Ebola and Student Health

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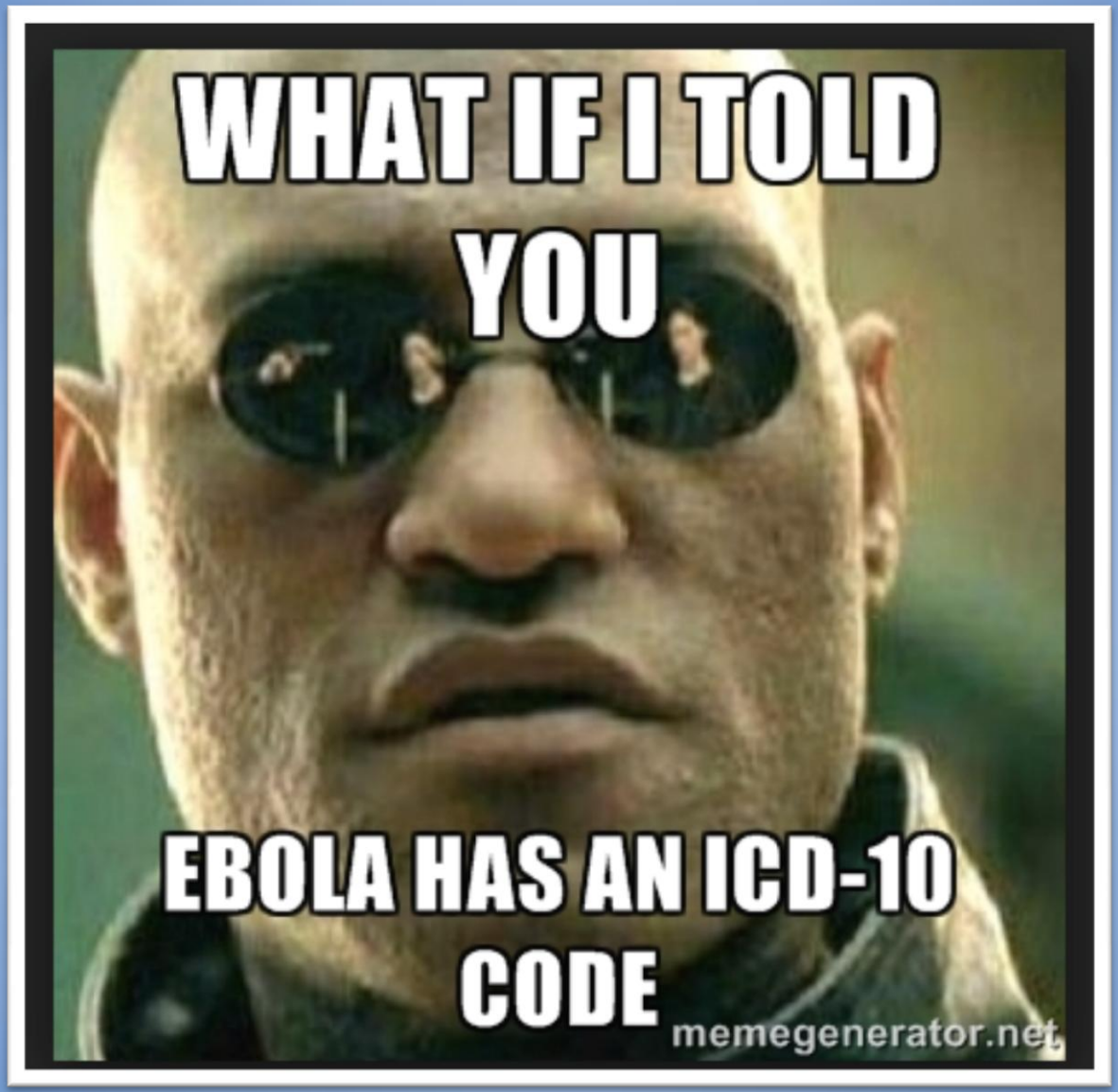
Outline

