

# Health Topic Pages of Interest



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

- [Anatomy & Physiology](#) (National Cancer Institute)
- [Body Basics](#) (Nemours Foundation)
- [Introduction to the Human Body](#) (National Cancer Institute)
- [Visible Human Project](#) (National Library of Medicine)

### Get Anatomy updates by email



Enter email address **GO**

MedlinePlus links to health information from the National Institutes of Health and other federal government agencies. MedlinePlus also links to health

[URL](#) for Anatomy



Search here...

Teens Home

Body

Mind

Sexual Health

Food & Fitness

Diseases & Conditions

Infections

Q&A

School & Jobs

Drugs & Alcohol

Staying Safe

Recipes

En Español

## BODY BASICS

[KidsHealth](#) > [Teens](#) > [Body](#) > [Body Basics Library](#) > About the Body Basics Library

AAA  
Text Size  Print

Did you ever wonder what all those complex body systems do? These Body Basics articles explain just how each body system, part, and process works. Use this medical library to find out about basic human anatomy, how it all functions, and what happens when things go wrong.

Blood  
Bones, Muscles, and Joints  
Brain and Nervous System  
Digestive System  
Endocrine System  
Eyes  
Female Reproductive System  
Heart and Circulatory System  
Immune System  
Kidneys and Urinary Tract  
Lungs and Respiratory System  
Male Reproductive System

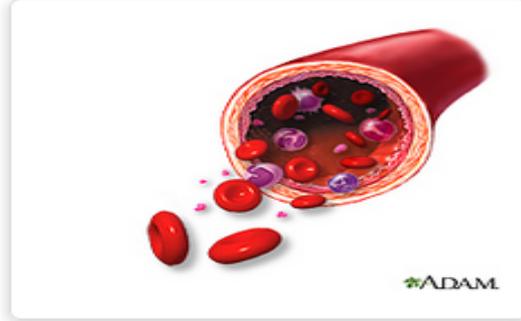
Home → Health Topics → Blood

# Blood



### On this page

- |   |  |   |
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| <b>Basics</b>   | <b>Learn More</b>  | <b>See, Play and Learn</b>  |
| <ul style="list-style-type: none"> <li>▪ <a href="#">Summary</a></li> <li>▪ <a href="#">Start Here</a></li> </ul>               | <ul style="list-style-type: none"> <li>▪ <a href="#">Related Issues</a></li> <li>▪ <a href="#">Specifics</a></li> </ul>      | <ul style="list-style-type: none"> <li>▪ <a href="#">Videos and Tutorials</a></li> <li>▪ <a href="#">Games</a></li> </ul>                                     |
| <b>Research</b>   | <b>Resources</b>   | <b>For You</b>  |
| <ul style="list-style-type: none"> <li>▪ <a href="#">Clinical Trials</a></li> <li>▪ <a href="#">Journal Articles</a></li> </ul> | <ul style="list-style-type: none"> <li>▪ <a href="#">Reference Desk</a></li> <li>▪ <a href="#">Find an Expert</a></li> </ul> | <ul style="list-style-type: none"> <li>▪ <a href="#">Children</a></li> <li>▪ <a href="#">Teenagers</a></li> <li>▪ <a href="#">Patient Handouts</a></li> </ul> |



## Summary

Your blood is living tissue made up of liquid and solids. The liquid part, called plasma, is made of water, salts, and protein. Over half of your blood is plasma. The solid part of your blood contains red blood cells, white blood cells, and platelets.

Red blood cells (RBC) deliver oxygen from your lungs to your tissues and organs. White blood cells (WBC) fight infection and are part of your body's defense system. Platelets help blood to clot when you have a cut or wound. Bone marrow, the spongy material inside your bones, makes new blood cells. Blood cells constantly die and your body makes new ones. Red blood cells live about 120 days, and platelets live about 6 days. Some white blood cells live less than a day, but others live much longer.

Blood tests show whether the levels of substances in your blood are within a normal range. They help doctors check for certain diseases and conditions. They also help check the function of your organs and show how well treatments are working. Some common blood tests measure

**Get Blood updates by email** ⓘ

Enter email address  **GO**

- MEDICAL ENCYCLOPEDIA**
- [Arterial stick](#)
  - [Blood differential](#)
  - [Blood smear](#)
  - [Blood typing](#)
  - [Capillary sample](#)
  - [CBC](#)

[URL for Blood](#)

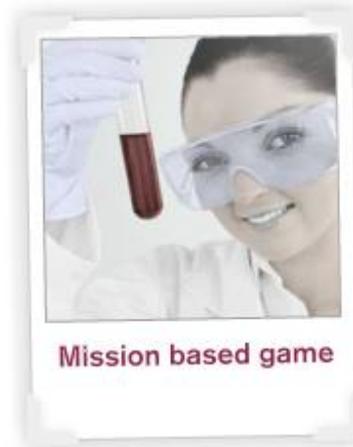




## Select Game Type



Can't be bothered about high score lists and other fancy stuff? Play as many times as you like with randomly selected patients!



Want a bigger challenge, missions, achievements and a chance to end up at the high score list? Then this is the choice for you!



Each time you play, the three patients are always the same ones, as are their blood types. Just like the old blood typing game!

[URL](#) for Blood Typing Game (Nobel Foundation)

Home → [Health Topics](#) → [Stem Cells](#)

## Stem Cells



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### Summary

Stem cells are cells with the potential to develop into many different types of cells in the body. They serve as a repair system for the body. There are two main types of stem cells: embryonic stem cells and adult stem cells.

