Planning for the Expected: Infectious Diseases and All-Hazards Planning

Presentation Goals

This presentation will discuss the following:

- Infectious diseases in schools
- Case Studies
- Incorporating infectious disease planning with all-hazards planning
  - Considerations for the four phases of school emergency management
- Conclusion

Presentation Goals

Specifically, information on infectious diseases in schools will include:

- Statement of the problem
- Common infectious diseases that affect schools
- Common routes of transmission
- Key considerations around infectious diseases and children
- Ways to prevent infection
- Consequences of infectious diseases for schools

Infectious Diseases in the U.S.

- Every year, schools close due to infectious disease outbreaks
- Infectious diseases are illnesses that are transmitted from one person to another via various routes

Recent Headlines Reflecting Infectious Diseases in Schools

Headlines identified using Google News Search Engine, February 28, 2010.

☆ 215 Woodmere **students** monitored after exposure to **mumps**
Newsday (subscription) - Delthia Ricks - Feb 11, 2010
About 215 **students** in a Nassau County **school** are being monitored for signs of **mumps** following a recent exposure to the viral illness, health officials say. **...**


Central Florida News 13

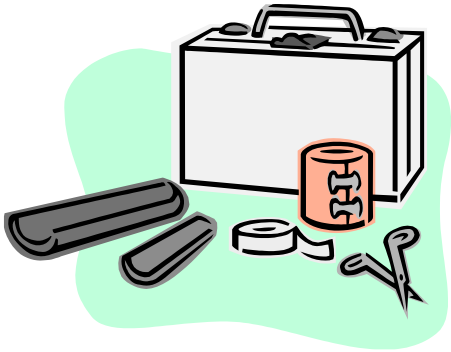
☆ Flagler **Schools** Await Lab Results On Sick Students
WESH Orlando - Feb 16, 2010
Health officials said they think they're dealing with Norovirus, a highly contagious **virus** that can spread quickly. **Close** to 250 cases of similar symptoms **...**
Report: Mystery illness is being spread by human contact — not water or food
Orlando Sentinel
Norovirus Could Affect More In Central Fla. WESH Orlando
all 46 news articles » Email this story

☆ **MRSA** Infection found at Massachusetts Elementary **School**
Lawyers and Settlements - Feb 23, 2010
... **School** have informed parents and faculty that an outbreak of Methicilin-Resistant Staphylococcus Aureus, or **MRSA** infection, has hit the **school**. **...**

Swine flu prompts **hundreds** of hard-hit schools to **close** | Health **...**
Oct 28, 2009 **...** **Swine flu** prompts **hundreds** of hard-hit schools to **close** .... In Traverse City, Mich., the **school** district **closed** every one of the 18 schools **...**
www.cleveland.com/...ssf/.../**swine_flu**_prompts_**hundreds**_of.html - Cached

Some Common Infectious Diseases That Affect Schools

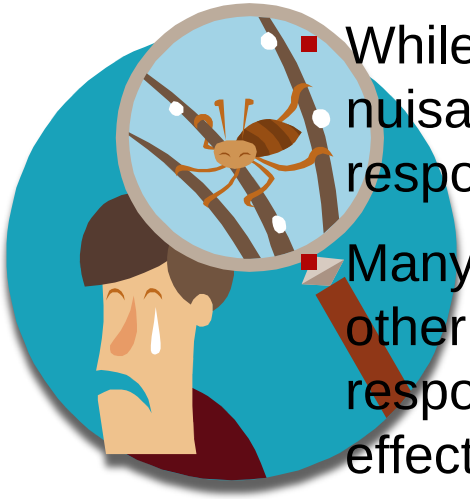
- Viral Infections
  - Gastroenteritis – Noroviruses
  - Influenza (Seasonal, H1N1)
  - Varicella (Chicken Pox)
  - Coxsackievirus (Hand, Foot and Mouth)
- Bacterial Infections
  - E. Coli
  - MRSA
  - Strep throat
- Fungal Infections
  - Ringworm



A Word About Lice

- Although not an infectious disease, lice outbreaks are similar in their characteristics and risk factors
- Lice are human parasites and are easily transmissible from person-to-person
- Although children may not get lice from school, but rather from infected public areas, schools often find themselves responsible for screening and communicating about lice. Lice outbreaks are common in schools, particularly elementary schools.

A Word About Lice



- While lice are not known to transmit disease, they are a nuisance condition and lice infestations cause emotional responses in the school community.
- Many of the same considerations should be given to lice as to other infectious disease outbreaks, such as the need to respond quickly to stop transmission or to communicate effectively to parents, students, and staff.
- Schools can help prevent the spread of lice by encouraging students not to share personal supplies (e.g., hairbrushes, hats) and to give each student a place to hang their coats or sweaters, instead of storing their effects together.
- It would be extremely rare to ever close a school because of head lice, but this is an issue that schools face almost annually.

Some Common Routes of Transmission

Person-to-Person

- Droplet transmission (influenza)
- Airborne transmission (TB)
- Fecal→Oral (E.Coli, Salmonella)
- Skin contact/Direct contact (chicken pox, lice)
- Blood/Body secretions (Hepatitis)
- Sexually Transmitted Diseases (Chlamydia)

Other Common Routes of Transmission

- Contaminated surfaces (influenza)
- Food-borne (*Salmonella*, *E. Coli*)
- Waterborne (*Cryptosporidium*)

Infectious Diseases and Children: Key Considerations

- Children and youth are particularly efficient at transmitting diseases
- Schools tend to be densely packed environments
- School environments may not be routinely cleaned and disinfected in a manner that reduces possibilities for disease transmission (i.e. desks, playgrounds)

Infectious Diseases and Children: Key Considerations, Cont'd.