- Quick review of Ebola Virus Disease (EVD)
- Developments in the US
- Relevance of Ebola for the college/university community
- Relevance of Ebola for Student Health
- Keeping current with new information


WHAT IF I TOLD YOU
EBOLA HAS AN ICD-10 CODE
memegenerator.net

Ebola Cases by Country

- CDC Level 3 Warning - Avoid non-essential travel
  - Liberia
  - Sierra Leone
  - Guinea
- CDC Level 2 Alert - Practice Enhanced Precautions
  - Democratic Republic of the Congo
- Cases imported from affected countries in West Africa to
  - Germany, Norway, France, UK, United States, Spain, Nigeria, Mali
- Secondary cases have occurred in
  - United States, Spain, Nigeria

Ebola Transmission

- By direct contact with bodily fluids of an infected person on mucosal surfaces, broken skin or via percutaneous route
- Blood, vomit, stool most infectious
- In droplets
- Not airborne
- Ebola virus also found in urine, semen, sweat, tears, breast milk
- Likelihood of transmission increases with duration and severity of symptoms as viral load increases

Who Is Most at Risk?

- People with close contact with acutely ill patients
  - Family caregivers
  - Health care providers
- People who have touched dead bodies or participated in funeral rites for Ebola victims

Incubation Period

- 2-21 days after exposure
- Average 8-10 days
- Not infectious until symptoms develop

Clinical Presentation

Initial presentation is non-specific

- Fever (100.4 degrees or higher)
- Headache
- Anorexia
- Fatigue
- Myalgias

Later stages

- Vomiting
- Abdominal pain
- Diarrhea
- Bleeding
- Multi-organ failure

Putting Ebola Into Perspective

- 36,000 people entered the U.S. in the last six months from Guinea, Liberia, and Sierra Leone
- Approximately 300 were college students
- One case of ebola in a non-student
- Malaria and other health conditions of concern in travelers and college students more likely than ebola

More Americans have been married to Kim Kardashian than have contracted Ebola in the U.S.

CDC Update on Returning Travelers

Travelers are screened before leaving the affected countries, and approximately 94% of travelers from the affected countries arrive at airports where risk assessment is also performed on arrival:

JFK
Dulles
Newark
O'Hare
Atlanta

Active Monitoring

All travelers from affected areas coming into the 5 airports are referred to the CDC's Active Monitoring Program

Names and contact information sent to local public health authorities who monitor travelers for 21 days

Level of risk determines extent of monitoring/quarantine

Confidentiality very important

Public health authorities may ask colleges to assist monitoring

Management of Returning Travelers is Evolving

- Quarantine possibilities
  - At home with family caregivers
  - For colleges – case by case decision making
  - Restricted travel

How does Ebola Affect the College Community

- International students from endemic countries
- Student, faculty and staff travel
- Study abroad students
- Exchange students
- Students, faculty, staff providing direct care in endemic countries
- Visiting scholars
- Speakers

Student Health Role in Campus Wide Planning

- Participate in development of all-hazard plans
- Be the voice of public health on campus and crisis response team
- Provide consultation to campus leadership
- Educate the community
- Be attentive to risk of stigmatization of students from affected countries

How can Student Health Prepare?

- Establish operational plan
- Collaborate with key campus stakeholders and community partners
- Employ best public health practices
- Communicate thoughtfully
  - Respond to the fears and concerns of the community
- Provide evidence-based care for our students and safe practices for our staff. Take travel history in office encounters.