Stem cells are different from other cells in the body in three ways:

- They can divide and renew themselves over a long time
- They are unspecialized, so they cannot do specific functions in the body
- They have the potential to become specialized cells, such as muscle cells, blood cells, and brain cells

Get Stem Cells updates by email 

**GO**

### MEDICAL ENCYCLOPEDIA

[Bone marrow \(stem cell\) donation](#)

[Graft versus host disease](#)

to SAVE someone's LIFE?



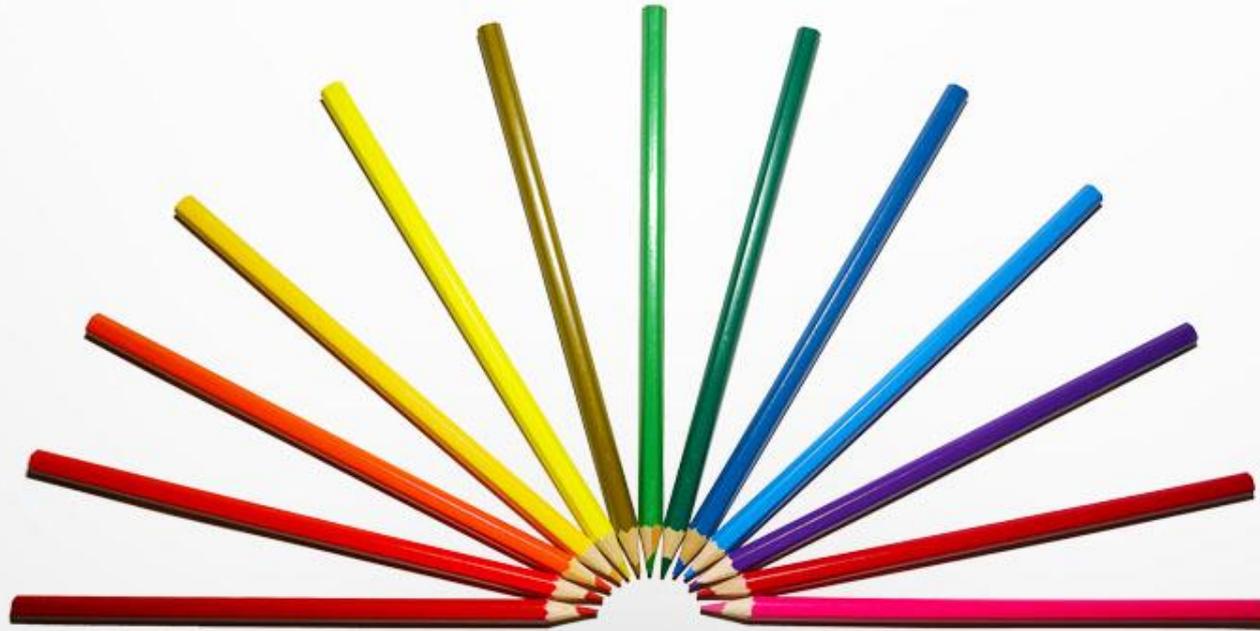
If YOU were asked

▶ ⏩ 🔊 0:03 / 5:27

⏏ ⚙️ 📱

Becoming a Blood Stem Cell Donor

[URL](#) for Becoming a Blood Stem Cell Donor Video (NCI)



# **General Health and Drug Information Resources**



### PubMed

PubMed comprises more than 26 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.

### PubMed COMMONS



#### Featured comment - Apr 20

Cicely Saunders Journal Club & author @GarridoMelissa discuss evaluation of cost-saving effects of palliative care. [1.usa.gov/1LJSwMN](http://1.usa.gov/1LJSwMN)

#### Using PubMed

[PubMed Quick Start Guide](#)

[Full Text Articles](#)

[PubMed FAQs](#)

[PubMed Tutorials](#)

[New and Noteworthy](#)



#### PubMed Tools

[PubMed Mobile](#)

[Single Citation Matcher](#)

[Batch Citation Matcher](#)

[Clinical Queries](#)

[Topic-Specific Queries](#)

#### More Resources

[MeSH Database](#)

[Journals in NCBI Databases](#)

[Clinical Trials](#)

[E-Utilities \(API\)](#)

[LinkOut](#)

## URL for PubMed

You are here: NCBI > Literature > PubMed

[Write to the Help Desk](#)

#### GETTING STARTED

- [NCBI Education](#)
- [NCBI Help Manual](#)
- [NCBI Handbook](#)
- [Training & Tutorials](#)
- [Submit Data](#)

#### RESOURCES

- [Chemicals & Bioassays](#)
- [Data & Software](#)
- [DNA & RNA](#)
- [Domains & Structures](#)
- [Genes & Expression](#)

#### POPULAR

- [PubMed](#)
- [Bookshelf](#)
- [PubMed Central](#)
- [PubMed Health](#)
- [BLAST](#)

#### FEATURED

- [Genetic Testing Registry](#)
- [PubMed Health](#)
- [GenBank](#)
- [Reference Sequences](#)
- [Gene Expression Omnibus](#)

#### NCBI INFORMATION

- [About NCBI](#)
- [Research at NCBI](#)
- [NCBI News](#)
- [NCBI FTP Site](#)
- [NCBI on Facebook](#)





US National Library of Medicine  
National Institutes of Health

PMC

Search

[Journal List](#) [Limits](#) [Advanced](#)

[Help](#)



## PMC

PubMed Central® (PMC) is a free full-text archive of biomedical and life sciences journal literature at the U.S. National Institutes of Health's National Library of Medicine (NIH/NLM).

### PubReader

A whole new way to read scientific literature at PubMed Central



### Get Started

[PMC Overview](#)

[Users' Guide](#)

[Journal List](#)

[PMC FAQs](#)

[PMC Copyright Notice](#)

### Participate

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[Add a Journal to PMC](#)

[Participation Agreements and Options](#)

[FAQs for Publishers](#)

### Keep Up to Date

[New in PMC](#) | [RSS](#)

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[Utilities Announce Mail List](#)

[Tagging Guidelines Mail List](#)

### Other Resources

[PMC International](#)

[Open Access Subset](#)

[E-utilities](#)

[NLM LitArch](#)

[PMC Citation Search](#)

3.8 MILLION Articles

are archived in PMC.

