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Communication Toolkits for Disease Outbreak Investigations and Response

48th National Immunization Conference
May 15th, 2018
Atlanta, GA

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Northrop Grumman
Division of Viral Diseases (DVD), CDC
Too Many emails!

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Viral disease investigations
Health departments face challenges

- Over half of states scored low on outbreak prevention and preparedness*
  - NOT a reflection of health department performance
  - Reflects access to resources, political environment, and community health

- Outbreaks are expensive and resource-intensive for local health departments
  - Many have had budget cuts, job losses†
  - Almost half have seen a decrease in reserve funds^
DVD’s outbreak support

- DVD helps and supports state and local outbreak response by providing technical assistance with:
  - Laboratory
  - Epidemiology
  - **Communication**
    - Risk communication
    - Use of plain language in messages and materials
    - News media response
    - Targeted information to specific audiences

![Diagram showing the formula Credibility + Trust = Successful Communication]
## Crisis and Emergency Risk Communication Lifecycle

<table>
<thead>
<tr>
<th>Pre-crisis</th>
<th>Initial</th>
<th>Maintenance</th>
<th>Resolution</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be prepared.</td>
<td>Acknowledge the event with empathy.</td>
<td>Help the public more accurately understand its own risks.</td>
<td>Improve appropriate public response in future similar emergencies through education.</td>
<td>Evaluate communication plan performance.</td>
</tr>
<tr>
<td>Foster alliances.</td>
<td>Explain and inform the public, in simplest forms, about the risk.</td>
<td>Provide background and encompassing information to those who need it.</td>
<td>Honestly examine problems and mishaps, and then reinforce what worked in the recovery and response efforts.</td>
<td>Document lessons learned.</td>
</tr>
<tr>
<td>Develop consensus recommendations.</td>
<td>Establish agency and spokesperson credibility.</td>
<td>Gain understanding and support for response and recovery plans.</td>
<td>Persuade the public to support public policy and resource allocation to the problem.</td>
<td>Determine specific actions to improve crisis systems or the crisis plan.</td>
</tr>
<tr>
<td>Test messages.</td>
<td>Provide emergency courses of action, including how and where to get more information.</td>
<td>Listen to stakeholder and audience feedback, and correct misinformation.</td>
<td>Promote the activities and capabilities of the agency, including reinforcing its corporate identity, both internally and externally.</td>
<td></td>
</tr>
<tr>
<td>Commit to stakeholders and the public to continue communication.</td>
<td></td>
<td>Explain emergency recommendations.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
We’re here to support you!
Our resources are backed by research and experience

- Based on best practices and health communication principles
- Extensive experience with emergency response and risk communications, plain language
- Create communications materials for a wide variety of audiences...
  - Clinicians
  - Epidemiologists
  - Health departments
  - People possibly exposed to disease
  - Parents
  - General public
  - Policymakers
  - Special audiences (pregnant women, people with chronic conditions)
- ...and a wide variety of topics
  - Disease
  - Outbreak
  - Immunization/prevention
  - Possible exposure
DVD’s Communication Toolkits for Outbreak Investigations and Response
Our Communication Toolkits

- For health departments to use during outbreaks
- Contains materials that can be readily adapted and used to reach different audiences during outbreak investigations and response
- Two types of materials:
  - Materials for disease and outbreak awareness
    • For raising general awareness about the disease and outbreak among different audiences
  - Materials for outbreak investigation and response
    • For communicating with the audiences affected by an outbreak, or involved in the outbreak investigation or response
Toolkit materials

- Use CDC and health department communications materials
- We are trying to request permission in advance if using health department materials
- Compressed folder containing toolkit with examples
Materials for disease and outbreak awareness

News media

– Press releases
  • An official statement to news media outlets about a particular event

– Scripts for press conferences and telebriefings
  • Answer questions from news media outlets about an event

– Media advisories
  • Invite news media outlets to a press conference or telebriefing

Transcript for CDC Telebriefing: Measles in the United States, 2015

OPERATOR: Welcome and thank you all for standing by. At this time all participants are in a listen-only mode until the question and answer section of the conference. At that time, if you would like to ask a question, press star 1 on your touchtone phone. Today’s call is being recorded. If you have objections...
Materials for disease and outbreak awareness

News media

- Digital press kits
  - Includes materials and information news media outlets can use to write stories about an event

- Key points
  - Concise up-to-date messages about the disease and outbreak that can be used to respond to news media requests and other requests for information
Materials for disease and outbreak awareness

General public

– FAQs
  • Answers to questions that are commonly asked about a particular disease and outbreak

– Fact sheets
  • May provide fact sheets along with letters to people who have potentially been exposed to a disease, or for general awareness of the disease and outbreak

– Prepared responses for public inquiries
  • Commonly asked questions and answers that can be readily used to respond to public inquiries, such as through a call line, during an outbreak
Materials for disease and outbreak awareness

General public

- **Website content**
  - Should include up-to-date information about the disease and the outbreak

- **Social media messages**
  - Should include call to action

- **Graphics**
  - May be helpful to visually convey specific information about a disease and how clinicians can diagnose and report
Materials for outbreak investigation and response

- **Letters**  
  - May be used to inform people possibly exposed to disease what to do if they develop symptoms, immunization clinics, and other issues

- **Epidemic Information Exchange (Epi-X) announcements**  
  - Provides rapid reporting, immediate notification, editorial support, and coordination of health investigations for public health professionals

- **Health Alert Network (HAN) announcements**  
  - Provide information about urgent public health incidents

- **Clinician Outreach and Communication Activity (COCA) Network**  
  - Provides timely, accurate, and credible information about emergency preparedness and response and emerging public health threats
Toolkit resource list

Communication
- Crisis and Emergency Risk Communication
- Plain language and health literacy
- Health Alert Network (HAN)
- Epi-X

Disease and vaccine-related resources
- Disease websites
- Vaccine Information Statements (VISs)

Guidance for clinicians and epidemiologists
- Manual for the Surveillance of Vaccine-Preventable Diseases
- Pink Book: Epidemiology and Prevention of Vaccine-Preventable Diseases
Crisis and Emergency Risk Communication (CERC) principles

**Build Trust and Credibility by Expressing:**
- Empathy and caring.
- Competence and expertise.
- Honesty and openness.
- Commitment and dedication.