Operational Plan for Student Health

- Establish a plan for management of phone calls and patient visits
- Designate a dedicated exam room with appropriate supplies
- Set aside area for donning and doffing PPE
- Identify area for disposal of used PPE and equipment
- Order supplies
- Train staff
- Conduct drills

Campus stakeholders and community partners

- Campus Police
- Residence Life
- Education Abroad
- International Students and Scholars
- Dining Services
- Facilities
- Counseling Center
- Local Hospital
- EMS
- Public Health

Travel and Study Abroad

- Collaborate with Education Abroad office
- Communicate to students, faculty and staff – again check content with public affairs and others
  - Suggest checking http://wwwnc.cdc.gov/travel/notices prior to any travel
  - Inform about procedures for return to U.S. and return to your college
- Current CDC Level 3 Travel Warning to avoid non-essential travel to Guinea, Liberia and Sierra Leone

Resources for Best Practices in Public Health

- State and local public health agencies
- CDC
- WHO
- CIDRAP
- ACHA
- NECHA
- Local student health colleagues
- UpToDate

Communication and Education Considerations

- Personal calls to students, faculty and staff who are traveling to or from endemic countries
- Campus-wide email, health center website and social media
- Clear and accurate information in a non-alarmist way
- Approval by crisis team, public affairs, vice-president….
- Conversations with colleagues

NOT TODAY EBOLA
memebinge.com
NOT TODAY!!!!!

Triage at the Front Desk in the Ambulatory Setting

No CDC guidelines yet

Telephone triage by front desk:

Travel history to one of the affected countries in 21 days?

If yes: clinician to speak to patient
If no: usual management

Ask all students or only students with sx?

Phone Triage Questions for Clinician

- Travel within the past 21 days to affected country?
- Symptoms: fever, headache, abdominal pain, vomiting, diarrhea, bleeding?
- Direct exposure to or care for anyone with Ebola?
- Participated in funeral preparation or rites for person with possible Ebola?

If phone screen is positive for suspected Ebola

- Instruct the patient to stay in place
- Call Public Health, 911 and/or local ER depending on your pre-established plan
- Notify individuals with need to know on campus as defined in response plan
- Confidentiality important

Signage Considerations

- This is controversial
- Some offices may place signs at office door
  - To notify people with potential exposure to Ebola to call first
  - To notify students about travel screening
  - To offer educational information

Walk-ins who are not Acutely Ill

Ask about travel history to affected countries (confidentially)

If travel history positive and patient not acutely ill:

- Escort the patient to a room with private bathroom
- Maintain 6 feet distance from the patient
- Obtain a more detailed history
- Have patient take own temperature
- If Ebola suspected based on travel history/ symptoms:
  - Provide written instructions for student
  - Leave the room and close the door
  - Call Public Health, 911 or ER to ask for guidance
  - Do not examine the patient if stable
  - May not need to don PPE

Response to the Acutely Ill Patient

Ask about travel history to affected countries (confidentially)

If travel history positive and patient acutely ill:

- Goals are to isolate the patient, limit contact with staff to absolute minimum and activate EMS
- Clear waiting room - Consider isolating patient there
- Maintain 6 feet distance from the patient
- Don PPE if required - one provider only
- Escort to exam room if required - close door
- Obtain more detailed history & vital signs if safe
- Call Public Health, 911 or ER to ask for guidance
- No lab tests, needles, nebulizers

Nigerians use humor to di
Study: Fear of Ebola Highe
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file://localhost/Users/kaypetersen/Desktop/Study%20%20Fear%20of%20Ebola%20Highest%20Among%20People%20Who%20Did%2...

OCTOBER 26, 2014

STUDY: FEAR OF EBOLA HIGHEST AMONG PEOPLE WHO DID NOT PAY ATTENTION DURING MATH AND SCIENCE CLASSES

BOROWITZ REPORT

BY ANDY BOROWITZ

PHOTOGRAPH BY KEVIN BENNETT / ABERDEEN AMERICAN NEWS / AP

MINNEAPOLIS (The Borowitz Report)—A new study, by the University of Minnesota, indicates that fear of contracting the Ebola virus is highest among Americans who did not pay attention during math and science classes.