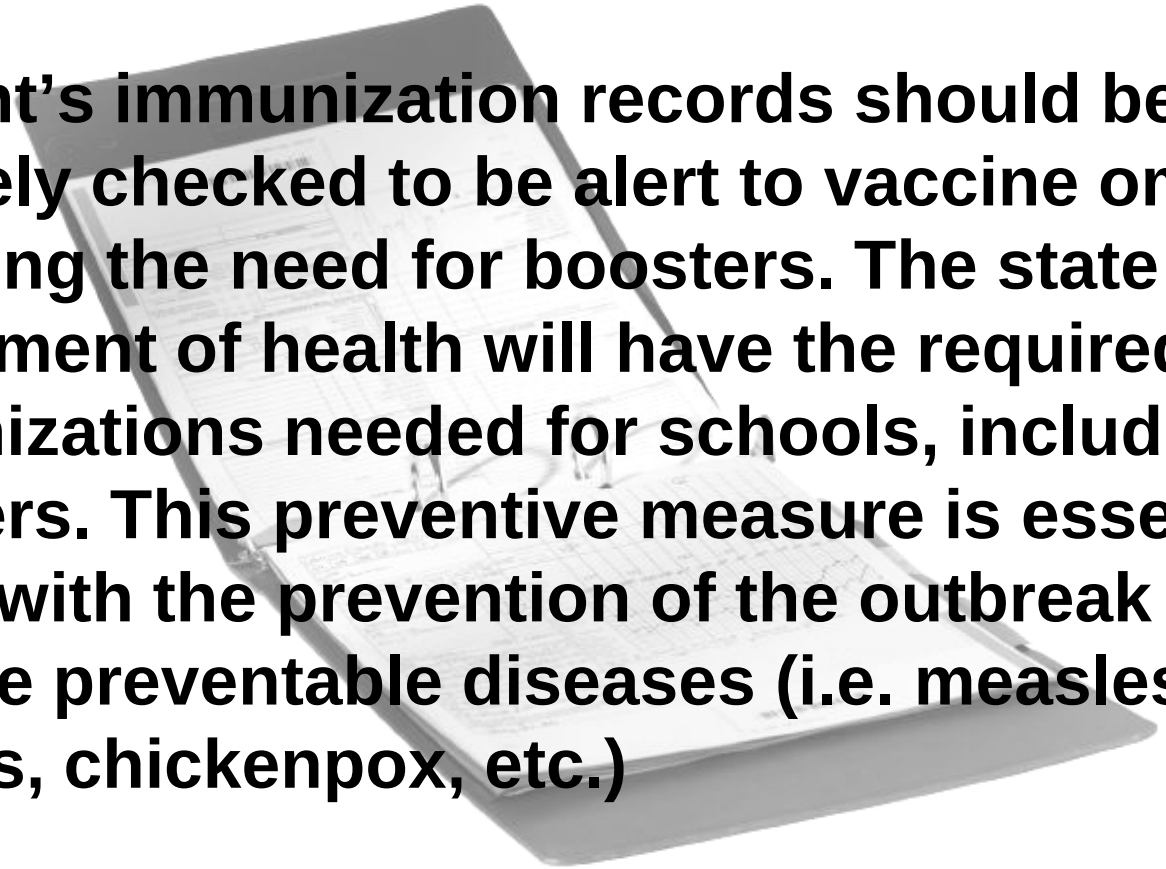
- Children may have less developed immune systems than adults
- Children may not be fully immunized against vaccine-preventable diseases (or require boosters)
- Vaccinations are given in a medically approved time frame. Younger children may have not yet been fully immunized.

Infectious Diseases and Children: Key Considerations, Cont'd.

Approaches will be different between Elementary School and Middle/High School students, for example:

- Level of vaccine coverage
  - Elementary School students may have less coverage, or High School students may not get boosters
- Involvement in High School sports may increase risk of some infection transmission
  - Because students may be in situations where equipment (e.g., towels, mouth guards) may be shared, or injuries or body fluids may be spilled (i.e. wrestling), there is an increased risk of infectious diseases such as MRSA, measles, etc.
  - Written policies should address extra precautions that should be used in sports.

Infectious Diseases and Children: Key Considerations, Cont'd.



Student's immunization records should be routinely checked to be alert to vaccine omissions including the need for boosters. The state department of health will have the required immunizations needed for schools, including boosters. This preventive measure is essential to assist with the prevention of the outbreak of vaccine preventable diseases (i.e. measles, mumps, chickenpox, etc.)

Infectious Diseases: The Good News!

- Many infectious diseases can be prevented or transmission can be mitigated or stopped
- Diseases can be prevented through:
  - Vaccines
  - Safe food handling
  - Good adherence to public health practices (hand hygiene, respiratory etiquette, staying home when sick, routine cleaning)
  - Education and outreach

Consequences of Infectious Diseases for Schools

- Emergency management plans may have to be activated with community partners
- Student and staff absences may cause schools to close for days or weeks, calling for the enactment of Continuity of Operations (COOP) Plans and Continuity of Learning plans. A COOP plan:
  - Ensures continued performance of essential functions across a full range of potential emergencies, be they natural or man-made.
  - Provides guidance and establishes responsibilities and procedures to ensure that business resilience is developed and maintained.
- COOP is not the same as an Emergency Operations Plan but rather supplements it, in the event normal facility or human resources are not available.

Consequences of Infectious Diseases for Schools

- Students and staff may be affected by illnesses for prolonged periods of time. Staff are often impacted because their family is sick, day care for their children may not be available, and they are absent in order to care for their families.
- Depending on the disease, there may be potentially some deaths in the school community
- If handled poorly, community trust in schools is shaken

Health Services in Schools

- Only about 33% of states and 73% of districts require that supplies for applying standard or universal precautions, including disposable gloves and bandages, be available in every classroom.

Universal or standard precautions refer to the practice of protecting oneself from transmission of diseases from patient's body fluids, such as through the use of non-porous personal protective equipment, such as gloves, masks, or goggles. Standard precautions are the basic level of infection control that should be used in the care of all patients all of the time, with the assumption that anyone may be infected, even those that may not know of their infection. This applies to blood, all body fluids, secretions and excretions except sweat and require the use of personal protective equipment such as, gloves, gowns, goggles as well as washing hands after contact. For some patients, additional precautions may be necessary.

Source: Centers for Disease Control and Prevention, School Health Policies and Programs Study, 2006. Accessed at: www.cdc.gov/healthyyouth.