**Top Tips:**
- Don't over-reassure.
- Acknowledge uncertainty.
- Express wishes. (“I wish I had answers.”)
- Explain the process in place to find answers.
- Acknowledge people's fear.
- Give people things to do.
- Ask more of people (share risk).

**As a Spokesperson:**
- Know your organization’s policies.
- Stay within the scope of responsibilities.
- Tell the truth. Be transparent.
- Embody your agency’s identity.

**Prepare to Answer These Questions:**
- Are my family and I safe?
- What can I do to protect myself and my family?
- Who is in charge here?
- What can we expect?
- Why did this happen?
- Were you forewarned?
- Why wasn’t this prevented?
- What else can go wrong?
- When did you begin working on this?
- What does this information mean?

**Stay on Message:**
- “What’s important is to remember…”
- “I can’t answer that question, but I can tell you…”
- “Before I forget, I want to tell your viewers…”
- “Let me put that in perspective…”

**CONSISTENT MESSAGES ARE VITAL.**

BE FIRST. BE RIGHT. BE CREDIBLE.
Plain language

- Put most important message first
- Don’t use jargon
- Delete unnecessary words
- Reading grade level should be 4th-6th grade
- CDC’s Clear Communication Index
  - A research-based tool to help develop and assess public communication materials
  - Items represent most important characteristics that help people understand information

www.cdc.gov/ccindex/index.html
Mumps Outbreak Toolkit

Communication Toolkit for Mumps Outbreak Investigation and Response

The Communication Toolkit for Mumps Outbreak Investigation and Response provides materials and resources that state and local health departments can adapt and use to reach specific audiences during outbreak investigations and response. CDC’s logo may not be used on materials if our content is altered. Health departments should be notified in advance if their content is used or altered.

Materials for disease and outbreak awareness

These materials can be used to raise awareness about the disease and outbreak among healthcare professionals, the public, news media outlets, and other groups.

Press releases

1. Mumps press release template
2. Iowa – Mumps Reported in Dubuque County
3. Arkansas – Department of Health declares end of Mumps outbreak
4. Hawaii – Department of Health recommends “outbreak MMR dose”
5. Washington State – Mumps cases in state now affecting two counties
6. Texas – Press release template
   http://www.dshs.texas.gov/IDOC/diseases/mumps/Mumps_Resources.doc

Scripts for press conferences and briefings

7. CDC Press Briefing on Mumps Outbreak in the Midwest with Dr. Julie Gerberding, and Dr. Jane Seward
   https://www.cdc.gov/media/transcripts/t060419.htm

Media advisories

8. Toronto Public Health Media Advisory: Media briefing on Mumps in Toronto
   http://www.toronto.ca/interfl/www/rel/files/168666e6d673ae986275e7b0092e5d67d2dc2d1656a8c07202enDocument

Digital press kits

[Insert title(s) and link(s) or attachment(s) to of examples of a CDC Digital Press Kit]

Key points for news media requests

9. CDC mumps general key points
   a. To direct news media requests to CDC, see www.cdc.gov/media/index.html
10. [Unknown State] talking points

FAQs

11. CDC Outbreak-Related Questions and Answers for Patients

Fact sheets

12. CDC mumps outbreak fact sheet
13. Seattle & King County mumps fact sheet
    o Also available in Chinese, Korean, Korraean, Marshallan, Russian, Spanish, Ukrainian, Vietnamese:

Prepared responses for public inquiries

14. CDC-INFO mumps prepared response
    o To direct inquiries to CDC-INFO, see www.cdc.gov/cdc-info/

Website content

15. CDC Mumps Cases and Outbreaks
    https://www.cdc.gov/mumps/outbreaks.html
16. Hawaii Department of Health Investigating Mumps Cases

Social media messages

17. CDC social media messages about an outbreak, and general messages about mumps and prevention
18. Johnson County Department of Health & Environment posts about mumps

Graphics

19. CDC multimedia graphics
    https://www.cdc.gov/mumps/public-resources/multimedia.html
Mumps Outbreak Toolkit

20. Hawaii Flight Mumps poster
Available in other languages: Chinese | Chukchee version 1 | Chukchee version 2 | Bokono | Japanese | Korean | Kosraean | Marshallese | Pohnpeian | Samoan | Spanish | Tagalog | Tongan | Vietnamese

21. Hawaii Consider Mumps poster

22. McLean County, Illinois mumps flyer

23. McLean County, Illinois mumps social media ready graphic

24. Minnesota How Effective is Mumps Vaccine? Infographic
http://www.health.state.mn.us/dph/idep/diseases/mumps/mumpsinfographic.pdf

25. Alaska Protecting Your Family from Mumps poster in English and Samoan
http://dhss.alaska.gov/dph/epi/id/pages/mumps.aspx

26. San Diego Posters – flaming basketballs and JILL

27. Nova Scotia permission request form
   - Angela Campbell, Director, Policy & Corporate Services Communications Nova Scotia
   - Phone Number: 902-722-1370
   - Email: Angela.Campbell@novascotia.ca
   - Chaisson, Lynn, Designer
   - Email: Lynn.Chaisson@novascotia.ca

Materials for outbreak investigations and response
These materials can be used for communicating with individuals and groups and health professionals affected by an outbreak, or involved in the outbreak investigation or response.