Content provided in part by:

1824

[Full Participation Journals](#)

322

[NIH Portfolio Journals](#)

3672

[Selective Deposit Journals](#)

### Public Access

[Public Access and PMC](#)

[How Papers Get Into PMC](#)

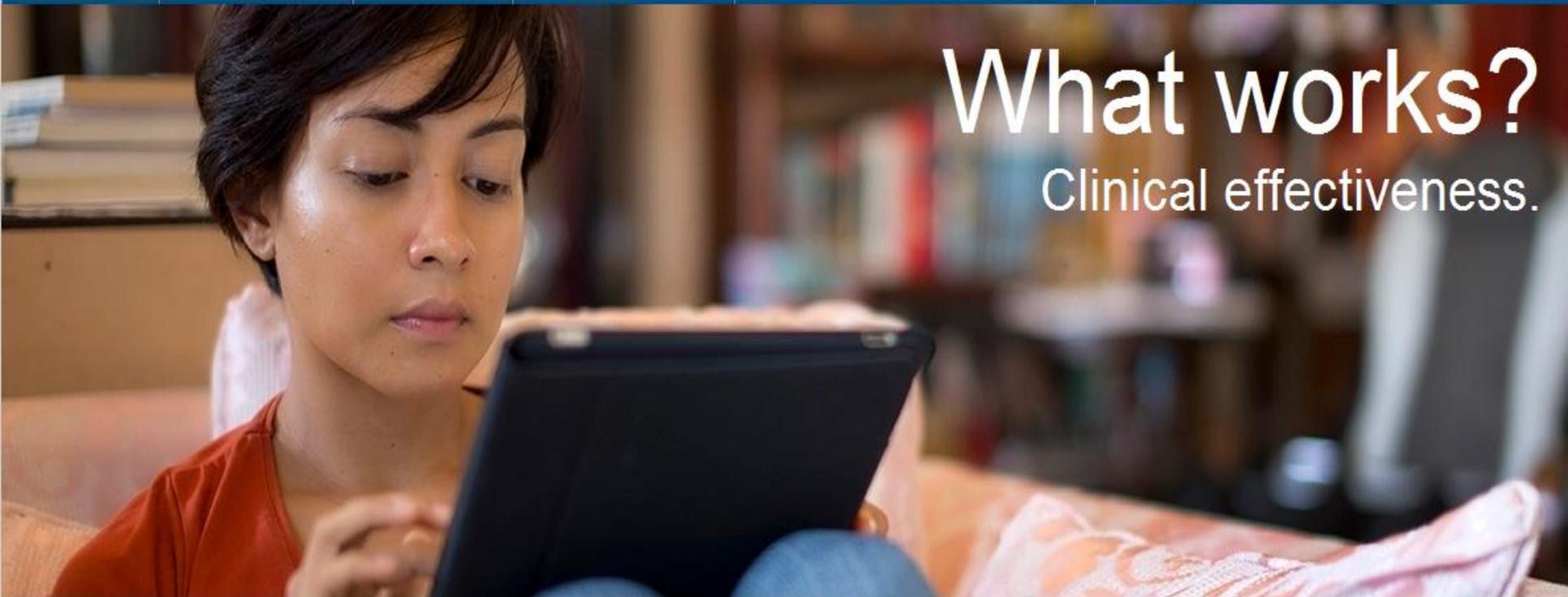
[NIH Manuscript Submission System](#)

[My Bibliography](#)

[PMCID/PMID/NIHMSID Converter](#)

[URL](#) for PubMed Central





# What works?

## Clinical effectiveness.

In partnership with:



[URL](#) for PubMed Health

New AIDSinfo infographics make HIV-related concepts easy to understand!

View



## News

- April 22, 2016  
AIDSinfo At-a-Glance Issue 10
- April 13, 2016  
Animal Study Paints Picture of the Earliest Immune Responses to HIV
- April 11, 2016  
NIH Sequences Genome of a Fungus that Causes Life-Threatening Pneumonia

Search News



## Guidelines

Federally approved HIV/AIDS medical practice guidelines

- View and Download the Guidelines
- Adult ARV Guidelines
- Pediatric ARV Guidelines
- Perinatal Guidelines
- Adult OI Guidelines
- Pediatric OI Guidelines



## Clinical Trials

Search tool to find HIV/AIDS-related clinical trials

- Enter Search Term(s) Search
- HIV/AIDS-Related Clinical Trials
  - HIV Preventive Vaccine Clinical Trials
  - HIV Therapeutic Vaccine Clinical Trials



## Drugs

Information on HIV/AIDS-related drugs

- HIV/AIDS-Related Drugs
- FDA-Approved HIV/AIDS Drugs
- Investigational HIV/AIDS Drugs

[URL](#) for AIDSinfo and [URL](#) for AIDSinfo Infographics  
[URL](#) for AIDSinfo Education Materials

<http://medlineplus.gov/>

Access patient-oriented online information on over 950 health topics. Click **Drugs & Supplements** or search by drug name or disease. Other topics include: Drug Safety, Vitamins, Over the Counter Medicines, Pain Relievers, and Herbal Medicine.

### Dietary Supplement Label Database

<http://dslid.nlm.nih.gov/>

This new label database includes information from 32,000 dietary supplement products marketed in the U.S. and includes product information, supplement facts, and ingredients.

