The Role of Educators in Public Health Emergencies

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Emergency Partners Information Connection (EPIC) Webinar Series
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Overview

- Children’s Preparedness Unit
- How emergencies affect children
- School health policies and practices study
- Healthy People 2020
- During the emergency response
- Before and after the emergency

Image credit: https://www.cdc.gov/features/school-emergency-preparedness/index.html
Children are >22% of the US population

They’re 100% of our future
Children’s Preparedness Unit
Children’s Preparedness Unit Mission

To champion the needs of children in emergency preparedness and response

- Build an evidence base of best practices
- Increase awareness of children in preparedness planning
- Offer technical assistance as subject matter experts
- Develop partnerships with leaders in preparedness planning
Children’s Health Team

- 2009 H1N1 Outbreak
- 2014 Unaccompanied Minors
- 2014-15 Ebola Outbreak
- 2015-17 Zika Outbreak
- 2016 Water Contamination, Flint, MI *
- 2016 Hurricane Matthew
- 2017 Hurricanes Harvey, Irma, Maria

* Response led by U.S. Dept. of Homeland Security
How Emergencies Affect Children
How children are different

Because they breathe in more air for their size than adults, children absorb harmful materials from the air more readily.

Because they need vaccines, medicines, and specially designed equipment for emergency situations that are different from adults.

Children are more vulnerable in emergencies

Because they spend more time outside, are lower to the ground, and they put their hands in their mouths more often than do adults.

Because they may not be able to communicate their symptoms or feelings.
Children are affected by disasters

Hurricane Maria, 2017

Image credit: https://time.com (top left); https://estaticos.efe.com (lower middle)
Children may be disproportionately affected

Polio Outbreak, 2010

Zika Virus Outbreak, 2015

Image credit: CDC PHIL (Polio); AP Photo/Felipe Dana (Zika)
Children may be more severely affected

Fukushima Nuclear Power Plant explosion, 2011

Ebola Virus Outbreak, 2014

Image credit: https://www.nytimes.com (Fukushima); CDC PHIL (Ebola)
Background

- The school environment:
  - Nearly 3/4 of students between the ages of 5-17 are in school for 6 hours a day
  - Approximately 5/7 of school districts have used materials from the U.S. Department of Education to develop a plan
  - More than 1/5 of school districts lack comprehensive plans
Types of public health emergencies

- Examples of emergencies that should have response plans:
  - School facility-related emergencies
  - Medical emergencies
  - Weather-related emergencies
Emergency alert

- **Types of notifications include:**
  - School operating status (closures, delayed opening, phased release)
  - Facilities issues
  - Hazardous weather announcements
  - Shelter-in-place notifications
Whole community approach before disaster strikes

- Unified and collaborative approach:
  - Coordinate
  - Cross-training
  - Know who to call
School health policies and practices study (SHPPS)

National survey:
• Conducted at the state, district, school, and classroom levels
• Healthy and safe schools environment module
• Three surveys (2006, 2012, 2016)
• Self-reported data (paper and pencil and Web)
• Response rate ranged from 64.0% to 66.5%
Healthy and safe schools environment module

- **School district characterizations:**
  - District partners
  - U.S. census region (Midwest, Northeast, South, West)
  - Levels of urbanicity (city, suburb, town, rural)
  - School enrollment size (small, medium, large)
  - District provided funding for training or offered education
Key findings from SHPPS (2012)

- **Urban vs. rural collaborations:**
  - 95% partnered with local law enforcement
  - 66% with local health department
  - 43% collaborated with families
Key findings from SHPPS (2016)

- **U.S. Census regions:**
  - Northeast districts were more likely to include special topics
  - Provisions of mental health services was high across regions
Key findings from SHPPS (2016)

- **Level of urbanicity:**
  - More districts meeting objectives
  - Increase in suburban areas
  - Lower number of rural and smaller areas
Key findings from SHPPS (2016)

- **School enrollment size:**
  - Almost 80% of school districts met provision for students and staff member with special needs
  - Smaller districts still lag behind
Key findings from SHPPS (2016)

- **District training or education offered:**
  - Most training recipients were school faculty and staff
  - Large districts vs. small districts offered training or education

![Bar chart showing districts offered training or education by category and district size](chart.png)
Healthy People 2020

HHS Office of Disease Prevention and Health Promotion:

- 10-year objectives for improving the health of all Americans (1990, 2000, 2010)
- 42 topic areas (>1,200 objectives)
- Objectives prompt measurable change at the national, state and local levels
Healthy People 2020 preparedness objective (PREP-5)

- **PREP–5:**
  
  - “Increase the percentage of school districts that require schools to include specific topics in their crisis preparedness, response, and recovery plans”
Healthy People 2020 Prep-5 objectives

- Family reunification plans
- Procedures for flu or infectious disease
- Plans for students and staff with special needs
- Provisions of mental health services
PREP-5.1: Reunification of children, families and caregivers

Family reunification plans: Target is 74.6%
PREP-5.2: Procedures for responding to pandemic influenza or infectious disease outbreak

2006 2012 2016
N/A 69.0% 65.3%

Procedures for responding to pandemic flu or infectious disease outbreaks: Target is 75.9%
PREP-5.3: Plans for students and staff members with special needs

Students and staff members with special needs: Target number is 87.9%
PREP-5.4: School plans to include provision of mental health services after a crisis

Mental health services after a crisis: Target is 76.2%
Implementation

- Creating a district level emergency preparedness and crisis response plan:
  - Collaboration with community and parents fosters confidence and community resilience
  - Extended school responsibilities
Guidance documents

Save the Children Disaster Report Card
During the Emergency Response:

Examples of Teacher Collaboration
Flint, MI Water Crisis (2016)

Flint, MI: Frequently Asked Questions

Should Flint children get blood lead level testing?