Letters (for reaching individuals and other groups)

27. Hawaii Information for Contacts of Mumps Cases
28. Hawaii Information for Schools
29. Washington, DC letters to universities regarding 3rd dose of MMR
30. Texas 2015 Mumps Exposure Notification Letter in English and Spanish

Epi-X announcements (for reaching states)

31. Mumps Outbreak Associated with the National Hockey League – October 12 through December 3, 2014
https://epix2.cdc.gov/v2/Reports/StandardReport/Dis-
play.aspx?id=32294&print=False&PS=false

32. Mumps Outbreak In Northwest Arkansas Community and Schools – Arkancas, 2016
https://epix2.cdc.gov/v2/Reports/StandardReport/Dis-
play.aspx?id=60453&print=False&PS=false
- For more information about Epi-X, see
  www.cdc.gov/epix/

HAN announcements (for reaching clinicians)

33. Denver Mumps Outbreak
http://www.tcbd.org/DocumentCenter/Home/View/4084

34. Minnesota Mumps Outbreak
http://www.health.state.mn.us/han/2017/may23mumps.pdf

35. Texas 2015 Mumps Health Alert template
https://www.dshs.texas.gov/IDCU/disease/mumps/Mumps-
Resources.doc
- For more information about CDC’s Health Alert Net-
  work, see emergency.cdc.gov/HAN/index.asp

COCA (for reaching clinicians)
[Insert title(s) and link(s) or attachments of examples of COCA Calls/Webinars, Updates, and Clinical Reminders, especially those with state presenter(s)]
- Include this statement: For more information, see
  emergency.cdc.gov/coca/index.asp

CDC Resources
- Crisis and Emergency Risk Communication: emer-
gency.cdc.gov/coerc/resources/index.asp
- Plain language and health literacy: https://www.cdc.gov/healthlit-
eracy/
- CDC disease websites: http://www.cdc.gov/dzs/
dex.aspx#/results

- Travel Health Notices: wwwnc.cdc.gov/travel/notices
- Emergency Operations Center: www.cdc.gov/phpr/oc.htm
- Yellow Book for International Travel: wwwnc.cdc.gov/travel/yel-
  lowbook/2016/table-of-contents
- Pink book for clinicians: www.cdc.gov/vaccines/pubs/pinkbook/in-
dex.html
- American Academy of Pediatrics Red Book for clinicians:
  http://redbook.solutions.aap.org/
- Manual for the Surveillance of Vaccine-Preventable Diseases:
- Principles of Epidemiology in Public Health Practice, Third Edition,
  An Introduction to Applied Epidemiology and Biostatistics:

Provider Education and Training
- Pink Book Mumps chapter
  https://www.cdc.gov/vac-
  cines/pubs/pinkbook/mumps.html
- You Call the Shots module on MMR
  https://www2a.cdc.gov/pchildjects/mod1/courses/mmrs/cce.mp
- Pink Book Measles, Mumps, Rubella Webinar
  https://www2.cdc.gov/vaccines/pubs/pinkbook/2017/ps11.asp
- Surveillance Manual Mumps chapter
  https://www.cdc.gov/vac-
  cines/pubs/surv-manual/chpt09-mumps.html
- IAC Resources http://www.immunize.org/

The health department materials in this toolkit are from selected state and local health departments. There may be other communications materials that we have missed, and we welcome health departments to share any materials that be helpful to include in this toolkit. For questions or requests, contact Allison Mafuri at amafuri@cdc.gov.
Dissemination of the toolkits

- Currently have toolkits for
  - Measles
  - MERS
  - Mumps
  - Norovirus (coming soon!)

- Promoting through partner calls, emails, and newsletters

- ISD Awardee SharePoint

- Sending by email
  - Health communicators, epidemiologists, others working on the outbreak
  - Exploring other ways to make it available
Dissemination of the toolkits

- By request, sent to
  - 2 partner organizations
    - National Association of County and City Health Officials (NACCHO)
    - USF Prevention Research Center
  - 9 local health departments
  - 10 state health departments

- ISD Awardee SharePoint
  - 20 views of the measles toolkit
  - 13 views of the mumps toolkit
“...members expressed thinking that the tool was comprehensive...tools that can be easily repurposed are incredibly valuable when time and capacity are limited...”
Public Health Media Library

- Badges
- Buttons
- eCards
- Feeds
- HTML content
- Images
- Infographics
- Microsites
- PDF
- Podcasts
- Videos
- Widgets

Tools: cdc.gov/medialibrary
Measles

Signs and Symptoms

The symptoms of measles generally appear about seven to 14 days after a person is infected. Measles typically begins with:

- high fever,
- cough,
- runny nose (congested), and
- red, watery eyes (conjunctivitis).

Two or three days after symptoms begin, itchy red spots (Koplik spots) may appear inside the mouth.

Koplik Spots

Mouth of a patient with Koplik spots, an early sign of measles infection.

Three to five days after symptoms begin, a rash breaks out. It usually begins as flat red spots that appear on the face at the hairline and spread downward to the neck, trunk, arms, legs, and feet. Small raised bumps may also appear on top of the flat red spots. The spots may become joined together as they spread from the head to the rest of the body. When the rash appears, a person’s fever may spike to more than 104° Fahrenheit.

After a few days, the fever subsides and the rash fades.

Measles Rash

Skin of a patient after 3 days of measles infection.
Interested? Questions? Comments?

Contact Amie Nisler at anisler@cdc.gov

For more information, contact CDC
1-800-CDC-INFO (232-4636)

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.

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A Serogroup B Meningococcal Disease Outbreak on a Wisconsin University Campus and the Mass Vaccine Campaign Response – Communication

National Immunization Conference
Workshop D6
May 15, 2018

Stephanie Schauer, Ph.D.
Bureau of Communicable Diseases
Division of Public Health
Wisconsin Department of Health Services
Meningococcal Disease

- Bacterial infection caused by *Neisseria meningitidis*.
- Gram ( – ) negative diplococcus.
- Humans only reservoir.
- Spread by **direct** contact with throat or respiratory secretions (saliva or spit).
- Incubation period can range 2–10 days from exposure but 3–4 days is most common.
- Of the five most common serogroups seen worldwide, serogroups B, C, Y, and rarely W occur in the U.S.
Meningococcal Disease

- Can cause meningitis, bacteremia, pneumonia, septic arthritis.
- Children younger than 1 year of age have the highest incidence of disease.
- Disease peaks again in young adults (aged 16 – 23 years).
- In the U.S., the case-fatality-rate (CFR) is ~10%–14%.
- Approximately 11–19% of survivors will have serious sequelae such as hearing loss, loss of limbs or brain damage.
Meningococcal Disease Risk Factors