### LactMed

<http://lactmed.nlm.nih.gov/>

The Drugs and Lactation Database (LactMed) contains over 1,100 drugs, supplements and herbs to which breastfeeding mothers may be exposed. Included is information on levels of substances in breast milk and infant blood, possible effects on nursing infants, potential alternate drugs, and additional resources.

### Pillbox

<http://pillbox.nlm.nih.gov/>

Quickly identify unknown drugs by color, shape, size, imprint, and scoring. Nearly 5,400 pill images are available.

### TOXNET Toxicology Data Network

<http://toxnet.nlm.nih.gov/>

Search databases on hazardous chemicals, toxic releases and environmental health, including LactMed and:

- **ChemIDplus** – *Chemical Identification/Dictionary* providing information on structure, property and chemical toxicity
- **HSDB** – *Hazardous Substances Data Bank* with biological and physical data including animal/human toxicity studies
- **DART** – *Developmental and Reproductive Toxicology* literature and
- **TOXLINE** – *Toxicology Literature Online*, with citations from toxicological journals including those in PubMed

### Drug Information from the NLM

For more information, visit:

<http://www.nlm.nih.gov/learn-about-drugs.html>

The National Network of Libraries of Medicine® (NN/LM), an outreach program of NLM™, provides assistance and training nationwide. To find a local library, please call 800-338-7857 or go to <http://nnlm.gov/members>

Funded under Contract No. HHS-N-276-2011-00005-C with the University of Illinois at Chicago and awarded by the DHHS, NIH, National Library of Medicine. This resource is freely available at: <http://nnlm.gov/training/resources/drugstri.pdf>

Reviewed: June 2015

## All About Drugs @ NLM

The U.S. National Library of Medicine® (NLM) provides a variety of informational databases on drugs and herbal supplements.

### Portals – search across multiple databases

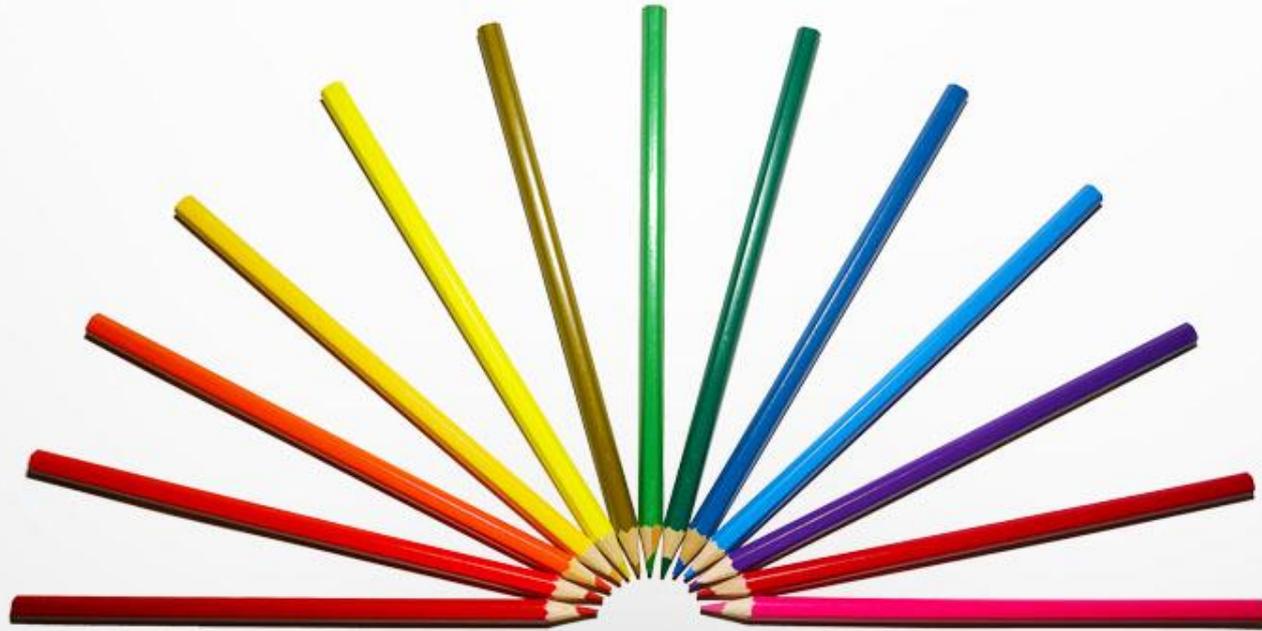
- **Drug Information Portal** – search across most NLM databases
- **TOXNET** – focus on toxic chemicals

### Labels Databases

- **DailyMed** – FDA approved drug labels
- **Dietary Supplement Label Database**

### Additional Drug Information Sources

- **AIDSinfo** – AIDs drugs and vaccines
- **Clinical Trials** – Drugs in clinical trials
- **LactMed** – Drugs affecting lactating mothers and breastfed infants
- **LiverTox** – Drug-induced liver injury cases
- **MedlinePlus** – For patients and families
- **Pillbox** – Pill identifier
- **PubChem** – Chemical information including components of drugs
- **PubMed** – Article citations
- **RxNorm** – Drug name listing



# Careers

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## Health Occupations

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



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- [Statistics](#)

#### For You

- [Children](#)



## 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.

Get Health Occupations updates by email 



MEDICAL ENCYCLOPEDIA

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



## Changing *the face* of Medicine

HOME

VISIT

PHYSICIANS

RESOURCES

ACTIVITIES

SHARE *your* STORY

Discover the many ways that women have influenced and enhanced the practice of medicine. The individuals featured here provide an intriguing glimpse of the broader community of women doctors who are making a difference. The National Library of Medicine is pleased to present this exhibition honoring the lives and accomplishments of these women in the hope of inspiring a new generation of medical pioneers.