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Personal Protective Equipment
CDC Guidelines

- **Standard, contact and droplet** precautions required
- Repeated training and demonstrated **competency** required in performing all Ebola-related infection control practices, procedures, donning and doffing PPE
- **No skin exposed**
- PPE donning/doffing procedure supervised by a **trained observer** in PPE

PPE guidelines evolving

For the non-acutely ill patient:

- 6 ft. distancing may be sufficient
- Basic PPE
  - Non-permeable gown
  - Double gloves
    - Regular Nitrile gloves under sleeves of gown
    - Extended cuff Nitrile gloves as top layer over sleeves of gown
  - Surgical Mask
  - Face Shield

PPE guidelines continued

PPE observer
- Basic PPE

Acutely ill patient
- Basic PPE with use of N-95 or PAPR (Powered Air Purifying Respirator)
- Jump suit or gown with hood and booties and leg covers
- Scrubs

Masks

- Surgical masks vs. N-95 masks - consider need and costs
  - Fit testing for N-95
    - OSHA Respiratory Questionnaire $40 per employee
    - Respiratory Fit test (n95) $65 per employee
    - Respiratory Exam (if needed) $80 per employee
    - PFTs (if needed) $55 per employee
    - New Organization Sign up Fee $150 per organization

Medical Supply **Estimated Costs**

Shieldtech 35 poly coated jumpsuit large 25/cs	$99
Faceshields FS-850-30 30/box	$82
L medical grade PF nitrile gloves 12' long (50) per box -2 (extended cuff)	$22
M medical grade PF nitrile gloves 12' long (50) per box-2 (extended cuff)	$22
N 95 masks (20/box)	$30
Disposable blood pressure cuff, 2 tubes white 5 pack-each	$44
Disposable thermometers for student surveillance - 100/box	$14
Cart	$248
Nonpermeable gowns - 100/box	$150

Procedure for Donning and Doffing PPE

Key Principles:

- Must have training and practice
- Must have a trained observer who states each step aloud
- Should follow specific written guidelines - see CDC

Waste Removal

- Virus is fragile
- Waste disposal
  - Call Public Health
  - Cleaning should be done ONLY by individuals designated by CDC or Public Health
  - Follow CDC guidelines
    - http://www.cdc.gov/vhf/ebola/hcp/environmental-infection-control-in-hospitals.html

Record Keeping

- Keep a record of all persons possibly exposed to the patient in the office, with nature of exposure and contact information
- Include all office staff, patients in waiting rooms, other family members that may have accompanied patient

Ebola Resources

- http://www.mass.gov/eohhs/gov/departments/dph/programs/emergency-prep/threats/biological/ebola-virus.html
- CDC - http://www.cdc.gov/vhf/ebola/
- http://www.who.int/csr/disease/ebola/en/
- http://www.cidrap.umn.edu/search/ebola http://www.acha.org/Topics/ebola.cfm
- http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6341a4.htm?s_cid=mm641a4_w
- http://wwwnc.cdc.gov/travel/page/advice-for-colleges-universities-and-students-about-ebola-in-west-africa
- http://www.cdc.gov/vhf/ebola/exposure/monitoring-and-movement-of-persons-with-exposure.html
- http://www.cdc.gov/media/releases/2014/fs1027-monitoring-symptoms-controlling-movement.html
- http://www.phe.gov/Preparedness/responders/ebola/Documents/ebola-screening-criteria.pdf
- http://www.phe.gov/Preparedness/responders/ebola/Documents/ebola-preparedness-considerations.pdf

OCTOBER 7, 2014

MAN INFECTED WITH EBOLA MISINFORMATION THROUGH CASUAL CONTACT WITH CABLE NEWS

BY ANDY BOROWITZ

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CANTON, OH (The Borowitz Report)—An Ohio man has become infected with misinformation about the Ebola virus through casual contact with cable news, the Centers for Disease Control has confirmed.

Thank you

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