Health Services in Schools

- Only about 33% of states and 73% of districts require that supplies for applying standard or universal precautions, including disposable gloves and bandages, be available in every classroom.
- OSHA requires that schools have a exposure control plan in place and that it is regularly reviewed and revised as necessary.
- Only 6% of states and 20% of districts require each school to have a school nurse.
  - 16% of states and 12% of districts require maximum student-to-school nurse ratio

Source: Centers for Disease Control and Prevention, School Health Policies and Programs Study, 2006. Accessed at: www.cdc.gov/healthyyouth.

Case Study: Kansas Middle School Norovirus Outbreak

- Approximately 150 students (30%) of total student body absent April 12, 2007 and 100 students absent on April 13th. Illness limited to Augusta Middle School.
- Statistically linked to taco salad served on April 10th.

Information taken from Kansas Department of Health and Environment, "*Outbreak of Norovirus at Augusta Middle School, Butler County, Kansas, April 2007.*"

Case Study: Methicillin Resistant *Staphylococcus Aureus (MRSA)*

- In Fall 2007, the death of a high school football payer in Virginia focused the nation on MRSA in schools.
- Within a month or two, several more MRSA outbreaks were reported across the nation, closing several schools and triggering cleaning efforts.
- Invasive (i.e., serious) MRSA infections occur in approximately 94,000 persons each year and are associated with approximately 19,000 deaths. Of these infections, about 86% are healthcare-associated and 14% are community-associated.

Klevens et al. *Journal of the American Medical Association* 2007; 298(15):1763-1771

Case Study: Meningitis

Photo courtesy of the *Providence Journal* (Kathy Borchers)

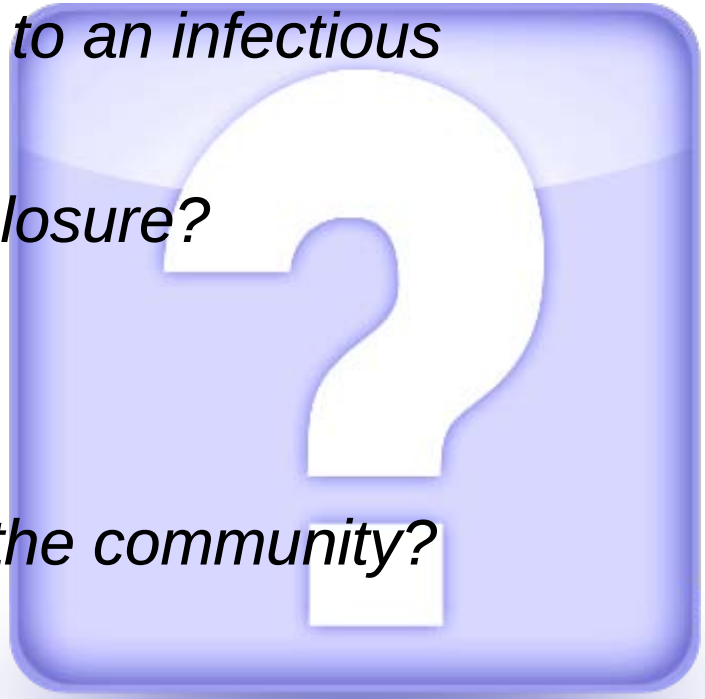
- A student in Warwick, RI died from meningitis, three others were sickened in January 2007
- High rates of pneumonia
- Schools closed for over 20,000 students for three days; day care centers, YMCAs also closed
- Mass mobilization between health and education department – antibiotics distributed to students and families

ERCM Lessons Learned, vol. 2, Issue 3, http://rems.ed.gov/views/documents/LL_Vol2Issue3.pdf

REMS Lessons Learned, vol. 3, Issue 3; http://rems.ed.gov/docs/LL_Vol3Issue3.pdf

Case Study: Audience Questions

- *Has your school been closed due to an infectious disease outbreak?*
- *Were you involved in the school closure?*
- *How was it handled?*
- *How long were schools closed?*
- *Were there any repercussions in the community?*
- *What are your lessons learned?*



Presentation Goals

This presentation will now discuss part 3 of the presentation goals:

- Infectious diseases in schools
- Case Studies
- **Incorporating infectious disease planning with all-hazards planning**
  - **Considerations for the four phases of school emergency management**
- Conclusion

General Planning Considerations for Infectious Diseases

All-hazards and all-diseases planning

- Builds from the four phases of school emergency management (*Prevention-Mitigation, Preparedness, Response, and Recovery*)
- Done in close coordination with community partners (e.g., public health, local government)
- Customized to the unique school community
- Supports the implementation of NIMS

General Planning Considerations for Infectious Diseases

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- Customized to the unique school community
- Supports the implementation of NIMS

General Planning: Partnerships

The plan should be developed, supported by, and aligned with a variety of partners including:

- School nurse/state school nurse consultant
- State and local public health officials
- State education agency officials
- School administrators, board members, and faculty
- School custodians, food service, transportation officials, and Human resources representative
- Student and family representatives
- Local health care practitioners

The 2009 H1N1 flu demonstrated the critical role of partnerships, surveillance, communication, and planning. In particular, school and public health officials worked together closely to address the flu and its many serious and difficult challenges. Through these partnerships, resources were disseminated (e.g., school response guidance, school-located vaccination sites); campaigns were launched (e.g., efforts to stop the spread of the flu); and efforts were made to continually monitor the impact of H1N1 on local communities nationwide.

General Planning: Communicating with the School Community

- Schools will be key source of accurate and timely information
- Like all hazards, related guidance and communication may be changing and evolving on an ongoing basis
- Communications should come from pre-determined Public Information Officer and created with input of emergency manager, key administrators, and school nurse
- Communication to the school community should be continual and positive, even if to say there are no changes
- Consistent information is vital.
- It is important to make sure that information is coordinated between individual schools (if more than one school is involved), the central or district school office and the local/state health department.

General Planning

Districts and schools should form partnerships to assess joint capabilities and share expertise in support of the plan.

- The plan should specify the need for formal letters of agreement with other agencies
- Clearly outline the roles and responsibilities of partners
- Ensure all partners' plans align
- Plan for the periodic review of policies
- Ensure all plans include information-collection and sharing procedures among partners that adhere to FERPA and HIPPA

For more information on HIPAA, visit http://www.hhs.gov/ocr/privacy/
For more information on FERPA, visit http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html.