- Kissing, sharing drinks (e.g., bars, parties, Greek society activities).
- Sharing eating utensils, water bottles (e.g., sports).
- Crowded living conditions (e.g., dorms, military).
- Sharing cigarettes or other smoking materials.
- Men who have sex with men (MSM).
- Certain medical conditions (e.g., asplenia).
- Other activities with direct contact with saliva or respiratory secretions.
University of Wisconsin–Madison, Wisconsin

- Located in Madison, Wisconsin (pop. ~250,000)
- Fall 2016 enrollment:
  - Undergraduate: 29,536
  - Graduate: 8,904
  - Professional and Special: 4,898
  - Total enrollment: 43,338
- Over 7,400 students live on campus in 19 dorm residences—90% of freshman live in dorms
UW–Madison Serogroup B Meningococcal Disease Cluster, 2016

- Three cases of meningococcal disease were identified in students between Oct. 3 and Oct. 26.
- Two of the three cases lived in dorms, but not the same dorm.
- All cases were serogroup B.
- None of the cases had received Mening B vaccine.

<table>
<thead>
<tr>
<th>ONSET</th>
<th>AGE</th>
<th>RESIDENCE</th>
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</thead>
<tbody>
<tr>
<td>Case 1</td>
<td>10/03</td>
<td>18</td>
</tr>
<tr>
<td>Case 2</td>
<td>10/05</td>
<td>19</td>
</tr>
<tr>
<td>Case 3</td>
<td>10/26</td>
<td>18</td>
</tr>
</tbody>
</table>
UW–Madison Meningococcal Disease Cluster, Wisconsin, 2016

Isolates sent to Centers for Disease Control and Prevention (CDC) for Whole Genome Sequencing (WGS).

- All three isolates were sequence type ST-11556, clonal complex CC32.
- This strain had not been seen in any previous college outbreaks that had WGS performed.
- Strain most closely resembles a sporadic case from Michigan identified in 2013.
Vaccination Decision

- There is currently no requirement for immunizations for college students in Wisconsin.
- There is a meningitis education bill.
- Of all the 2016 entrance medical forms completed by students, <5% (825) indicated receiving one or more dose of either serogroup B vaccine.
- Due to a number of factors, including the identification of Men B, the time clustering of cases, lack of identified epi links, and low Men B immunization rates, it was ultimately decided to hold vaccine clinics.
Vaccination Campaign

- The University Health Services (UHS), Wisconsin Division of Public Health (DPH), and CDC collaborated to:
  - Define the sub-population at risk.
    - Undergraduates through age 25.
    - Graduate and professional students who live with or are in an intimate relationship with an undergraduate.
  - Distribute communications and key messages.
  - Plan, staff, and supply vaccine clinics on campus. Five clinics planned, two additional clinics added.
UW-Madison Response (cont.)

- UHS, DPH, and CDC minimized barriers to receive vaccine by:
  - Providing access to clinics.
  - Eliminating cost of vaccine for students.
- Vaccine provided through the CDC’s vaccine outbreak set-aside fund
UW-Madison Response (cont.)

Distributed communications and key messages within 24 hours of second case both on campus and statewide.

- UHS saturated the campus with emails and communications to students, faculty/staff, and parents.
- Described disease severity.
- Provided vaccine recommendations, times, and locations of clinics and information on cost ($0).
Announcement Flyer

STUDENTS!

meningitis B vaccination

Get your fast, free meningitis B vaccination at the SERF!

Thurs., Oct. 20
11 am – 7 pm
Fri. Oct. 21
10 am – 4 pm
Tues. Oct. 25
9 am – 4 pm
Wed. Oct. 26
11 am – 7 pm
Thurs. Oct. 27
10 am – 5 pm

UHS UNIVERSITY HEALTH SERVICES

uhs.wisc.edu/meningitis | 608.265.5600
Dorm room Door Hangers

Due to time constraints we drilled a hole into the paper and attached it with a rubber band instead of using the typical door hanger die cut paper.
Digital TV Ads

Four panels were used and timed to display detailed information.
Large directional signs

There were many directional signs used to help guide students through the POD, inform them of wait times, help them with WIR, and direct them to various stations or tables.
Who’s at Risk?
Informational sheet

Provided to students as they entered the POD to inform them if they are at risk or eligible to receive the vaccine.

WHO IS AT RISK?

The Wisconsin Department of Health Services (DHS) and the University of Wisconsin-Madison strongly recommend, with support from the Centers for Disease Control and Prevention, that the following UW-Madison populations receive the serogroup B meningococcal (MenB) vaccine:

• All UW-Madison undergraduate students through age 25, including transfer students, regardless of whether or not they live in campus housing.
• Members of the UW-Madison community who have any medical condition that puts them at increased risk for meningococcal disease.*
• Graduate or professional students through age 25 who live with or are in an intimate relationship with an undergraduate student.

Faculty and staff who have any of the medical conditions listed above should consult with their personal physician to discuss vaccination.

All other UW-Madison graduate and professional students, faculty, staff, and visitors are not considered at increased risk for meningococcal disease and therefore are not recommended for vaccination with a serogroup B meningococcal vaccine due to the occurrence of cases on the UW-Madison campus.

Meningococcal disease is not spread by casual contact, such as being in a classroom with or sharing a bus with an infected person. Meningococcal bacteria are spread from person-to-person through the exchange of saliva. You must be in direct (close) or lengthy contact with another person’s secretions to be exposed (e.g., kissing, sharing eating utensils, sharing water bottles, sharing smoking materials such as cigarettes and vaping materials).

