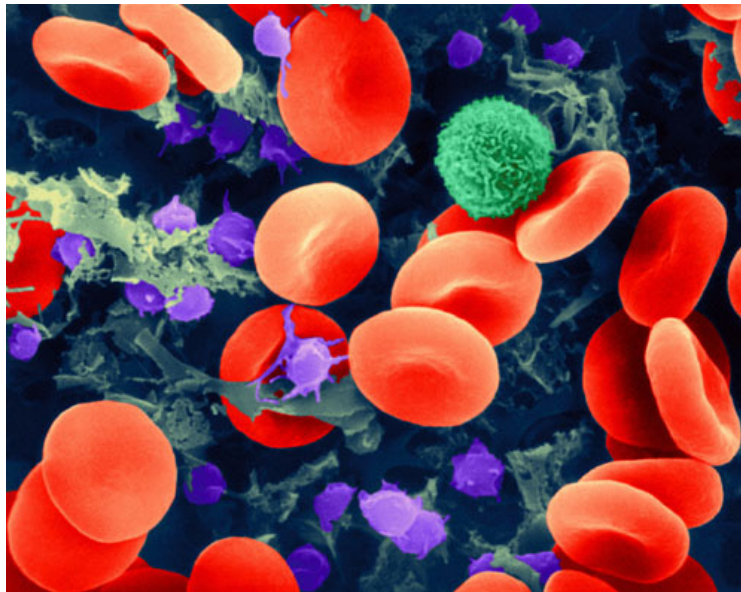


Unit 6: Bioterrorism and Infectious Diseases

Instructional Activities for Teens



PKIDs' Infectious Disease Workshop

Made possible by grants from the Northwest Health Foundation,
the Children's Vaccine Program at PATH and PKIDs.

PKIDs' Infectious Disease Workshop

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Acknowledgements

Producing this workshop has been a dream of ours since PKIDs' inception in 1996. It has been more than two years since we began work on this project, and many people helped us reach our goal. It's not done, because it is by nature a living document that will evolve as science makes strides in the research of infectious diseases, but it's a great beginning.

There are people who've helped us whose names are not on this printed list. That omission is not deliberate, but rather from our own clumsiness in losing important pieces of paper, and we apologize.

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This publication contains the opinions and ideas of its authors. It is intended to provide helpful and informative material on the subject matter covered. Any information obtained from this workshop is not to be construed as medical or legal advice. If the reader requires personal assistance or advice, a competent professional should be consulted.

The authors specifically disclaim any responsibility for any liability, loss, or risk, personal or otherwise, which is incurred as a consequence, directly or indirectly, of the use and application of any of the contents of this workshop.

Introduction

PKIDs (Parents of Kids with Infectious Diseases) is a national nonprofit agency whose mission is to educate the public about infectious diseases, the methods of prevention and transmission, and the latest advances in medicine; to eliminate the social stigma borne by the infected; and to assist the families of the children living with hepatitis, HIV/AIDS, or other chronic, viral infectious diseases with emotional, financial and informational support.

Remaining true to our mission, we have designed the *Infectious Disease Workshop (IDW)*, an educational tool for people of all ages and with all levels of understanding about infectious diseases. In this workshop, you will learn about bacteria and viruses, how to prevent infections, and how to eliminate the social stigma that too often accompanies diseases such as HIV or hepatitis C.

We hope that both instructors and participants come away from this workshop feeling comfortable with their new level of education on infectious diseases.

The IDW is designed to “train-the-trainer,” providing instructors not only with background materials but also with age-appropriate activities for the participants. Instructors do not need to be professional educators to use these materials. They were designed with both educators and laypersons in mind.

The IDW is comprised of a master Instructor’s Background Text, which is divided into six units: Introduction to Infectious Diseases, Disease Prevention, Sports and Infectious Disease, Stigma and Infectious Disease, Civil Rights and Infectious Disease, and Bioterrorism and Infectious Disease.