During the 2009 H1N1 pandemic, the Department of Education provided specific guidance to schools regarding FERPA, accessible at http://www.ed.gov/policy/gen/guid/fpco/pdf/ferpa-h1n1.pdf

All-Disease Planning: Prevention-Mitigation

Prevention-Mitigation activities focus on preventing the transmission of a virus or disease and its affects on those who are sick.

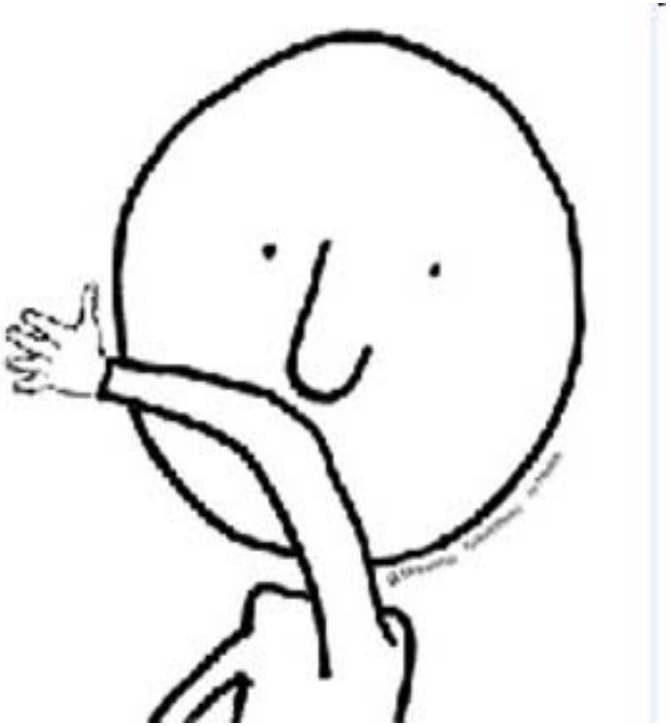
Prevention-mitigation includes:

- Establishing everyday health policies
- Creating reporting and surveillance programs
- Establishing immunizations programs and school vaccination programs

Prevention-Mitigation: Establish Everyday Health Policies

- Ensure handwashing policies and procedures are in place
  - Time to wash hands
  - Handwashing supplies are readily available
- Teach students and teachers how to wash hands properly
- Routinely communicate and launch awareness campaign

Prevention-Mitigation: Establish Everyday Health Policies

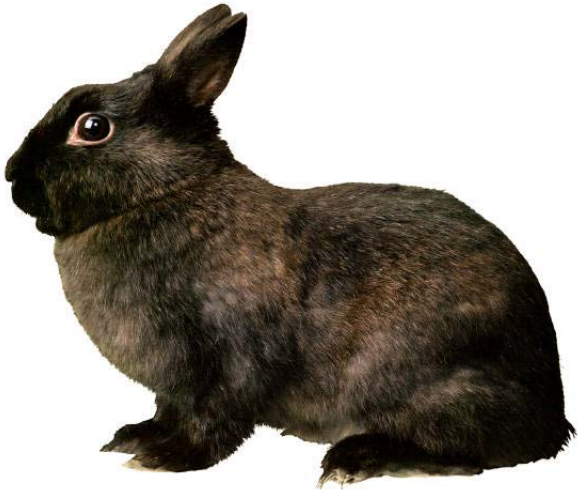


- Provide education regarding cough and sneeze etiquette
  - Teach students and teachers how to cough/sneeze into their elbow or using a tissue
  - Teach how to properly dispose of tissues
- Routinely communicate and launch awareness campaign

Prevention-Mitigation: Establish Everyday Health Policies

- Review and update routine cleaning and sanitizing policies
- Routinely clean and disinfect
  - Frequently touched surfaces
  - Commonly shared resources (toys, musical instruments)
- Ensure appropriate practices
  - Use proper products (as directed on the label)
  - Provide training
  - Follow safe chemical management policies

Prevention-Mitigation: Establish Everyday Health Policies



Review policies and practices related to handing animals in school or on field trips

- Some animals carry bacteria, such as *Salmonella*
- Students should always wash hands after handling animals
- Routinely communicate and launch awareness campaign

Note: Some schools prohibit live animals in school because of the risk of salmonella and other infectious disease.

Prevention-Mitigation: Reporting and Surveillance

Work with local health department to determine roles and responsibilities in disease reporting and surveillance

- Which communicable diseases must be reported in your state? Measles? TB?
- To whom does your school report a disease outbreak?
- A list of Nationally Notifiable Diseases can be found at: http://www.cdc.gov/ncphi/disss/nndss/PHS/infdis2009.htm

Question: How would ICS differ under this type of incident?

Prevention-Mitigation: Reporting and Surveillance, Cont'd.

Creating and Maintaining Surveillance Systems

- Determine roles and responsibilities for all partners in surveillance
- Assess current system. Is it linked to others?
  - At the district or school? At the local public health agency?
  - State education or Public Health agency?
- What does the system monitor?
  - Number of students and staff absent?
  - Visits to school health office?
  - Numbers of students and staff sent home?
  - Number of cases by symptom or sickness?
  - Can the system collect this data daily? Analyze and compare the data? Identify quickly any significant increases or decreases?

Prevention-Mitigation: Reporting and Surveillance, Cont'd.

The reporting and surveillance systems should include policies and protocols:

- It is essential to define information-collection and information-sharing procedures among partners at all necessary levels and with all necessary agencies.
- Make sure these procedures adhere to the Family Educational Rights and Privacy Act (FERPA) and Health Insurance Portability and Accountability Act (HIPAA) guidelines.

For more information on HIPAA, visit http://www.hhs.gov/ocr/privacy
For more information on FERPA, visit http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html
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Prevention-Mitigation: Considerations for Immunization

Immunization Policies and Practices

- All states require that students be fully immunized* before attending schools and provide proof of immunization status.
- Exemptions are sometimes available for medical, religious, personal, or philosophical reasons, but availability of and requirements for these waivers vary by state.
- Laws for specific states can be found at: http://www.immunizationinfo.org/vaccineInfo/index.cfm#state.