*These conditions include functional and anatomic asplenia (including sickle cell disease), persistent complement component deficiencies (C1, C2-C9, properdin, factor H, factor D), and those who may be taking Soliris® for treatment of atypical hemolytic uremic syndrome (aHUS) or paroxysmal nocturnal hemoglobinuria (PNH). Microbiologists who are routinely exposed to the bacteria that causes meningococcal disease, Neisseria meningitidis, are also considered to be at risk.
Selfie wall and Snapchat filter

To promote the clinic on social media—Facebook, Instagram, Twitter, Snapchat, and YouTube—students could take “selfies” to show who got vaccinated and invite others to clinics.
Social media

Creative use of photos and animated gifs posted on a variety of social media helped keep the broadcasts about the vaccination clinics interesting, and fun.
Cookies and swag (stickers, bookmarks and magnets)!

Given to students after they received their first dose to advertise the vaccine clinics teach good respiratory hygiene.
Bookmarks

Materials for students to read while waiting in line and take home with them to help identify symptoms of meningitis and learn about possible ways it can be spread.
Thank you sign

Placed near exit to remind students when to come back for their second dose.
Vaccine Clinics- Communication

iPads were used for screening and real-time reporting in UHS electronic health records and the Wisconsin Immunization Registry (WIR).
Other UW Outreach

- Informational emails and PowerPoint presentations sent to faculty and staff asking them to take 60 seconds to encourage students to be vaccinated.
- Emails sent directly to parents and students.
- Reminder emails sent mid-campaign to students who had not been vaccinated.
PowerPoint for Instructors to present to students

Short 3 panel Power Point to provide instructors a way to inform students about the POD

Meningitis B Symptoms

- high fever
- severe headache
- neck stiffness
- confusion
- vomiting or rashes may also occur

Anyone with these symptoms should contact a health care provider or go to an emergency room immediately.

uhs.wisc.edu/meningitis | 608.265.5600
Communication to the Wider Community

- Joint webinar with UW and Wisconsin Immunization program for health care providers and local public health.
- Letters sent to health care providers across the state informing them of the outbreak.

**Meningococcal B Outbreak Response**

Please see the following link on the DHS website for important information from Dr. Jeffrey Davis regarding the meningococcal B outbreak at the UW Madison campus and what immunizers around the state can do.

Providers should consider the following in order to be able to respond to the increased demand:

- Ensure your practice has adequate vaccine stock on hand.
- Consider adding additional immunization only visits, and additional capacity to your practice.
- Educate all staff, including nurses and those who make appointments are aware of the need to immunize these students.
- Consider doing outreach to affected patients.
- Check the VDP before immunizing to ensure your patient is getting the proper vaccine according to the correct intervals.

**Summary:** Two cases of meningococcal disease have been detected among students attending the University of Wisconsin-Madison. All UW-Madison undergraduate students should get vaccinated with meningococcal serogroup B vaccine to protect against serogroup B meningococcal disease, and the University Health Services will be holding vaccination clinics on campus. Local public health professionals have already identified persons who require antibiotic prophylaxis for this situation. We urge all students to always contact their health care provider immediately if they think they are experiencing signs and symptoms of meningitis. Attached is the Immunization Information Disease Immunization Dose Chart for your reference.
Communication to the Wider Community

- State program included updates about the outbreak and recommendations in a biweekly electronic newsletter.
- Communication with program managers in states with significant numbers of UW students.
- Second letter to health care providers about administering second dose.
UW–Madison Immunization Response

- Immunization Rates
  - Residence Halls 74%
  - Undergraduates - 67%
    - Freshman 70%
    - Sophomore 71%
    - Junior 68%
    - Senior 63%

- Wisconsin Immunization Program made four total orders of vaccine from CDC.

- Vaccinated almost 4,000 students first day and almost depleted original order of 7,900 doses by end of second clinic.

<table>
<thead>
<tr>
<th>State</th>
<th>Percent</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wisconsin</td>
<td>59.4 %</td>
<td>11,790</td>
</tr>
<tr>
<td>Minnesota</td>
<td>9.8 %</td>
<td>1945</td>
</tr>
<tr>
<td>Illinois</td>
<td>8.9 %</td>
<td>1766</td>
</tr>
<tr>
<td>Other</td>
<td>21.9 %</td>
<td></td>
</tr>
</tbody>
</table>
Follow up reminders for second dose

This was given out to students after they received their first dose with an area to put the date when they can get their second dose. This was perforated so the student could tear off the relevant info they needed for the second dose and store it in a wallet or purse.
Communication Successes

- UW created an instant, recognizable brand and normalized vaccination.
- Leveraged parents’ influence with direct communication.
- Messaging was shared between UW and state and local entities to ensure consistency.
Communication Challenges

- Confusion between conjugate vaccines and Serogroup B vaccines.
- We had to backtrack on messages to students and parents and recommended 2\textsuperscript{nd} dose from primary care providers (PCP) or other sources over holidays.
- Communication to health care providers throughout the state to understand the need and to plan for these students to receive the second dose over break.
# UW – Madison Immunization Response Summary

Over 20,000 students immunized at seven clinics!

<table>
<thead>
<tr>
<th>Clinic</th>
<th>Clinic 1</th>
<th>Clinic 2</th>
<th>Clinic 3</th>
<th>Clinic 4</th>
<th>Clinic 5</th>
<th>Clinic 6</th>
<th>Clinic 7</th>
<th>Misc.</th>
<th>Walk In</th>
<th>Total Administered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>10/20</td>
<td>10/21</td>
<td>10/25</td>
<td>10/26</td>
<td>10/27</td>
<td>10/31</td>
<td>11/2</td>
<td>All</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>SERF</td>
<td>SERF</td>
<td>SERF</td>
<td>SERF</td>
<td>SERF</td>
<td>SERF</td>
<td>SERF</td>
<td>SERF, UHS</td>
<td>UHS</td>
<td></td>
</tr>
<tr>
<td>Bexsero</td>
<td>3,944</td>
<td>2,903</td>
<td>2,560</td>
<td>2,971</td>
<td>3,407</td>
<td>1,851</td>
<td>2,722</td>
<td>12</td>
<td>155</td>
<td>20,525</td>
</tr>
<tr>
<td>Trumenba</td>
<td>14</td>
<td>9</td>
<td>12</td>
<td>11</td>
<td>1</td>
<td>7</td>
<td>5</td>
<td>21</td>
<td>3</td>
<td>83</td>
</tr>
<tr>
<td>Total</td>
<td>3,958</td>
<td>2,912</td>
<td>2,572</td>
<td>2,982</td>
<td>3,408</td>
<td>1,858</td>
<td>2,727</td>
<td>33</td>
<td>158</td>
<td><strong>20,608</strong></td>
</tr>
</tbody>
</table>
Acknowledgements

Thank you to all local, state, and national agencies, the University of Wisconsin – Madison, and the thousands of students and staff that made the vaccine clinics possible!
Mumps Outbreak at Syracuse University: Communicating with Students

Christine Compton, M.D., M.P.H.
New York State Department of Health
Medical Director, Bureau of Immunization
Mumps
Epidemiology
Mumps in the news...