For each unit, instructors will find fun and helpful activities for participants in five age groups: 2 to 6 years of age, 6 to 9 years of age, 9 to 12 years of age, 13 to 18 years of age and adults.

We welcome any questions, comments, or feedback you may have about the IDW or any other issue relating to infectious diseases in children.

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WEBSITE: www.pkids.org

Dear Parents,

Our class will soon be studying infectious diseases. We will learn about what germs are and ways we can keep from spreading germs. We will also learn that people who have infectious diseases don't have to be treated differently or singled out just because they have a disease.

The workshop we will use has been created by PKIDs (Parents of Kids with Infectious Diseases), a national nonprofit organization dedicated to supporting families touched by infectious diseases.

Your child may have questions about germs or may come home with new ideas about preventing the spread of germs. Here are a few ways you can stay informed:

View PKIDs' website. PKIDs' website can be found at www.pkids.org. You may also request information by calling PKIDs at 1-877-55-PKIDS.

View the instructor's background text for the Infectious Disease Workshop (IDW). The primary purpose of this text is to provide teachers with background information on infectious diseases. It is a good text for anyone seeking general information on infectious diseases. The text provides information about specific diseases, methods of disease prevention, and civil rights for those affected by infectious disease. Visit www.pkids.org for a link to the IDW background texts in PDF format.

View descriptions of the activities we will be doing in class. Visit www.pkids.org for a link to the activities and handouts in PDF format.

The world becomes smaller every day and germs from near and far continue to threaten our health. It is extremely important to educate our young people, equipping them with prevention methods to protect their health and stop the spread of disease.

As always, please feel free to contact me with any questions!

Sincerely,

BIOTERRORISM

Making an Emergency Contact List

LEVEL

Teens



OBJECTIVE

- Students will fill out emergency contact information sheet.
- Students will post the emergency contact information sheet in their homes for reference.
- Families of students will discuss/rehearse actions to be taken in the event of emergency.

MATERIALS

1 copy of the “Emergency Contacts” sheet for each student.

PREP

None

INSTRUCTIONAL COMPONENTS

1. Give 1 copy of the “Emergency Contacts” sheet to each student. (The sheet is designed for children as well as adults.)
2. Briefly review the components of the sheet:
 - Our Family Name: put the family’s last name here.
 - Home Phone and Address: list any phone numbers for the home and the street address (no post office boxes).
 - For ambulance, fire, or police, call 911.
 - 2 spaces are provided for parent/guardian contact information.
 - 2 spaces are provided for friends/family not in the same household. It is a good idea for everyone in the family to know the phone number for the out-of-town friend/relative, so that in the event of a local disaster, each family member can report in with the out-of-town friend/relative, who shares that information with all family members.
 - 1 space is provided for the number of the local health department. Anyone suspecting they have been subject to a biological attack should call this number.
 - 1 space is provided to list the location of the family’s meeting place outside the home.
3. Encourage older children to discuss the sheet with their families to be sure every family member understands how and when to use the information.

ASSESSMENT

Students should be able to state the location of the emergency contact list in their home.

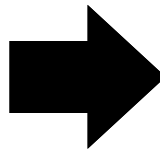
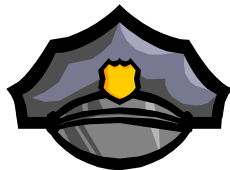
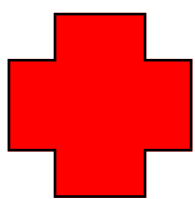
Emergency Contacts

Our Family Name: _____

Our Home Phone: _____

Our Street Address: _____

Our Town: _____



9-1-1



NAME: _____

WORK PHONE: _____

CELL PHONE: _____



NAME: _____

WORK PHONE: _____

CELL PHONE: _____



NAME: _____

HOME PHONE: _____

WORK/CELL PHONE: _____



NAME: _____

HOME PHONE: _____

WORK/CELL PHONE: _____

LOCAL HEALTH DEPARTMENT
PHONE: _____
WEBSITE: _____

OUR FAMILY MEETING PLACE
OUTSIDE HOME: _____

BIOTERRORISM

Making A Comfort Kit

LEVEL

Teens

OBJECTIVE

Students will assemble a small package of things for their own personal comfort or entertainment in the event of a disaster.

