



Comparative Analyses of Flu Prevention at New England State Universities: Recommendations for Change

Adelaide Murray
 Marc D. Hiller, MPH, DrPH
 Rosemary M. Caron, PhD, MPH



Presenter Disclosure

Adelaide Murray

- The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:
 - **No relationships to disclose**



Introduction

“Flu is a serious contagious disease that can lead to hospitalization and even death” (CDC 2014).



Campus Transmission

- Living, learning, social density
 - Facilitates transmission of pathogens in respiratory or oral secretions
 - Behavior likely a more important factor in transmission than physical density
 - Opportunities to influence outbreaks through behavioral change and immunization

(Turner, James 2010. “Public Health Perspective on Infectious Disease on College Campuses” National Social Norms Institute, University of Virginia.)



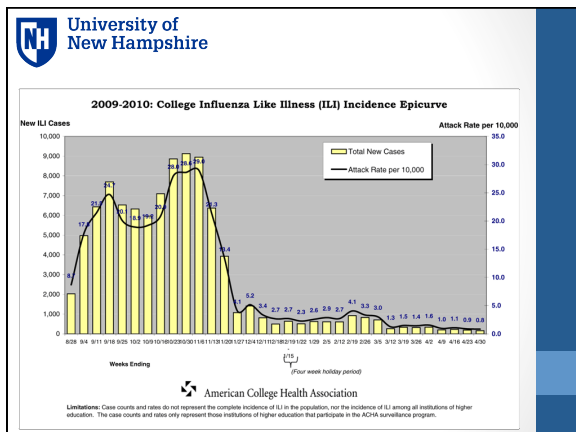
College Impact

- 18% of college students defined the flu as affecting their individual academic performance
 - This was the 4th highest percentage among the 31 listed factors impacting their academics



Affecting academic performance

“defined as: received a lower grade on an exam, or an important project; received a lower grade in the course; received an incomplete or dropped the course; or experience a significant disruption in thesis, dissertation, research, or practicum work” (ACHA 2012)



- ### Methods
- Online Survey Format
 - Six New England State Universities
 - University of Vermont
 - University of New Hampshire
 - University of Connecticut
 - University of Maine
 - University of Massachusetts Amherst
 - University of Rhode Island

- ### Sources of Information
- State Health Departments
 - American College Health Association (ACHA)
 - Centers for Disease Control and Prevention (CDC)

- ### Results
- Results were received from all New England State Universities
 - N=6

- ### State Health Departments
- 83% of sites reported receiving either guidelines, recommendations, or requirements from their State Health Department

Which of the following is provided to your University from your State Health Department with regard to influenza immunization policies, practices, or prevention services? (Check all that apply)

| | Requirements | Guidelines | Recommendations | None |
|--------|--------------|------------|-----------------|------|
| Site A | | ✓ | | |
| Site B | | | ✓ | |
| Site C | | | | ✓ |
| Site D | ✓ | ✓ | ✓ | |
| Site E | | ✓ | ✓ | |
| Site F | ✓ | ✓ | ✓ | |

State Health Departments cont.

- 33% of sites reported that their state legally required immunization of Health care workers
- 17% of sites reported that their state required the provision or availability of any immunization education for members of the university community

State Health Departments cont.

- Flu Surveillance (Sentinel)
- Educational information shared for healthcare workers, patients, schools, other
 - Posters/flyers
 - Alerts
 - Web Information
- Obtain flu vaccination

ACHA

- 100% of institutions surveys are current organizational members of ACHA
- The ACHA “has linked college health professionals throughout the nation ... forming a powerful, collaborative network base”
- Provides publications, surveys, data, and resources (e.g., toolkits)

“CDC Says “Take 3” Actions to Fight the Flu”

1. Take time to get a flu vaccine
2. Take everyday preventive actions to stop the spread of germs
3. Take flu antiviral drugs if your doctor prescribes them

Get a flu vaccine (CDC 2014)

- A yearly flu vaccine is the first and most important step in protecting against the flu
- Everyone 6 months of age and older should get a flu vaccine as soon as the current season’s vaccines are available

Vaccination

- The ACHA found only 40% of college-age students reported receiving flu vaccinations in the last 12 months.
 - This was the second lowest prevalence of the vaccinations reported