* This typically includes immunization for measles, mumps, rubella, pertussis, Hib, diphtheria, and others

Prevention-Mitigation: Considerations for Immunization

Immunizations protect students against a set of infectious diseases, including measles, mumps, rubella, pertussis and meningitis. If most of the students in the school are fully immunized, there is some degree of "herd immunity," which is protective of the whole community. However, if there are large enough pockets of unimmunized or under-immunized students, it is possible for there to be an outbreak of these diseases.

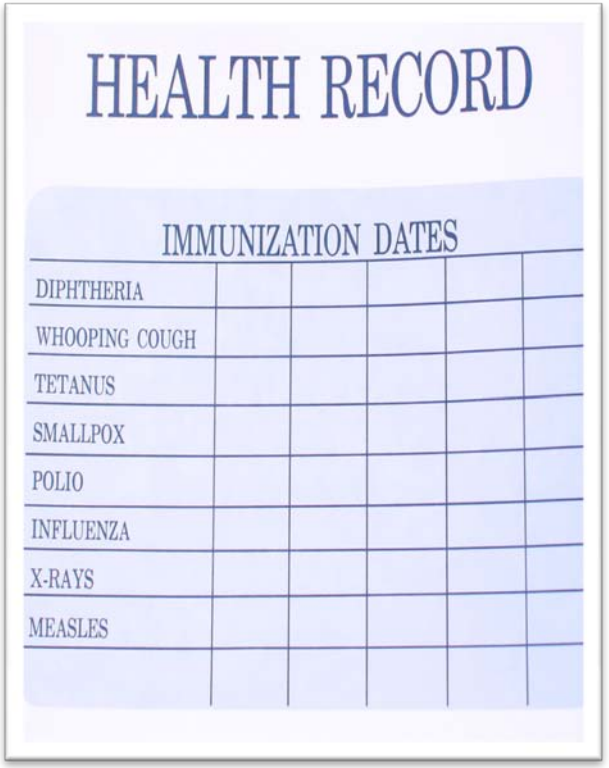
- *In 2005, a large outbreak of measles sickened 34 people ranging in ages from 9 months to 49 years old. The source of the transmission was an unvaccinated 17-year-old girl who had done some volunteer work in Romania. Only two of the 34 people infected were vaccinated.*

- *In Great Britian, there used to be very high rates of vaccination coverage, but with concerns over vaccines, these rates have dropped dramatically and measles, once almost completely eradicated, is now a common illness. Before vaccination, most children before age 15 had contracted the disease, resulting in 450 deaths, 48,000 hospitalizations, 7,000 cases of seizures, and 1,000 cases of permanent deafness or brain damage each year*

Prevention-Mitigation: Vaccination Records

Continually assess student vaccination records

- Monitoring of student's immunization records is extremely instrumental in reducing vaccine preventable outbreaks.
- Student immunization records should be checked, preferably by a school nurse, and records of any children who have not received vaccinations because of medical, religious or philosophical reasons should be flagged so that the school can contact the parent/guardian should an outbreak occur.
- Link monitoring activity and data to communications plan.



Prevention-Mitigation: School-Located Vaccination Clinics

School-located Vaccination Clinics (SLVs):

- Vaccinations and SLVs play an important role year after year in preventing the seasonal flu.
- Schools offer access to a large number of students in one setting in which vaccinations can be easily provided to students and staff if desired and appropriate.
- The feasibility of holding school-located vaccination clinics varies and is dependent upon the capacity of the local education and public health officials.

Prevention-Mitigation: School-Located Vaccination Clinics

For those communities that determine a school-located vaccination is feasible, the teams should develop planning processes and procedures as well as assess their capacity to address the following issues:

- Have roles and responsibilities been determined across participating agencies and the school?
- Do planning considerations address logistics? Are logistical processes in place?
- Does the design process take into consideration key variables such as availability of vaccine, guidelines for distribution, and determining what time of day vaccination will be available (e.g. before, during, after school)?
- Does the vaccination planning effort address education and outreach?

Preparedness Phase

Preparedness activities focus on being ready to respond and increase prevention-mitigation efforts during an outbreak, epidemic, and pandemic

- Establishing policies and procedures to facilitate a rapid, coordinated, and effective response
- Addressing continuity of operations and continuity of learning
- Developing the emergency management structure (Incident Command System)
- Identifying roles and responsibilities
- Coordinating communication
- Training and conducting exercises

Preparedness: Develop Policies and Protocols

Education and public health officials should work together to develop broad policies and protocols to employ in the event of an outbreak, epidemic, or pandemic. These policies should

- Take an *"All-Diseases"* approach
- Decrease exposure to the disease
- Limit the disruption of day-to-day learning activities
- Adapt to evolving knowledge and guidance
- Support populations with special needs
- Include a continuum of response measures that address a variety of scenarios—large and small outbreaks, mild to severe illness

Preparedness: Prepare Potential Response Measures

Depending upon the disease and its prevalence, education and public health officials should prepare to implement a variety of potential response measures:

- Promote early treatment for those who may be at higher risk
- Advise the sick to stay home from school and school events
- Conduct active screening for illness at school
- Separate sick students and staff at school
- Increase social distances within the school environment
- Adapt attendance policies
- Consider school dismissals

Preparedness: COOP Plan

School officials should have in place an established Continuity of Operations (COOP) Plan that:

- Ensures continued performance of essential functions across a full range of potential emergencies.
- Provides guidance and establishes responsibilities and procedures, including alternatives.
- Is tailored to address the safety vulnerabilities of districts and individual schools and assign responsibility for carrying out specific actions in response.
- Sets forth lines of authority and organizational relationships.
- Shows how actions will be coordinated.
- Describes how people and property will be protected in emergencies and disasters.
- Identifies personnel, equipment, facilities, supplies, and other resources available for use during response and recovery operations.

NOTE: A COOP plan is not the same as an Emergency Operations Plan.
COOP plans supplement the EOP, since many emergencies will not require COOP implementation.