Mumps at Syracuse University: Students asked to prevent further spreading

Mumps Outbreak at SUNY New Paltz Expands

CBS NEWS | April 21, 2017, 11:30 PM

Mumps outbreak reported at University of Minnesota

Mumps spreading on Indiana college campuses

MUMPS CASES CONFIRMED AT ST. MICHAEL’S COLLEGE AND UNIVERSITY OF VERMONT
Data represents New York State excluding New York City.

Cases (Confirmed or Probable) as of 2/16/2018. 2017 Case counts are preliminary and subject to change.

### Reported Mumps Cases in New York State*

Confirmed and Probable Cases Reported between 01/01/2016 and 12/31/2017**

<table>
<thead>
<tr>
<th>Year</th>
<th>#Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>16</td>
</tr>
<tr>
<td>1998</td>
<td>14</td>
</tr>
<tr>
<td>1999</td>
<td>12</td>
</tr>
<tr>
<td>2000</td>
<td>14</td>
</tr>
<tr>
<td>2001</td>
<td>4</td>
</tr>
<tr>
<td>2002</td>
<td>5</td>
</tr>
<tr>
<td>2003</td>
<td>3</td>
</tr>
<tr>
<td>2004</td>
<td>5</td>
</tr>
<tr>
<td>2005</td>
<td>33</td>
</tr>
<tr>
<td>2006</td>
<td>51</td>
</tr>
<tr>
<td>2007</td>
<td>24</td>
</tr>
<tr>
<td>2008</td>
<td>21</td>
</tr>
<tr>
<td>2009</td>
<td>346</td>
</tr>
<tr>
<td>2010</td>
<td>964</td>
</tr>
<tr>
<td>2011</td>
<td>10</td>
</tr>
<tr>
<td>2012</td>
<td>5</td>
</tr>
<tr>
<td>2013</td>
<td>11</td>
</tr>
<tr>
<td>2014</td>
<td>11</td>
</tr>
<tr>
<td>2015</td>
<td>24</td>
</tr>
<tr>
<td>2016</td>
<td>204</td>
</tr>
<tr>
<td>2017**</td>
<td>298</td>
</tr>
</tbody>
</table>

*Data represents New York State excluding New York City.

**Cases (Confirmed or Probable) as of 2/16/2018. 2017 Case counts are preliminary and subject to change.
Number of Reported Mumps Cases in New York State* by Outbreak Confirmed and Probable Cases Reported between 01/01/2016 and 02/01/2018**

<table>
<thead>
<tr>
<th>OUTBREAK</th>
<th># CASES</th>
<th>% OF TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sporadic Cases/Clusters</td>
<td>151</td>
<td>29%</td>
</tr>
<tr>
<td><strong>Syracuse University (Fall 2017)</strong></td>
<td>151</td>
<td>29%</td>
</tr>
<tr>
<td>SUNY New Paltz (Fall 2016)</td>
<td>88</td>
<td>17%</td>
</tr>
<tr>
<td>Nassau – Long Beach (Summer 2016)</td>
<td>51</td>
<td>9.8%</td>
</tr>
<tr>
<td>SUNY Geneseo (Fall 2016)</td>
<td>27</td>
<td>5.2%</td>
</tr>
<tr>
<td>SUNY Albany (Spring 2017)</td>
<td>25</td>
<td>4.8%</td>
</tr>
<tr>
<td>Albany Hockey (Winter 2017)</td>
<td>7</td>
<td>1.3%</td>
</tr>
<tr>
<td>Clifton Park Gym (Summer 2017)</td>
<td>6</td>
<td>1.2%</td>
</tr>
<tr>
<td><strong>SUNY Buffalo (Winter 2016)</strong></td>
<td>6</td>
<td>1.2%</td>
</tr>
<tr>
<td>Camp Timberlake (Summer 2017)</td>
<td>5</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Syracuse University (Spring 2017)</strong></td>
<td>3</td>
<td>0.6%</td>
</tr>
<tr>
<td>Total</td>
<td>520</td>
<td></td>
</tr>
</tbody>
</table>

*Data represents New York State excluding New York City.
**Cases (Confirmed or Probable) as of 2/16/2018. Case counts are preliminary and subject to change.
Factors Contributing to Mumps Outbreaks

- Vaccine effectiveness: protects against most but not all cases
- Waning immunity?
  - Lower levels of neutralizing antibody (NA) observed among persons who received MMR #2 $\geq 15$ years ago demonstrates antibody decay over time.$^1$
- Crowded environments favor prolonged close contact
  - Living in dormitory or other student housing, playing on sports teams together
- Certain behaviors increase spread of virus
  - Sharing cups, water bottles, utensils, cigarettes, personal items, etc.; parties and drinking games; kissing and close contact

---

Mumps at Syracuse University
Syracuse University (SU): Outbreak Timeline

First Case: 8/30/2017; started on an athletic team
Outbreak Declared: 9/16/2017
Outbreak takes off: Beginning of October
3rd MMR given: Starting 10/24/2017; 8 PODs

Last Case: 12/11/2017
Outbreak Ended: 2/14/2018
Communication Pathways

Common Goal: Control the outbreak and prevent further spread of disease
Communication Key to Outbreak Control