Explore *the* Exhibition

### ► VISIT

This exhibition at the National Library of Medicine closed on November 19, 2005. Its traveling exhibition [itinerary](#) is available online. Please refer to "On Exhibit at NLM" on the [Library's home page](#) for information on the current exhibition on display at the Library.

### ► PHYSICIANS

Perform your own customized database [search](#) to learn about the woman physicians featured in this exhibition. Learn about their sources of inspiration, the challenges they faced, and their accomplishments.

### ► RESOURCES

Students, find out if a [career in medicine](#) is for you through the guide to medical career Web sites. Teachers, print classroom [lesson plans](#) and view an extensive [bibliography](#) including books and videos.

***New Book! Women Physicians and the Cultures of Medicine.***

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

# 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



# **Environmental Health Science/Chemistry**

# Environmental Health Student Portal

**What is Environmental Health ?**

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

[Learn More](#)



Recovering from floods and other natural disasters can take years.

[Read more about disasters.](#)

1 2 3 4 5

**Air Pollution**

**Chemicals**

**Climate Change**

**Water Pollution**

The Environmental Health Student Portal provides a safe and useful resource for students and teachers to learn how the environment can impact our health.

Suitable for grades 6-8

[URL](#) for Environmental Health Student Portal

## Tox Town provides information on:

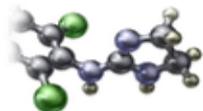


- Everyday locations where you might find toxic chemicals and how the environment can impact human health
- Non-technical descriptions of chemicals
- Available in English and Spanish

Suitable for grades 6-12+

[URL](#) for Tox Town & [Curriculum](#)

TOXNET Home > ChemIDplus Lite



## ChemIDplus

A TOXNET DATABASE

[Lite](#) • [Browse](#) • [Advanced](#)

SEARCH ChemIDplus

BROWSE ChemIDplus

ADVANCED SEARCH

(automatic) ▼

(automatic) ▼

Search

Search for multiple terms by using this format: 50-00-0|50-01-1|50-02-2

## Support

### Resources

[Help](#)  
[Fact Sheet](#)  
[Sample Record](#)  
[TOXNET FAQ](#)

### Contact Us

Email: [tehip@tehl.nlm.nih.gov](mailto:tehip@tehl.nlm.nih.gov)  
 Telephone: (301) 496-1131  
 Fax: (301) 480-3537

## About ChemIDplus



### What is ChemIDplus?

Chemical database is a dictionary of over 400,000 chemicals (names, synonyms, and structures). ChemIDplus includes links to NLM and other databases and resources, including links to federal, state and international agencies. ChemIDplus Lite is designed for simple searching on name or registry. ChemIDplus Advanced helps users draw their own structures and perform similarity and substructure searches.

**Updates:** ChemIDplus records are updated daily.

## Did you know



### How do I lease/license the TOXNET databases?

The following TOXNET databases are available for lease: ChemIDplus, DIRLINE, CCRIS, GENE-TOX, HSDB, and TOXLINE.

For further information visit [Leasing Data](#) from the National Library of Medicine.

[More FAQs](#)

## Environmental Health & Toxicology

Resources on environmental health and toxicology

[Visit Site](#)



[URL for ChemIDplus](#)



# NLM iOS Apps

## Bohr Thru



Candy Crush Style Game focused on familiarizing students with chemical elements and their structures.

## Base Chase



Players learn the bases of DNA by completing unique DNA strands for a variety of animals.

## Run4Green



Mario-style game focused on teaching the importance of environmental conservation.

[URL](#) for iTunes Free Apps from NLM



# MedlinePlus Environmental Health

**Air Pollution**

**Drinking Water**

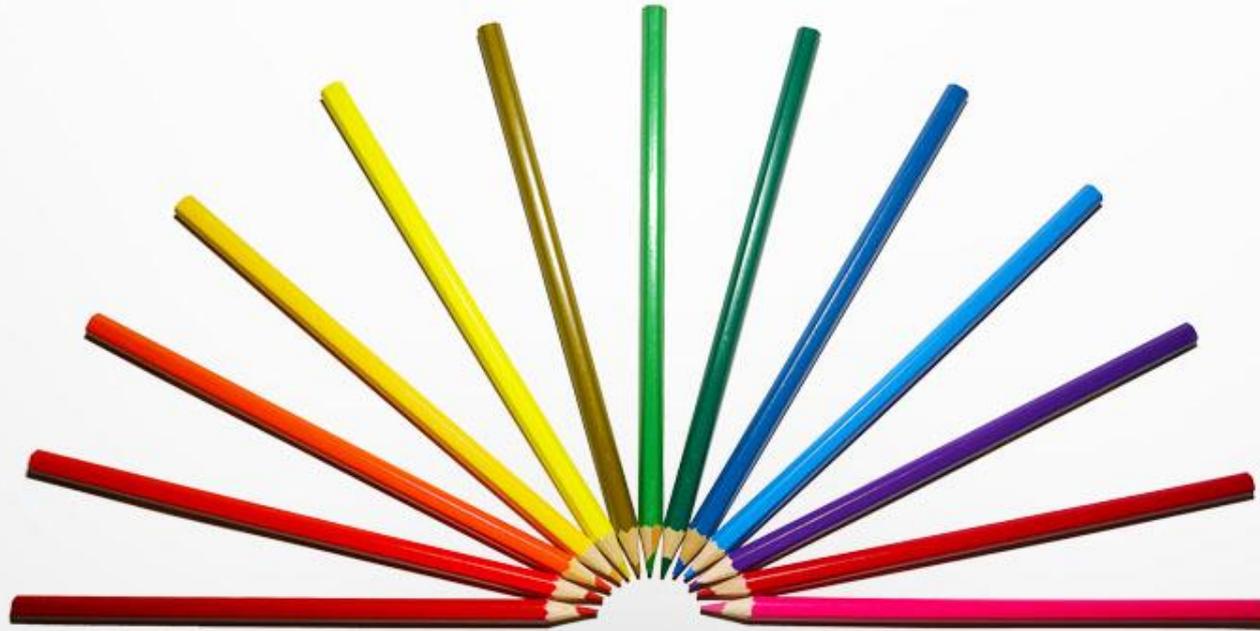
**Hazardous Waste**

**Molds**

**Noise**

**Water Pollution**





# Genetics

Genetics Home Reference provides consumer-friendly information about the effects of genetic variation on human health.