School officials should establish a Continuity of Learning Program

Schools may decide to provide educational content or services to:

- Individual or small groups of students who are out-of-school for extended periods
- Large groups disrupted by school dismissal or large groups of faculty absences

States, districts and schools can work together along with additional partners to create programs and resources to develop continuity of learning plans in the event of prolonged absences or prolonged school dismissals.

Preparedness: Continuity of Learning

Continuity of learning programs should include:

- A variety of instructional methods and delivery (low-tech to high tech)
- Formative and summative assessments
- Outreach to families informing them of the program, the expectations for students, and the expectations for families

It is important to keep issues of access in mind when developing your continuity of education plans. *A broad array of both technological and non-technological opportunities may be used to provide for continuity of education during school closures. This may include the use of radio or public broadcast television stations, conducting class via telephone conference calls, phone tutoring, or sending "educational packets" to student's homes. These materials can all be developed in advance of an emergency, and, then can be on hand for easy distribution in the event of an extended closure. A combination of both may supplement traditional education, allowing students to maintain skills while they remain at home.*

Preparedness: Identifying Roles and Responsibilities

- **School emergency management plans should include clearly identified roles and responsibilities of school officials and their community partners:**
  - Organized by the Incident Command System
  - Including general health policies and vaccination and immunization programs
  - Including response activities
  - Ensuring alignment with partners' plans
    - Consider need for formal letter of agreement?
  - Formalized & Shared
    - Is this a written or an informal plan? Is this plan School Board approved?
    - Does the school community know about and can they readily access the policy/policies?
  - Updated regularly
    - Are they routinely reviewed and updated? How can the policy be improved and enhanced?

Preparedness: Policies

- Infectious disease policies vary widely from simple exclusion criteria, to considerations about students with chronic infectious diseases like HIV/AIDS and Hepatitis, to only focusing on staff with infectious diseases. A written comprehensive policy should include a range of considerations.
- Written policies foster stability, inform the school community, and provide planned and consistent prevention and intervention.
- School Boards may need to review and approve policies but if policies are pursued in collaboration with the public health department, these may be easier to pass.
- Another important consideration is how widely-known the policies are. If they only exist in the central office, are they effective and useful policies?

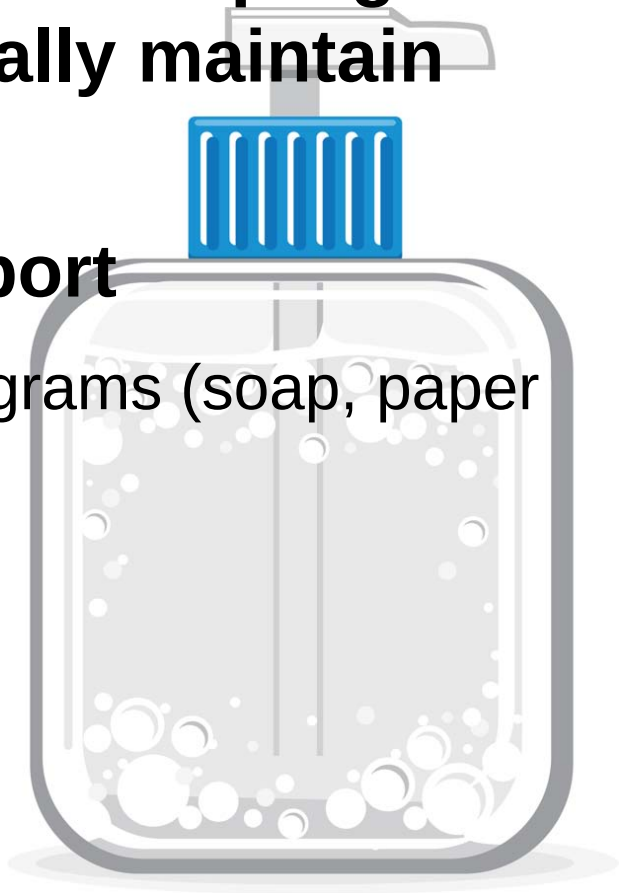
Questions:
Does your district currently have infectious disease policies?
What are they?
What do they include?

Preparedness: Supplies

The school plan should put in place a program to collect, evaluate, and continually maintain sufficient supplies.

Supplies programs should support

- Healthy hygiene and cleaning programs (soap, paper towels, sanitizing chemicals, etc.)
- Increase in prevention measures
- Possible vaccination clinics

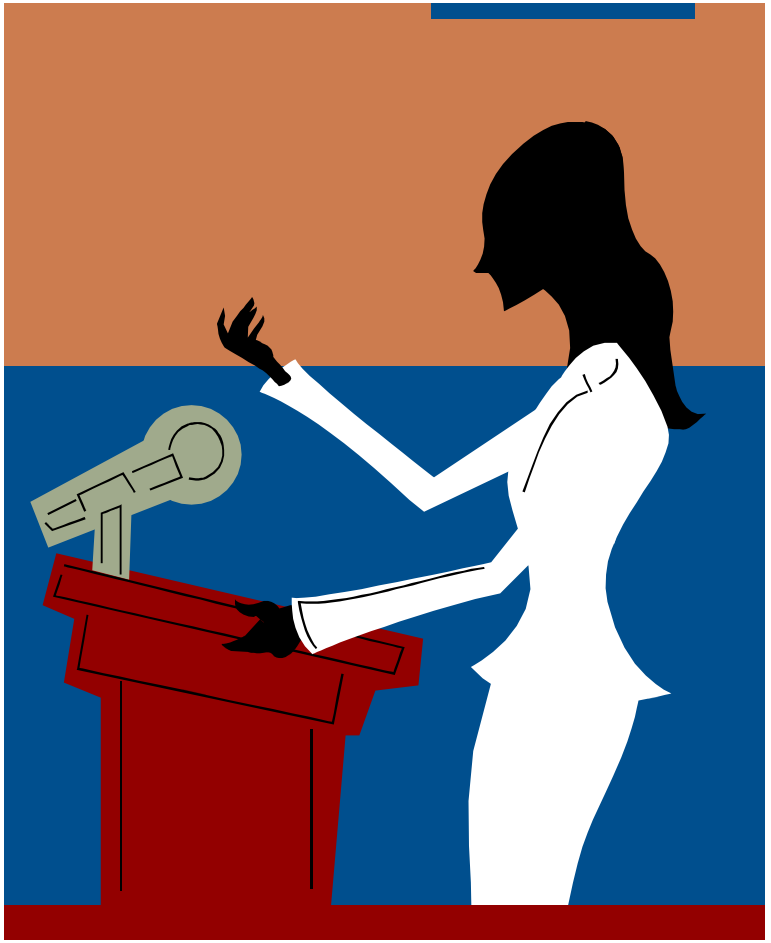


Preparedness: Communications

- Generate and review communications plans to communicate with
  - School emergency management team
  - Partners
  - The school community (students, staff, families)
  - Media
- Create templates for numerous kinds of outbreaks in the school community
- Consider multiple communication techniques