- Begin early: outbreak first established
- Communicate often: multiple conference calls
- Have the right people on the calls
- Share key messages; repeat key messages
- Encourage university to target messages to the students
- Share resources: disease information, template letters, press releases, etc.
- Share lessons learned from past experience with mumps outbreaks on how to promote messages to students
  - Effective use of RAs, key staff such as the Athletic Director, Greek organizations, website
Communication: Key Messages

• Rapidly identify non-immune students
  o Submit immunization records, medical or religious exemption
• Identify risk: What to expect
  o Vaccination protects but vaccinated individuals can get sick
• What to do to prevent the spread of the mumps
  o Modify behaviors; make it specific to students
• What to do if you become ill
  o Know the signs/symptoms of mumps; report to Health Services
• Health Services: recognition of illness, appropriate testing, isolation of ill students
Syracuse University: Outreach Campaign
Outreach Campaign Summary

• Established a Mumps Crisis Communications Team
• Goals of outreach:
  o Raise awareness of mumps cases on campus
  o Provide education on prevention measures (behaviors) and what to do if ill
  o Provide easy access to campus resources for treatment and vaccination
  o Get vaccination records from all students
• Broad (campuswide) and targeted (athletes, Greek orgs.) communication strategies
• Leveraged a variety of communication tactics and channels
• Utilized leadership work teams across the campus
• Consistent messaging
• Surround students with messaging to promote prevention, early detection and treatment
Communication Channels

- Campus-wide emails to students, faculty and staff (10 emails)
- Print signage (5,000 flyers) in residence halls, academic buildings, athletic facilities, dining halls, libraries, Greek houses, etc.
- Digital signs across campus: 150 signs
- Text alerts, robocalls, phone calls to get immunization records
- Targeted outreach to student-athletes including flyers, emails, in person education
- Education of coaches and sports medicine staff
- Parent emails
- Website information and updates: http://health.syr.edu/
- Local and student media; social media
- Information boards at events
Syracuse University has confirmed cases of mumps among its student population. Fortunately, mumps is not considered to be life-threatening and is not common today because of the effectiveness of the vaccine. People most at risk are those not vaccinated. While the vaccine is effective, on occasion, people who have had the vaccine may still get mumps. Knowing the symptoms and maintaining good health practices will protect you and our campus community.

### WHAT IS MUMPS?
Mumps is a disease caused by a virus. The virus usually makes you feel sick and causes salivary glands between your jaw and ears to swell. Other body tissues can become infected too.

(New York State Department of Health)

### HOW DOES IT SPREAD?
Person-to-person via droplets of saliva or mucus from the mouth, nose, or throat, usually when a person coughs, sneezes, or talks.

### TIPS TO AVOID THE SPREAD OF MUMPS:
- Get your measles, mumps, and rubella (MMR) vaccination.
- Cover mouth/nose with tissue or arm when coughing or sneezing.
- Wash your hands often with soap and water.
- Avoid sharing cups, utensils, water bottles, etc.
- Clean and disinfect frequently touched surfaces like sinks, doorknobs, and tables.

### WHAT ARE THE SYMPTOMS?
- Fever
- Headache
- Muscle aches
- Tiredness
- Loss of appetite
- Parotitis (swelling of the glands below the ears)

### QUESTIONS?
Contact Health Services at 315.443.9005

Syracuse University Health Services
Digital Signage

TAKE YOUR HEALTH into YOUR OWN HANDS!

HELP PREVENT the SPREAD of MUMPS:

• Don’t share drinks or eating utensils.
• Cover your mouth/nose when coughing or sneezing.
• Refrain from kissing and other intimate activity.

• Don’t share cigarettes and e-cigarettes.
• Wash your hands often with soap and water.

• Clean and disinfect frequently touched surfaces like sinks, doorknobs and tables.
• At the first sign of symptoms, visit a doctor.

Questions? Visit health.syr.edu or contact Health Services at 315.443.9005

Syracuse University
Print Signage

HEALTH ALERT

DON’T LET THE MUMPS KEEP YOU ON THE SIDELINES!

I’VE BEEN VACCINATED; CAN I STILL GET MUMPS?

YES!

Although vaccination is your best protection, it’s not 100 percent effective. In fact, every Syracuse student who has contracted mumps has been properly vaccinated.

I HAVE BEEN EXPOSED TO THE MUMPS, WHAT SHOULD I DO?

The incubation period is usually 16 to 18 days after exposure, but can be as long as 25 days. That means, during this period you should take extra precaution and most importantly, avoid exchanging body fluids with anyone.

HOW CAN I HELP PREVENT THE SPREAD OF MUMPS?

• Don’t share drinks or eating utensils
• Don’t share water bottles
• Don’t share towels
• Refrain from kissing and other intimate activity
• Cover your mouth/nose when coughing or sneezing
• Don’t play drinking games

WHAT ARE THE SYMPTOMS OF MUMPS?

• Fever • Headache • Muscle aches • Tiredness • Loss of appetite • Swollen and tender salivary glands under the ears on one or both sides

I’M FEELING UNDER THE WEATHER, WHAT SHOULD I DO?

CALL the athletic trainer for your sport immediately.

Questions? Call Health Services at 315.443.9005.

DON’T LET MUMPS SPOIL YOUR FUN!

MMR VACCINATION IS THE BEST PROTECTION AGAINST MUMPS.

HELP US PREVENT THE SPREAD OF MUMPS.

• Don’t share drinks or eating utensils
• Cover your mouth/nose when coughing or sneezing
• Stay home when you are sick
• Wash your hands often with soap and water
• Clean and disinfect frequently touched surfaces like sinks, doorknobs, and tables
• At the first sign of symptoms, visit a doctor
• Don’t share cigarettes and e-cigarettes
• Avoid playing drinking games
• Refrain from kissing

SIGNS AND SYMPTOMS OF MUMPS

Mumps is best known for the puffy cheeks and swollen jaw that it causes.

• Fever
• Headache
• Loss of appetite
• Muscle aches
• Tiredness

Visit health.syrd.edu to learn more about prevention and symptoms.

If you have symptoms, stay home and away from others and contact Health Services or your doctor.