## Health Conditions

More than 1,100 health conditions, diseases, and syndromes

[Browse A-Z](#)



## Genes

More than 1,300 genes and the health effects of genetic changes

[Browse A-Z](#)



## New & Updated

### New

- 7q11.23 duplication syndrome
- Stüve-Wiedemann syndrome
- fibrochondrogenesis
- Past 12 Months

### Updated

- antiphospholipid syndrome
- infantile-onset ascending hereditary spastic paralysis
- Poland syndrome
- spondyloepiphyseal dysplasia congenita
- Past 12 Months

## Bulletins

[URL](#) for Genetics Home Reference

[URL](#) for Handbook, Help Me Understand Genetics

Home

Topics

Labs &  
Experiments

Teacher  
Resources

Careers in  
Genetics

Highlights

search...

GO



### Cell Biology

The study of the cell, including mitosis and meiosis



### DNA, Genes, Chromosomes

The building blocks of inheritance



### Heredity/Inheritance Patterns

The genetic transmission of traits



### Epigenetics/Inheritance and the Environment

The genome's dynamic response to the environment



### Genetic Conditions

Conditions caused by gene variations or mutations



### Evolution

Processes by which organisms are changed over time



### Biostatistics

The use of mathematics to investigate life science related problems



### Biotechnology

Biological techniques used to enhance products



### DNA Forensics

The application of genetic testing for legal purposes



### Top Issues In Genetics

Select genetic topics of popular interest



Suitable for grades 9-12

[URL](#) for GeneEd

# HARRY POTTER'S WORLD

## RENAISSANCE SCIENCE, MAGIC, AND MEDICINE

HOME

EXHIBITION

EDUCATION RESOURCES

TRAVELING INFORMATION

EXHIBITION

“There was a lot more to magic,  
as Harry quickly found out,  
than waving your wand  
and saying a few funny words.”

— *Harry Potter and the Philosopher's Stone*,  
J. K. Rowling



Illustration of an owl  
Konrad Gesner,  
*Historiae Animalium*, 1551



## EXHIBITION



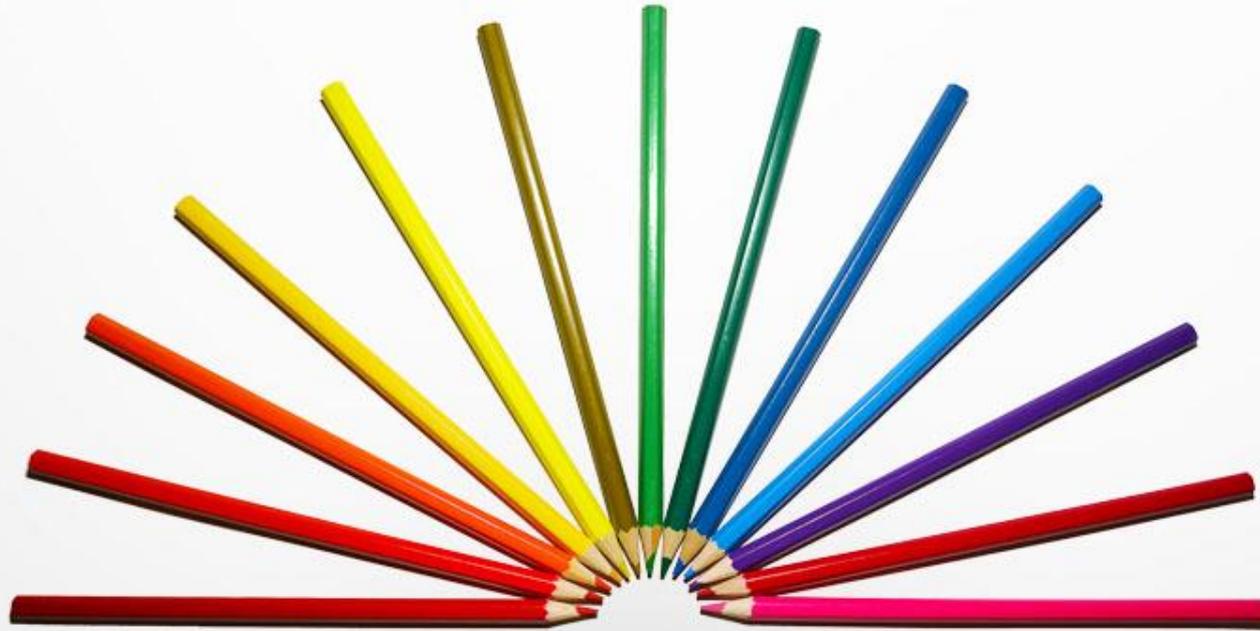
## EDUCATION RESOURCES



## TRAVELING INFORMATION



[URL](#) for Harry Potter's World



**NLM's  
Online Exhibitions**

# imagine history! reimagine your world

 search exhibitions: explore, discover, enjoy!

explore our exhibitions



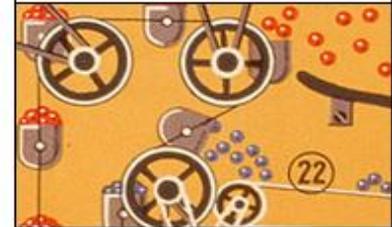
book a traveling exhibition



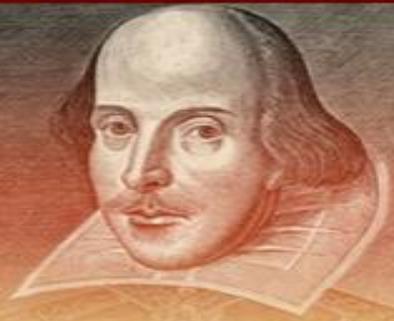
find an educational resource



curious? take a look



The Exhibition Program creates lively and informative exhibitions and educational resources that enhance awareness of and appreciation for the collections of the **National Library of Medicine**.  
Explore. Discover. Enjoy.