MATERIALS

- 1 letter to families (included with lesson) per student.
- Miscellaneous items to be provided by students/parents.

PREP

Determine storage space for kits.

INSTRUCTIONAL COMPONENTS

1. Send students home with letter to families.
2. Older students could assist younger children in making a kit.
3. Be sure all kits are labeled with names!

ASSESSMENT

Students will bring their completed comfort kits to school.

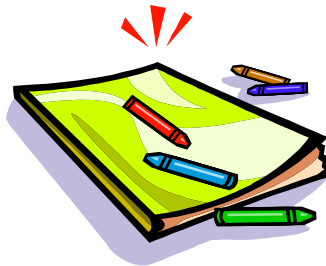
Dear Families,

In the unlikely event of a disaster (natural or man-made) occurring during school hours, please consider creating a “comfort kit” for each child in your family to take to school. This kit will be kept at school and should contain non-perishable items that will help sustain the student and relieve fear and homesickness. Please work with your child to construct this kit and send the completed kit to school with your child. At the end of the year, all unused kits/items will be sent home with students.

Please select items that will fit inside a 1-gallon plastic closeable bag. Some items that are not readily available can be purchased inexpensively at a dollar store (e.g., crayons, small toys). A list of items to consider might include the following (depending on age appropriateness):

- Plastic garbage sack (to protect from moisture; can be used as a blanket)
- Photo of the family
- Letter from family member(s)
- Non-perishable snack items, hard candy
- Drinks in small, sealed containers or pouches
- Drawing pad, paper
- Markers, colored pencils (if they aren't already at school)
- Activity/game booklet
- Book, magazine, comic book
- Travel-sized games
- Deck of cards

Remember to label the kit with the owner's name! Thank you for participating.



BIOTERRORISM

Who Responds?

LEVEL

Teens

OBJECTIVE

Students will gain knowledge of agencies and resources that are integral in responding to a bioterrorism incident.

MATERIALS

1 copy of the attached quiz for each student.

PREP

None

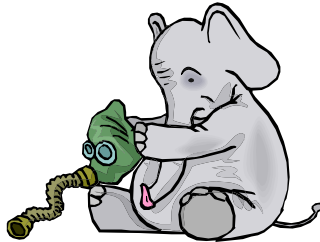
INSTRUCTIONAL COMPONENTS

Students will complete the quiz and compare/check answers.

ASSESSMENT

See attached quiz.

Answers: 1) laboratories, 2) the media, 3) police department, 4) health care providers, 5) CDC, 6) NPS, 7) public health departments, 8) HazMat, 9) FEMA, 10) DHHS, 11) paramedics, 12) FBI.



BIOTERRORISM

Who Responds?

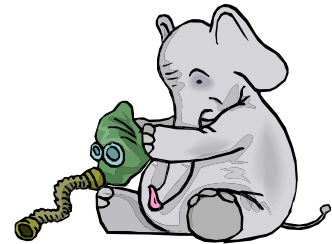
In the event of a bioterrorist incident, many agencies would need to coordinate their efforts in order to control the situation. Several are already doing this to ensure that resources and communication protocols will be ready if a biological attack occurs. Some agencies that would need to share information are: state/local health departments; paramedics (EMS, fire department); health care providers, including hospitals, physicians and nurses, and medical clinics; medical examiners' offices; laboratories; pharmacies; veterinary clinics; poison control centers; local/state police departments; the Federal Bureau of Investigation (FBI); volunteer organizations; and social and mental health services. That's just to name a few!

How well do you know and understand which agencies would serve your community during a biological attack? To find out, take this quiz and check your answers with your instructor at the end.

(NOTE: The agencies and descriptions provided here are not meant to provide you with a complete list of organizations and their duties, but rather a general idea of them.)