Visit Health Services to get vaccinated. Questions? Call Health Services at 315.443.9005.
Bump The Mumps
Bump The Mumps

- Student initiated, student led event:
  - Student at the S.I. Newhouse School of Public Communications
  - Spark that ignited an idea: handed laptop to a fellow student
    - What if he has mumps?
  - “I didn’t take the mumps threat as seriously as I should. Despite the signage everywhere and the blast of emails and communications, the mumps was not a real threat to me until I thought I might be affected.”
- Idea: Create a pop-up mumps awareness event that would resonate with students
- Worked with the media relations manager Division of Marketing and Communications: supported by administration
Bump The Mumps: The Event

- November 14, 2017, 10 a.m. to 4 p.m.
- Text Alert went to all students at 10:05 a.m. announcing event – learn how to protect oneself from the mumps
- Fun, community engagement, school spirit
- Provide factual information regarding mumps
- Student health educators from SU’s Falk College available: worked with University Health Services Department
- Snapcode: connect to online health services information
- Take the pledge to stop the spread of mumps
- Otto Orange, school mascot, signed the pledge
Bump The Mumps: On the Quad
Bump The Mumps: High participation
Bump The Mumps: Takeaways

- Hot Cocoa
- T-Shirts
- Cups
- Tattoos
- Stickers: Snapcode
- Hand Sanitizer
- Face Masks
Bump The Mumps: Outcomes

• Attendance exceeded expectations: 60 gallons hot cocoa first 2 hours
• Over 1,000 students signed the pledge
• Factual information provided dispelled rumors and misinformation regarding mumps outbreak at SU
• Meaningful peer-to-peer relationships
• Event Snapcode: over 150 snapchat Bump The Mumps stories shared which generated over 15,000 views
• Event was covered by local and student media
• Key role in the success of SU’s overall mumps awareness outreach campaign
Contact Information

Christine Compton:
  • christine.compton@health.ny.gov
  • 518-473-4437
Emergency Risk Communication: A Lifesaving Tactic

48th National Immunization Conference
Atlanta, GA
May 15, 2018

Sarah Poser
Health Communication Specialist
Division of Viral Diseases
Centers for Disease Control and Prevention (CDC)
Best Practices of Communication

- Identify your audience
  - Little person, big picture
  - E.g., “Working single mothers ages 40—50 who live in rural cities and eat fast food once a week”

- Set your (SMART) communication objectives
  - Specific, Measurable, Attainable, Relevant, Timely
  - E.g., “Increase by 5% the number of people in Atlanta ages 50+ who get zoster vaccine by December 31, 2018”

- Have a main message
  - E.g., “People 50 and older need two doses of the new zoster vaccine”

- Use plain language
  - Clear, direct language that your audience understands the FIRST time they read or hear it
Risk Communication Strategies

- **Outraged/Terrified**
  - Outrage Management

- **Apathetic/Unaware**
  - Safe Zone

- **Crisis Communication**

- **Precaution Advocacy**

Credit: Peter Sandman
Risk Communication Strategies

- Identify:
  - Audience
  - Actual level of risk
  - Audience’s emotion about it
Safe Zone

- No risk
- People are apathetic
- Your job here is done!
Outrage Management

- Risk is low
- People are upset!!
- Examples:
  - Fear of vaccines causing autism
  - Distrust of GMOs
- Strategy:
  - Listen
  - Echo what you heard
  - Find things to agree with ("Yes, and..." method)
  - "CALM DOWN."

EMOTIONAL RESPONSE OF TARGET AUDIENCE

- Outraged/Terrified
- Apathetic/Unaware

RISK

Low

High
Precaution Advocacy

- Risk is high!!
- People don’t care or aren’t aware
- Examples:
  - Smoking, obesity, seatbelts, bike helmets
  - Viral disease outbreaks at colleges
- Strategy:
  - Arouse emotions, get their attention
  - Keep your messages short, make it interesting, stay on message
  - “WATCH OUT!”

EMOTIONAL RESPONSE OF TARGET AUDIENCE

Outraged/Terrified

Apathetic/Unaware

Low

High

RISK
Crisis Communication

- Risk is high!!
- People are rightfully upset!!
- Examples:
  - Natural disasters
  - Flu pandemic
  - Bioterrorism
  - Flint water crisis
  - Cyanide-laced Tylenol capsules
- Strategy:
  - Express empathy to quiet the mid-brain
  - Empower people to take action
Risk Comm Strategies in Review
CDC’s Crisis Communication Lifecycle

**Pre-crisis**
- Prepare
- Foster alliances
- Develop consensus recommendations
- Test message
- Evaluate plans

**Initial**
- Express empathy
- Provide simple risk explanations
- Establish credibility
- Recommend actions
- Commit to stakeholders

**Maintenance**
- Further explain risk by population groups
- Provide more background
- Gain support for response
- Empower risk/benefit decision making
- Capture feedback for analysis

**Resolution**
- Educate a primed public for future crises
- Examine problems
- Gain support for policy and resources
- Promote your organization’s role

**Evaluation**
- Capture lessons learned
- Develop an event SWOT
- Improve plan
- Return to pre-crisis planning

For more information, see: [emergency.cdc.gov/cerc](http://emergency.cdc.gov/cerc)
Top 3 things to remember

- Know your audience
  - How dangerous is the risk to them?
  - How emotional are they about it?

- Have a main message
  - Include a call to action

- Be clear and direct
  - Use plain language (communication that your audience understands the FIRST time they read or hear it)
  - Keep messages short and relevant
  - Repeat yourself
  - Avoid jargon, judgment, promises you can’t keep
Resources

- CDC’s Clear Communication Index – [cdc.gov/ccindex]
- CDC’s Crisis and Emergency Risk Communication (CERC) Training/Resources – [emergency.cdc.gov/cerc]
- Communication Toolkits for Outbreak Investigation and Response – up next!
Thank you!

Sarah Poser
Health Communication Specialist, Divisions of Viral Diseases, CDC
sposer@cdc.gov

For more information, contact CDC
1-800-CDC-INFO (232-4636)

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.

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