Preparedness: Communication

- **Identify appropriate spokespeople to communicate during an emergency**
- **This may not be the same as spokesperson in other emergencies**
  - Superintendent, Board members
  - School or district nurse
  - Public Information Officer
- **Ensure that person has opportunities to practice the role in advance**



Preparedness: Train and Practice

- As required by OSHA, train staff annually on Universal Precautions and new staff upon employment
- Train staff on the emergency management plans, roles and responsibilities
- Ensure that all staff understand universal precautions and are prepared with gloves and other necessary equipment.
- Test plans regularly, using both tabletop exercises, full-scale drills, and real-world situations

Preparedness: Train and Practice

- Test plans regularly, using both tabletop exercises, full-scale drills, and real-world situations
- Tabletop exercises should be done to determine how quickly an outbreak would be detected, how quickly and efficiently the ICS would be activated, how communications systems would be used.
- If events occur in your district or nearby districts, treat the situation as if it is any other hazard and make sure that your team debriefs.

Question:
Did your district practice pandemic response during Summer or Fall 2009 in the event that the H1N1 pandemic became more severe or profoundly affected school communities again?

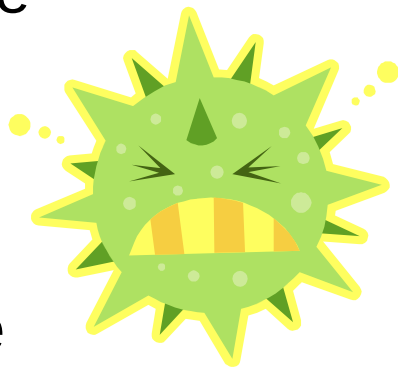
Response

Response activities focus on stopping the transmission.

- Activate the National Incident Management System's (NIMS) Incident Command System (ICS)
- Activate the emergency management plan and response protocols. Response protocols will vary:
  - Specific disease
  - School's unique population
  - Knowledge of the disease
  - Severity of the outbreak
- Activate communications plan

Response: Develop Information Awareness

- Work with health officials to determine source of outbreak, scale, and case definition to determine the response required and level of infectiousness.
- Identify an unusual cluster of disease
  - i.e. an unusually high number of absences
- Develop a case definition
  - Who is sick?
  - When did they get sick?
  - What are the symptoms?
  - Are new people getting sick?



Response: Exclusion Guidelines

- Know and ensure that exclusion guidelines are enforced consistently
- Exclusion guidelines generally stipulate:
  - Conditions that would keep children home from school (vomiting, diarrhea, fever, etc.)
  - How long students should remain home after feeling better or symptoms end
- Exclusion guidelines may need to be altered during specific outbreaks (e.g., norovirus, H1N1)
  - If the health department doesn't have such a chart, work with them or local health practitioners to develop one.

Questions:
What are the Exclusion Guidelines in your district?
Are they known to all staff?
Are they practiced by staff and parents?

During the Spring 2009 H1N1 flu, guidance from CDC and ED was updated as more and more information was learned about the virus and its affects on individual populations.

For example:

- **Apr 27 – School dismissal recommended for 7 days**
- **May 1 - School dismissal recommended for 14 days**
- **May 5 - School dismissal not recommended**

Response: Determine Response Measures

Work with health officials to determine response protocols.

Schools should be prepared to implement a wide variety of response measures in addition to possible school dismissal

- Active screening for illness
  - *Check students and staff for symptoms when they get to school in the morning, separate those who are sick, and ask them to go home as soon as possible.*
  - *Throughout the day, staff should be vigilant in identifying students and other staff who appear sick.*
- Increase social distances within the school environment
  - *CDC encourages schools to try innovative ways of separating students. These can be as simple as moving desks farther apart or cancelling classes that bring together children from different classrooms.*
  - *Students and staff who develop symptoms of infection at school will need care and attention. Furthermore, keep sick persons separated from others until they can go home or be transferred to an alternative setting for care or treatment.*

Response: Response Measures, Cont'd.

- Adapt attendance policies
  - Permit students and staff at higher risk for flu complications to stay home.
  - Advise students with sick household members stay home
    - *Students who have a sick household member should stay home for 5 days from the day the first household member got sick. This is the time period they are most likely to get sick themselves.*
  - Extend the time that sick people stay home
    - *If flu severity increases, people with flu-like illness should stay home for at least 7 days, even if they have no more symptoms. If people are still sick, they should stay home until 24 hours after they have no symptoms.*

Response: School Dismissals

- Types of school dismissals
  - Selective dismissals prevent the spread of disease to vulnerable communities.
  - Reactive dismissals occur when schools are not able to maintain normal functioning.
  - Preemptive dismissals are a proactive strategy to decrease the spread of disease.

Question: What response measures did your district take during H1N1?

The team can work to balance the risks of disease in their community with the disruption dismissals will cause in both education and the wider community, based on the goal of reducing the number of people who become seriously ill or die from disease with the goal of minimizing social disruption and safety risks to children sometimes associated with school dismissal. However, the plan should be adaptable to any specific guidance put forth by the Centers for Disease Control and Prevention (CDC) and the Department of Education (ED) during a pandemic.

Response: School Dismissals Cont'd.

To close or not to close?