Choose from the following and fill in the blanks:

Health care providers
Police departments
Paramedics
Public health departments
Laboratories
The media
HazMat
National Pharmaceutical Stockpile Program (NPS)
Federal Emergency Management Agency (FEMA)
Department of Health and Human Services (DHHS)
Centers for Disease Control and Prevention (CDC)
Federal Bureau of Investigation (FBI)



1. Technicians in government and private _____ analyze samples from crime scenes to determine the composition of suspicious substances.
2. All agencies should communicate effectively with _____ in order to prevent the spread of inaccurate information and to provide the public with information.
3. In the event of a biological attack, the local _____ would be responsible for community security, including enforcing quarantines and helping transport medical supplies.

4. _____, such as hospitals, clinics, nurses and physicians, must have an understanding of the biological agents that can be used as weapons and the symptoms victims of a biological attack would exhibit. If an attack is suspected, they must immediately contact public health officials at local, state, and federal health organizations.
5. The _____ provides national leadership and education to public health professionals and health care providers, teaching them to detect and respond to biological threats. This organization oversees many programs and offices, including the Epidemiology Program Office, the National Center for Infectious Diseases, and the National Immunization Program.
6. The _____ is a national supply of medications, treatments, and medical paraphernalia that can be distributed in the event of a biological emergency.
7. _____ are generally concerned with maintaining community health at the state and local level and providing education to the public and medical personnel. In the event of a bioterrorist attack, they would send disease detectives (epidemiologists) to investigate the situation and assess people exposed to the biological agent.
8. _____ deals with the transportation and cleanup of hazardous materials.
9. The _____ coordinates the federal response to emergencies. This government agency has assisted countless people suffering from the aftermath of major destructive events, such as tornadoes, floods, and earthquakes.
10. The _____ coordinates the National Medical Response Teams for Weapons of Mass Destruction. This department encompasses many government agencies, including the Centers for Disease Control and Prevention.
11. In the event of a bioterrorist attack, _____ from EMS and the fire department would be responsible for responding to and transporting victims.
12. The lead agency in a terrorist incident is the _____.

BIOTERRORISM

Who Responds? A Role Playing Exercise

LEVEL

Teens



OBJECTIVE

Students will understand the roles of local agencies in responding to a bioterrorist attack.

MATERIALS

- 1 copy of the attached printout per group, OR 1 overhead of the attached printout.
- Bioterrorism scenario (2 are listed here)

PREP

Predetermine groups, if desired. Groups should be small (2-3 members) to cover as many areas as possible.

INSTRUCTIONAL COMPONENTS

1. Have students brainstorm about groups of people (agencies or systems) who might respond in the event of a biological attack. This list may include:
 - Fire department
 - Police department
 - EMS (Emergency Medical Services, including 911 operators, first responders, ambulances, emergency departments)
 - FBI
 - HAZMAT (Hazardous Materials)
 - American Red Cross
 - Search and Rescue
 - National Guard
 - Health care system (including hospitals, family doctors, infectious disease specialists)
 - Public health department
 - State emergency management agency
 - Media (TV, newspapers, radio, Internet)
 - Politicians
2. Students should select a type of responder from the list to research as a group. Students should take on the viewpoint of that group, e.g., the media group and the EMS group will have completely different viewpoints on a bioterrorist attack.
3. Each group should then research the role their chosen agency or system would play in the event of a bioterrorist attack. Personal interviews with local responders may be helpful.

ASSESSMENT

After students have completed research, provide them with a bioterrorism event scenario to

“solve.” Students should be able to say how their group would contribute to the situation. Groups should communicate with each other.

Follow up questions:

1. Was communication orderly or haphazard?
2. Did you find you needed to rely on other groups in order to fulfill your own duties? Did you find that one group was easier for you to work with than another?
3. What additional information did you wish you had in dealing with the bioterrorist attack?
4. What does this tell us about how we as civilians should respond to bioterrorism (or other public emergencies)?