*"And there's the  
humor of it"*  
Shakespeare and the four humors

**Exhibition**

- Four Humors
- Taming of the Shrew
- Hamlet
- Merchant of Venice

**Education**

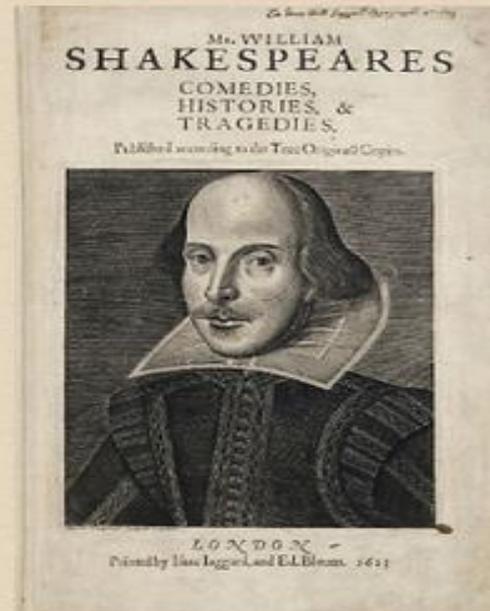
Traveling Exhibition

Credits

Exhibition Program

*"And there's the  
humor of it"*

Shakespeare and the four humors



William Shakespeare (1564–1616) created characters that are among the richest and most humanly recognizable in all of literature. Yet Shakespeare understood human personality in the terms available to his age—that of the now-discarded theory of the four bodily humors—blood, bile, melancholy, and phlegm. These four humors were thought to define peoples' physical and mental health, and determined their personalities, as well.

left: **William Shakespeare**. Courtesy Folger Shakespeare Library.

The language of the four humors pervades Shakespeare's plays, and their influence is felt above all in a belief that emotional states are physically determined. Carried by the bloodstream, the four humors bred the core passions of anger, grief, hope, and fear—the emotions conveyed so powerfully in Shakespeare's comedies and tragedies.

Today, neuroscientists recognize a connection between Shakespeare's age and our own in the common understanding that the emotions are based in biochemistry and that drugs can be used to alleviate mental suffering.

[URL](#) for "And there's the humor if it" Online Exhibition



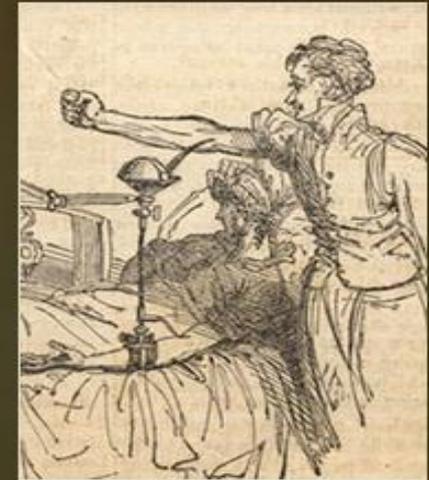
# FRANKENSTEIN: STEIN:

PENETRATING *the* SECRETS *of* NATURE

On a dark and stormy night in 1816, Mary Shelley began writing a story that posed profound questions about individual and societal responsibility for other people.