It is important that children in Flint be tested for lead. CDC/ATSDR suggests all children in Flint should have blood lead testing, and specifically, that all children under six years of age in Flint be tested at least once between October 1, 2015 and April 1, 2016. This is because lead testing may detect which children currently have high lead levels even if they are not being exposed to tap water at this time. The impact of lead on children’s health and development will persist even after blood lead levels are less than 5µg/dL. Blood lead testing can help provide important information for children’s needs now and as they grow.

What are the best practices for using tap water?

- Use NSF* certified water filters in your home, and run only cold water through the filters. Filters can be obtained at select Fire Stations, local health departments or City Hall.
- Filtered water is a safe option ONLY if your filter is certified to remove lead and you follow all the instructions on how to use it and when to replace it.
- Use filtered or bottled water for drinking (including making coffee, drink mixes, juice, and brushing teeth).
- Bottled water is the safest choice for children under the age of six, including for making infant formula.
- Use filtered or bottled water for cooking.
- Use filtered water to wash fruits and vegetables.
- Use filtered or unfiltered tap water for washing hands and dishes.
- Boiling water will not remove lead.

Should children drink the tap water in Flint?

Bottled water is the safest choice for children under the age of six, including for making infant formula.

Source: https://rems.ed.gov/docs/03-07-16-FlintFAQ.pdf (left); https://www.cdc.gov/phpr/readywrigley/books.htm (right)
Zika Virus Response Planning: Interim Guidance for District and School Administrators in the Continental United States and Hawaii

Summary

What is already known about this topic?

Zika virus is transmitted primarily through the bite of infected Aedes species mosquitoes. Zika virus is not transmitted directly from one person to another through casual contact. There is no evidence that risk for transmission on school properties will be higher than in other areas of the local community.

What is added by this report?

If suspected or confirmed Zika virus infection occurs in a student or staff member, schools should continue to prioritize strategies to prevent mosquito bites on school grounds, to prevent further transmission through infected mosquitoes. Because Zika virus is not transmitted from person to person by casual contact, it is not necessary to issue a schoolwide notification, and students or staff members with travel-related Zika virus exposure or confirmed Zika virus infection do not need to be removed from school. Isolation of persons with Zika virus disease or quarantine of exposed persons is neither recommended nor appropriate. Schools should maintain privacy and nondiscrimination protections for all students and employees. In the case of local Zika virus transmission, it is not necessary to cancel school-related activities.

What are the implications for public health practice?

School, local, and public health authorities should work together to implement mosquito control activities and mosquito bite prevention measures for schools to decrease risk of Zika virus transmission, to apply appropriate policies for educating students and staff members, and for continuation of school operations.

At-risk individuals are people with access and functional needs that may interfere with their ability to access or receive medical care before, during, or after a disaster or emergency.
2017 Hurricane Harvey, Irma, & Maria

Source: https://www.cdc.gov/phpr/readywrigley/books.htm

Image credit: CDC staff: personal photo used with permission of Malaika Washington
Before & After the Emergency:

Preparedness & Recovery Resources for Educators
Tools & Resources

**TEACHERS AND CHILDCARE**

**KIDS AND FAMILIES**

**HEALTH PROFESSIONALS**

**EMERGENCY PLANNERS**

**INFOGRAPHIC**

**VIDEOS**

Source: https://www.cdc.gov/childrenindisasters/tools-and-resources.html
Coping after a disaster

Coping after a disaster

Helping Children Cope with Emergencies

Regardless of your child’s age, he or she may feel upset or have other strong emotions after an emergency. Some children react right away, while others may show signs of difficulty much later. How a child reacts and the common signs of distress can vary according to the child’s age, previous experiences, and how the child typically copes with stress.

Children react, in part, on what they see from the adults around them. When parents and caregivers deal with a disaster calmly and confidently, they can provide the best support for their children. Parents can be more reassuring to others around them, especially children, if they are better prepared.

People can become more distressed if they see repeated images of a disaster in the media. Early on, consider limiting the amount of exposure you and your loved ones get to media coverage.
Helping your students cope after a disaster

- Provide opportunities to talk and ask questions.
- Speak in a way they can understand.
- Set a good example.
- Be aware of behavior changes and report appropriately.

Source: https://www.cdc.gov/childrenindisasters/helping-children-cope.html

Image credit: iStock 684059604
Emergency Planning for Families

EASY AS ABC
THREE STEPS TO PROTECT YOUR CHILD DURING EMERGENCIES IN THE SCHOOL DAY

A - ASK how you would be reunited with your child in an emergency or evacuation

B - BRING extra medications, special food, or supplies your child would need if you were separated overnight

C - COMPLETE a backpack card and tuck one in your child’s backpack and your wallet

Source: https://www.cdc.gov/childrenindisasters/infographics/easyasabc.html

Source: https://www.cdc.gov/childrenindisasters/checklists/index.html
Children are constantly growing and changing

Each stage brings different challenges

Image credit: https://www.cdc.gov/ncbddd/childdevelopment/positiveparenting/index.html
Resources

- Tips for Talking with and Helping Children and Youth Cope After a Disaster (SAMHSA): https://store.samhsa.gov/shin/content/KEN01-0093R/KEN01-0093R.pdf
Thank You!

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Image credit: https://www.cdc.gov/childrenindisasters/helping-children-cope.html