RESOURCES FOR STUDENTS

*** Warning: Some sites may contain certain disease-related images that may not be suitable for young children.*

Johns Hopkins Bloomberg School of Public Health and the School of Medicine
Center for Civilian Biodefense Strategies
www.hopkins-biodefense.org

The Northwest Center for Public Health Practice at the University of Washington
healthlinks.washington.edu/nwcphp/bttools

The American Red Cross
www.redcross.org

Office of the Surgeon General Medical NBC (Nuclear, Biological, Chemical)
www.nbc-med.org/

Centers for Disease Control — Public Health Emergency and Preparedness Response
www.bt.cdc.gov/

John Penido, Fire Chief, City of San Marino
Transcript of comments on coordination of resources during an emergency situation
www.rand.org/nsrd/bioterr/penido.htm

The library!!

Sample Scenarios

www.rand.org/nsrd/bioterr/isaacson.html
www.cdc.gov/ncidod/EID/vol5no4/inglesby.htm
www.cdc.gov/ncidod/EID/vol5no4/bartlett.htm

Bibliography

American Academy of Pediatrics: *Children, Terrorism, and Disasters*
www.aap.org

Association for Professionals in Infection Control and Epidemiology, Inc.: *Bioterrorism*
www.apic.org

Centers for Disease Control and Prevention: Public Health Emergency Preparedness and Response
www.bt.cdc.gov

Center for the Study of Bioterrorism at the St. Louis University School of Public Health
bioterrorism.slu.edu

Department of Health and Human Service: Homepage for Metropolitan Medical Response System (MMRS) information
www.mmrs.hhs.gov

Johns Hopkins: Center for Civilian Biodefense Strategies
www.hopkins-biodefense.org

Northwest Center for Public Health Practice at the University of Washington School of Public Health and Community Medicine: *Bioterrorism Training Tools; Hands-on Training for Public Health Emergencies*
healthlinks.washington.edu/nwcphp

Seattle and King County Public Health. “*Update on Bioterrorism Preparedness: The role of Public Health and health care providers.*”
www.metrokc.gov

The U.S. Army Medical Research Institute of Infectious Diseases
www.usamriid.army.mil

U.S. Army Office of the Surgeon General: The Medical NBC (Nuclear, Biological, Chemical) Online Information Server
www.nbc-med.org

U.S. Food and Drug Administration: Bioterrorism
www.fda.gov

Additional Activities and Resources for Teachers, Students, and Parents

American Red Cross. Distributes preparedness pamphlets, checklists, and coloring books. Website contains information for educators.
www.redcross.org

Chin, James E. ed. *Control of Communicable Diseases Manual*. 17th ed. Washington, DC: American Public Health Association, 2000.
Primarily focuses on the public health response to infectious diseases.

The Parents' Committee for Public Awareness. *Anthrax: A Practical Guide for Citizens—What You Should Know, What You Can Do, & How It Came to This*.
Cambridge: Harvard Perspectives Press, 2001.
Distills the most up-to-date information and compiles useful public materials so that no family, individual, employer, public institution or medical facility will have to hunt them down.

Rand Symposium 2000. Eisenstein, Maurice, and Houghton, Brian eds., *Bioterrorism: Homeland Defense: Next Steps*
www.rand.org/nsrd/bioterr/index.html

Salvucci, Angelo Jr. M.D., ed. *Biological Terrorism, Responding to the Threat: A Personal Safety Manual*. Carpinteria: Public Safety Medical, 2001.
Contains all the information necessary to protect individuals and their families in the unfortunate reality of our nation's battle with terrorism.

Tucker, Jonathan B. *Scourge: The Once and Future Threat of Smallpox*. New York: Atlantic Monthly Press, 2001.
Looks at the continuing debate over the destruction of smallpox using numerous interviews with key players to look at the political and social aspects of the disease.

University of Washington School of Public Health & Community Medicine. Spring/Summer Newsletter. *2001 Training for Public Health Emergencies*.
healthlinks.washington.edu/nwcphp/nph/s2001/biot_training_s2001.pdf