- Review legal authorities for school closures during declared emergencies and non-emergencies
- Depending on the severity and transmissibility of the illness, and the number of affected students or staff, schools may decide to close down to mitigate disease transmission or until enough students or staff are healthy enough to return to school.
- For some viruses, schools may only be closed for a few days and in other cases, such as a severe influenza pandemic, schools may be closed for several weeks or even months.

Key facts to consider when deciding to close schools include:

How many people are sick? Many schools have pre-established thresholds for school closures, such as 10% absenteeism.

How easily is the disease spread from person to person? Is it spread from coughing? Body fluid?

How does the illness impact the learning environment?

Who can decide to close schools?

How will policies be applied in terms of encouraging people to stay home if they are sick?

Response: Continuity Planning

- If prolonged absences are considered, school officials will need to also consider activating:
  - Continuity for Learning Plan for individual students or small groups of students
- If school dismissals are considered, school officials will need to also consider activating:
  - COOP plan
  - Continuity for Learning Plan

Questions:
Has Your District begun continuity of learning programs?
What kind of instruction delivery and methods are being used? Packets? Email? Web sites?
Does your program assess of achievement? Does your include students with individualized education program plans?

Response: Communication

Activate communications plans for the school community

- Continually inform students, staff, and families of
  - Characteristics of the disease
  - Methods for detecting
  - Response to a case is suspected to detect
  - Healthy hygiene and etiquette
  - Positive aspects, even if to say no changes
- Describe current and possible future response measures
- Information awareness and enforcement of key healthy hygiene and respiratory etiquette campaigns

Response: Communication, Cont'd.

Communicate with teachers, staff, and parents

- When should communications go out?
- Who will communicate with the media?
- If schools need to close, how will this be communicated?
  - What systems are in place?
- Are key parents necessary for communications plan (such as PTA/PTO)?
- Are there fact sheets on common diseases prepared?
- If there are fatalities, how will this be communicated?

Response: Information-Sharing

- Ensure that all regulations are appropriately addressed, including the Family Educational Rights and Privacy Act (FERPA) and Health Insurance Portability and Accountability Act (HIPAA)
- These regulations may limit what information can be shared to the school audience or media
- More information on FERPA/HIPAA can be found at: http://www.ed.gov/policy/gen/guid/fpco/doc/ferpa-hippa-guidance.pdf

Recovery: Considerations

Recovery activities focus on beginning academic and business/fiscal recovery.

- Assist school community with healing and coping
- Assess health and mental health needs of students and staff
  - Were there fatalities?
  - Is there fear that it is safe to return?
- Provide mental health services as necessary

Recovery: Considerations for Reopening Schools

- Determine if school facility needs remediation before it can reopen
  - Was the school used for vaccination clinics?
  - Other purposes?
- Determine process for re-opening schools or reconvening students
  - Follow policy regarding re-opening of school and make sure to follow medical/health department advice
  - Communicate with parents, students, staff, media
  - Assessing achievement during dismissals and absences

Considerations for Recovery, Cont'd.

- Connect continuity of learning activities to the restoration process:
  - Include formative and summary assessments
  - Modify remaining school year calendar to accommodate prolonged absences and school closure
- Determine if Exclusion Guidelines need to be revised
  - Should students be advised to stay out longer than usual (for example, for three days after last having fever instead of 24 hours to prevent spread?)

Promising Practices: Georgetown Preparatory School

Georgetown Preparatory School is an independent, Jesuit college-preparatory school for young men (grades 9-12) in Bethesda, Maryland. Of the 460 students, approximately 100 are residents.

- The FluPrep© program was created in 2005 to help the Georgetown Preparatory School Community prepare for an influenza pandemic.

FluPrep ©, Cont'd.

The FluPrep© program was seen as a way to:

- Educate the school community about infectious diseases.
- Develop community and personal leadership for preventing and mitigating disease transmission and protecting the school community.
- Train non-professional responders to identify and respond to diseases.

FluPrep ©, Cont'd.

As a result of this process, the school began to:

- Undertake a medical review of the operations of the school nurse's office.
- Develop an infectious disease monitoring plan.
- Consider requiring annual flu vaccine (do not currently require but strongly encourage).
- Begin monitoring travel of students.

FluPrep ©, Cont'd.

As a result of this process, the school began to:

- Assess medical response capacity, including personnel, supplies, and equipment.
- Attempt to change current school culture including hygiene and particularly, responsible attendance policies for students and staff.
- Discuss appropriate communications methods.

Infectious Disease Planning: Summary

- Schools should take an “all-diseases” approach to incorporating infectious diseases with their emergency management program
- Planning can be framed by the four phases of school emergency management
- Planning should be done with local public health officials and ensure plans are aligned, as well as roles and responsibilities are clearly defined
- Schools should be prepared to implement a wide variety of response measures to support the community in the event of a mild to severe outbreak affecting large and small portions of the population

Resources

Centers for Disease Control and Prevention

- http://www.cdc.gov

Pandemic Influenza Resources

- http://www.pandemicflu.gov

Department of Education guidance for continuing education during a prolonged school closure

- http://www.ed.gov/emergencyplan

Lessons Learned

- http://rems.ed.gov

Association of State and Territorial Health Officials

- http://www.astho.org

American Public Health Association

- http://www.apha.com

National Association of School Nurses

- http://www.nasn.org

Presentation Credits

Thank you to the following person for their role as lead author of this presentation:

- **Dana Carr**, Director, Health, Mental Health, Environmental Health and Physical Education Programs, Office of Safe and Healthy Students, U.S. Department of Education

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- **Vicki Taliaferro,** RN, BSN, NCSN, School Health Consultant

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The REMS TA Center was established in October 2007 by the U.S. Department of Education, Office of Safe and Healthy Students.

The center supports schools and school districts in developing and implementing comprehensive emergency management plans by providing technical assistance via trainings, publications and individualized responses to requests.

For additional information about school emergency management topics, visit the REMS TA Center at http://rems.ed.gov or call 1-866-540-REMS (7367). For information about the REMS grant program, contact Tara Hill (tara.hill@ed.gov).

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For more information contact:

REMS TA Center

(866) 540-7367 (REMS)

http://rems.ed.gov

info@remstacenter.org