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New England Vaccination

| | Undergrad Student Enrollment | Students Immunized (%) |
|--------|------------------------------|------------------------|
| Site A | 18,032 | 2,164 (12) |
| Site B | 9,182 | 918 (10) |
| Site C | 12,531 | 1,754 (14) |
| Site D | 22,134 | UNK |
| Site E | 10,912 | ~982 (8-10) |
| Site F | 13,528 | UNK |

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The Vaccine

| | Type(s) | # | Source (Respective %) |
|--------|-------------------|--------|--|
| Site A | Injection | ~2,500 | University (100) |
| Site B | Injection & Nasal | 1,400 | University (80) State Health Department (5) Hospital (UNK) Other (15) |
| Site C | Injection | 2,500 | University (100) |
| Site D | Injection & Nasal | ~5,000 | University (85) State Health Department (15) |
| Site E | Injection | 2,000 | University (100) |
| Site F | Injection | 600 | University (20) State Health Department (80) |

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Cost of Vaccination

- 66% of sites report **NO** direct cost to students in order to receive a flu vaccine
- 33% of sites report a direct cost to students in order to receive a flu vaccine
 - \$49.50
 - \$17

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Vaccination Cont.

- 83% of sites reported that some population on campus has priority access to the flu vaccine
 - High risk primary care patients
 - Students with chronic illnesses
 - Health staff
 - Pregnant women
 - Only if shortage exists

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Vaccination Exemptions

- 67% of sites reported that their states provided "exemptions" for vaccinations based on
 - Religious purposes
 - Allergen purposes
- 50% of sites reported that their state provided "exemptions" for vaccinations based on
 - Philosophical objections

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Vaccination Clinic by Site

| | Location | Length | Hours |
|--------|---|-----------------------|-------------------------|
| Site A | Student Union | 3-4 days | 6-8 hours per day |
| Site B | Health Services | 3 weeks (Mon - Fri) | 8am -5pm |
| Site C | Student Union | 1 day | 6 hours |
| Site D | Health Services, Mobile Clinics | ~20 different clinics | UNK |
| Site E | Student Center | 2x / week Oct - Nov | 2-3 hours |
| Site F | Student Union, Dining Halls, Athletic Events, Residence Halls, Classrooms | UNK | Varies, usually 3 hours |

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Additional Vaccination

- 100% of sites reported offering vaccines outside of flu clinics
 - Health services visits or walk ins
 - Those that ask or are encouraged based on risk

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Increase in Vaccination

- 50% of sites reported notable changes in percentage of student immunized
 - Media related to flu prevalence
 - Better marketing
 - Opportunities for vaccination
 - Outside providers
 - Retail pharmacies
 - On campus clinics
 - Individual appointments

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Everyday Preventive Actions (CDC 2014)

- Avoid close contact
- Self-isolate
- Cover your nose and mouth
- Wash your hands
- Avoid touching your eyes, nose, and mouth
- Clean and disinfect surfaces

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Avoid Close Contact

- 100% of sites reported that for students who appear to have flu-like symptoms, they recommend
 - That they come to health services
 - That they self-isolate in their dormitory or residence
- 67% of sites reported that for students who appear to have flu-like symptoms, they recommend
 - They they leave campus and return home if possible
- Dependent on circumstances

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Avoid Close Contact Cont.

- 33% of sites reported that they segregate students presenting with flu like symptoms from other students visiting health services (e.g., directing them to separate waiting areas)

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Collaborative Relationships

- Sites reported having a relationship that may aid in flu prevention or reduction with
 - Housekeeping (33%)
 - Dining Services (83%)
 - Housing (67%)
 - Other (50%)
 - Athletics
 - Human Resources
 - Residential Life

Collaborative Relationships cont.