EXPLORE THE EXHIBITION

SEE THE  
DIGITAL GALLERY



FIND EDUCATIONAL RESOURCES



BOOK THE TRAVELING EXHIBITION

[URL](#) for Frankenstein: Penetrating the Secrets of Nature



# 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

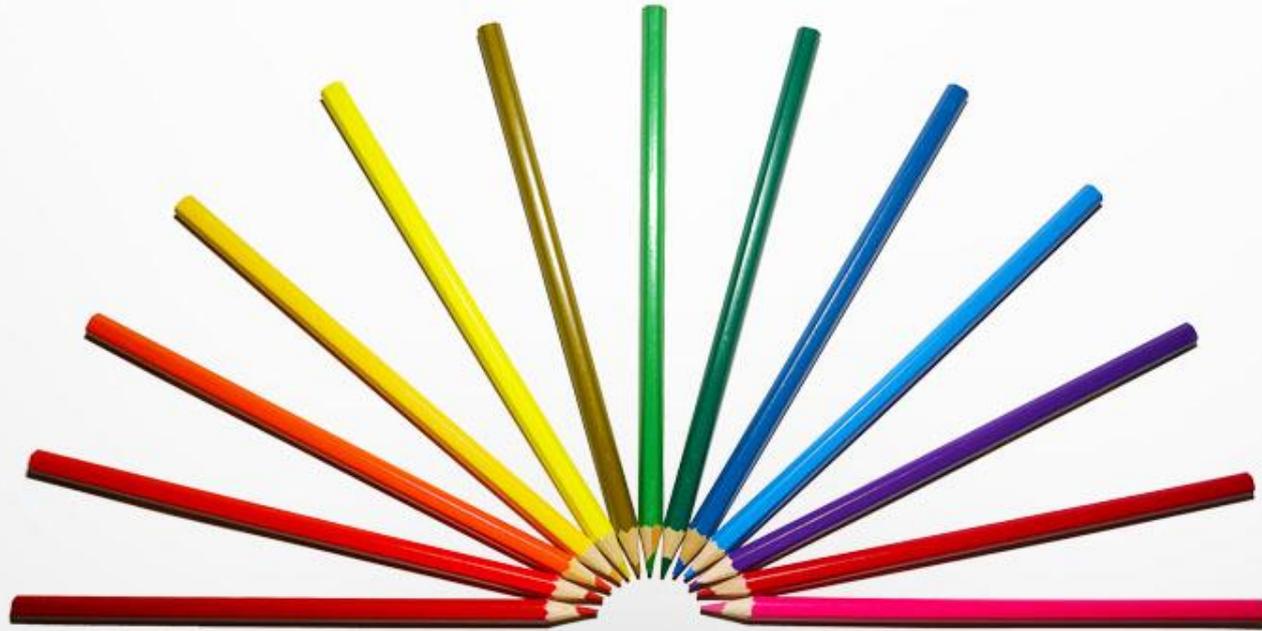


FIND EDUCATIONAL RESOURCES

# AIDS

IT AIN'T OVER YET

 BOOK THE TRAVELING EXHIBITION



# **Additional Resources/Services**

[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.
- Look for a description of the process of selecting or approving information on the site. It is usually in the "about us" section and may be called "editorial policy" or "selection policy" or "review policy."
- Sometimes the site will have information "about our writers" or "about our authors" instead of an editorial policy. Review this section to find out who has written the information.

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](#).

NIH: National Library of Medicine

[URL](#) to Evaluating Health Information



Get Evaluating Health Information updates by email





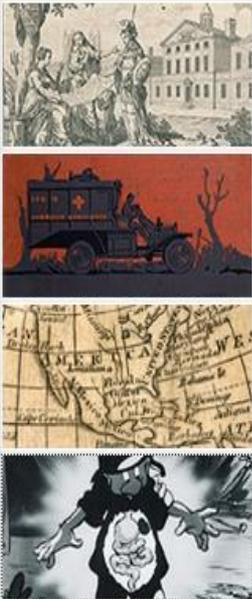
MEDICAL ENCYCLOPEDIA



- Refine by:
- Collections >
  - Subjects >
  - Authors >
  - Titles >
  - Formats >
  - Languages >
  - Dates by Range >



The Public Health Film Goes to War – Overseas and at home during World War 2



**Digital Collections** is the National Library of Medicine's free online resource of biomedical books and still and moving images. All of the content in Digital Collections is freely available worldwide and, unless otherwise indicated, in the public domain. Digital Collections provides unique access to NLM's rich resources.



### NSTA Philadelphia Area Conference 2015 Presentation Information

Locate presentation information from the NSTA Philadelphia Area Conference 2015. The powerpoint versions of the slides are available by emailing [lydia@pitt.edu](mailto:lydia@pitt.edu).



[Encouraging Curiosity with NLM's Online Toy box: Free and Reliable Health and Science Resources for](#)



[Engage, Encourage, and Enable Health and Science Exploration through Literacy: Free Resources from t](#)

Comments (0)

### School Librarian News

- [Sense and Sensibility: Why Librarians Remain Essential to Our Schools](#) (Huffington Post Blog)

Comments (0)

### The Value of School Librarians

[OP-ED | College, Career and Democracy ready? Not without a trained librarian](#) (June 2014 Article)

### 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](#)

[NN/LM MAR K-12 Health Professionals Resource Guide](#)

To request training on NLM resources for K-12 Professionals contact Lydia Collins at [lydia@pitt.edu](mailto:lydia@pitt.edu)

### NN/LM MAR Consumer Health Coordinator



Lydia N. 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:

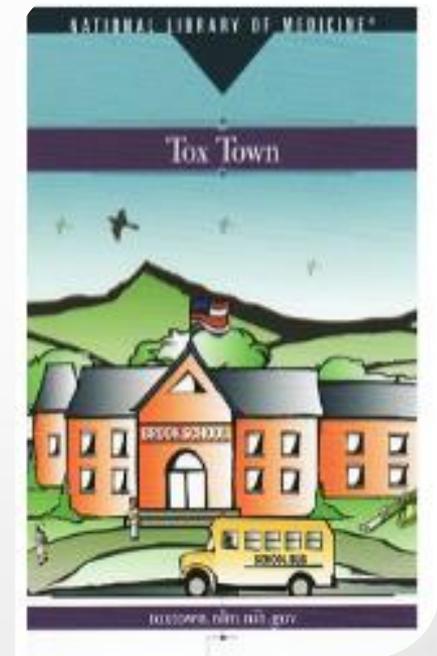
[Consumer Health](#)

### MedlinePlus Magazine



# 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)



# Join NN/LM

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

## Membership Benefit Comparison

Benefits	Full Members	Affiliate Members
Eligibility for award <a href="#">funding</a> for health information access and other projects	X	X
<a href="#">Training and educational opportunities</a> for librarians, health professionals, and consumers	X	X
Opportunities to partner with other health sciences libraries or health-related information centers	X	X
Obtain <a href="#">educational and printed materials</a> for NLM posters, brochures, bookmarks, and other publications	X	X
Opportunities to request an <a href="#">NLM Traveling Exhibition</a>  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 <a href="#">DOCLINE</a>  , the interlibrary loan system used by health sciences libraries	X	



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

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

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

# Thank You



Lydia N Collins  
Consumer Health Coordinator  
[LYDIA@PITT.EDU](mailto:LYDIA@PITT.EDU)



[URL](#) for NN/LM MAR

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