- Flu kits through Residential Life
- Assist with distribution of education materials
- Sick meal services
- Cleaning and sanitation
- Communications and marketing

Housing Alternatives

- 17% of sites reported having housing alternatives available for either those students with flu-like symptoms or their roommates
 - Housing accommodations are rarely utilized

Meal Alternatives

- 83% of sites reported having a system of food/meal delivery in place for ill students to receive meals without entering a regular dining hall
 - Friend can pick up
 - Delivery

Cover your nose and mouth

- 100% of sites reported that they use masks on their campus.
- 100% of sites reported that masks are available for use at health services
- 17% of sites reported that masks are dispensed if indicated for use outside health services

Clean and disinfect surfaces

- 83% of sites reported having a system in place to eliminate and/or reduce infection areas of student dorms and common areas during flu season.
 - Increased cleaning
 - Notified of dorms with high incidence
 - Alcohol based sanitizers placed strategically

Clean and disinfect surfaces

- 67% of sites reported having a system to increase the availability and/or use of hand sanitizer and tissues to students around campus during flu season

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Where is your system to increase the availability and/or use of hand sanitizer and tissues to students around campus during flu season focused?

| Location | Site A | Site B | Site C | Site D | Site E | Site F |
|-------------------------|--------|--------|--------|--------|--------|--------|
| Dorms | ✓ | | | ✓ | ✓ | ✓ |
| Dining Halls | ✓ | | | ✓ | ✓ | ✓ |
| Libraries | ✓ | | | | ✓ | |
| Classrooms | | | | ✓ | | |
| Faculty Offices | | | | | | ✓ |
| Academic Departments | | | | | | |
| Health Services | ✓ | | | | ✓ | ✓ |
| Recreational Facilities | ✓ | | | | ✓ | ✓ |
| Other | | | ✓ | | ✓ | |

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Information Dissemination

- 33% of sites reported that their president/provost speaks out during flu season to offer recommendations and/or promote flu prevention to students and/or professors.
 - To all students, faculty, & staff
 - Tweeted himself getting vaccinated

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Information Dissemination

- 33% of sites reported sending emails/and or newsletters to students/parents/significant others over Thanksgiving or winter breaks to provide flu prevention information, such as remind them to be vaccinated, and return to campus with some basic necessities to treat the flu

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Student-based organization

- 50% of sites reported that their university has a student-based organization or club that seeks to promote flu immunization on campus
 - Outreach (posters/flyers)
 - Social Media Campaign
 - Hand washing demonstrations
 - Cold Care Kits

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Internet Presence

- 100% of sites reported having a section of their website devoted to information on the seasonal flu.
- 67% of sites reported using social media to communicate information during flu season

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What percentage of your overall social media campaign does each account for (Total = 100%)

| Social Media | Site A | Site B | Site C | Site D | Site E | Site F |
|--------------|--------|--------|--------|--------|--------|--------|
| Facebook | 50 | 20 | 75 | | | |
| Twitter | 50 | | 10 | | | 100 |
| Instagram | | | 2.5 | | | |
| Tumblr | | | | | | |
| Pinterest | | | 2.5 | | | |
| Youtube | | | 10 | | | |
| Linkedin | | | | | | |
| Other | | 80 | | | | |

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Please select the impact that your social media presence has had (e.g., a noticeable increase) in those immunized

| | No impact | Minimal | Moderate | Significant |
|--------|-----------|---------|----------|-------------|
| Site A | | | | ✓ |
| Site B | | ✓ | | |
| Site C | | | ✓ | |
| Site D | | ✓ | | |
| Site E | ✓ | | | |
| Site F | | ✓ | | |

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"On a scale of 1-10, how aggressive would you characterize your University's overall efforts directed at influenza during 2013-2014 flu season on your campus?"

| | Prevention Efforts | Containment Efforts | Treatment Efforts |
|---------|--------------------|---------------------|-------------------|
| Site A | 5 | 5 | 7 |
| Site B | 5 | 4 | 7 |
| Site C | 7 | 7 | 7 |
| Site D | 9 | 4 | 8 |
| Site E | 4 | 3 | 2 |
| Site F | UNK | UNK | UNK |
| Average | 6 | 4.6 | 6.2 |

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Preliminary Recommendations

- Vaccine free of cost
- Collaborative relationships
 - Housing - Housing alternatives
 - Maintenance - Sanitation
 - Faculty/Staff - Limit Contact
- Consistency
- Increase availability and opportunity

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Contact Information

Adelaide Murray –
aro78@unh.edu

Marc Hiller, MPH, DrPH –
marc.hiller@unh.edu

Rosemary Caron, MPH, PhD –
rosemary.caron@unh.edu