

Strategies for Overcoming Barriers to Healthcare Personnel Immunization

Thursday, April 25, 2019
1:00 PM ET



Agenda

Welcome and Introductions

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Strategies for Overcoming Barriers to Healthcare Personnel Immunization

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Questions and Answers



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- **Marla Dalton** (NFID staff, content reviewer) owns stock, stock options, patent, or other intellectual property from Merck & Co., Inc.
- **William Schaffner** (NFID medical director, content reviewer) served as an advisor or consultant for Dynavax Technologies Corporation, Merck & Co., Inc., Novavax, Inc., Pfizer Inc., Seqirus, Shionogi Inc., and SutroVax
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Learning Objectives

At the conclusion of this activity, participants will be able to:

- Summarize the current US recommendations for healthcare personnel (HCP) immunization and coverage rates
- Explain issues, challenges, and opportunities that may impact HCP immunization acceptance
- Discuss best practices and practical strategies to increase HCP immunization rates in various healthcare settings



About NFID

Non-profit 501(c)(3) organization dedicated to educating the public and healthcare professionals about the burden, causes, prevention, diagnosis, and treatment of infectious diseases across the lifespan

- Reaches consumers, healthcare professionals, and media through:
 - Coalition-building activities
 - Public outreach initiatives
 - Professional educational programs (ACCME accreditation with commendation)
 - Scientific meetings, research, and training
- Longstanding partnerships to facilitate rapid program initiation and increase programming impact
- Flexible and nimble organization



Strategies for Overcoming Barriers to Healthcare Personnel Immunization



Patricia A. Stinchfield, RN, MS, CPNP, CIC
NFID Vice President
Senior Director, Infection Prevention & Control
Children's Minnesota



Strategy 1

Know the Recommendations



Poll Question

Does your place of employment have mandatory influenza vaccination requirements?

1. Yes
2. No
3. Not sure
4. Not applicable



Centers for Disease Control and Prevention

MMWR

Recommendations and Reports / Vol. 60 / No. 7

Morbidity and Mortality Weekly Report

November 25, 2011

Immunization of Health-Care Personnel Recommendations of the Advisory Committee on Immunization Practices (ACIP)



MMWR 2011;60 (RR-07):1-29



ACIP Recommendations for Healthcare Personnel (HCP)

Routine Requirements

- Hepatitis B
- Influenza
- Measles, mumps, and rubella (MMR)
- Tdap
- Varicella

Lab workers

- Meningococcal
- Polio
- Typhoid

MMWR 2011;60 (RR-07):1-29. www.cdc.gov/vaccines/adults/rec-vac/hcw.html



Who Are We Talking About?

CDC: Healthcare workers include physicians, nurses, emergency medical personnel, dental professionals, students, medical and nursing students, lab technicians, pharmacists, hospital volunteers, and administrative staff

Pink Book: Measles Immunity in Healthcare Personnel

All persons who work within medical facilities should have evidence of immunity to measles

NFID Call to Action: HCP in hospitals, long-term care, clinics, rehab centers, urgent care, home health, and emergency medical service (EMS) personnel



Issues



Lack of accountability



No consensus on use of mandates and conditions of employment



Inconsistent implementation and performance metrics



Lack of targeted messaging



Disproportionate emphasis between influenza and other vaccines recommended for HCP

Hepatitis B

- 3 dose series upon hire if no evidence of completed series or serologic evidence of immunity
- Dose #1 upon hire, dose #2 in 1 month, dose #3 approximately 5 months after #2
- Draw anti-HB serologic test 1-2 months after dose #3
- Repeat for non-responders; may check serology after 1 additional dose or end of second series
- Retesting not necessary for HCP with documented post-vaccination immunity
- Occupational Safety and Health Administration (OSHA) allows declination after offering



Photo IAC image library. Liver cross section. Note enlarged cells and blistering of capsular surface

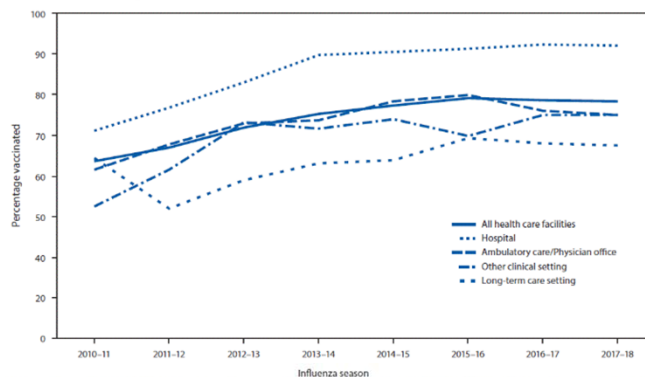
Influenza (Flu)

- One dose annually
- When? Current recommendations say as soon as it becomes available
- Best before the end of October
- Mandatory vs. recommended varies
- Efficacy varies per strain and per season
- Vaccination is best defense against severe influenza and related complications
- Safe



How Are We Doing with Flu Vaccination in Healthcare Personnel?

FIGURE 1. Percentage of health care personnel who received influenza vaccination, by work setting* — Internet panel surveys,¹ United States, 2010–11 through 2017–18 influenza seasons

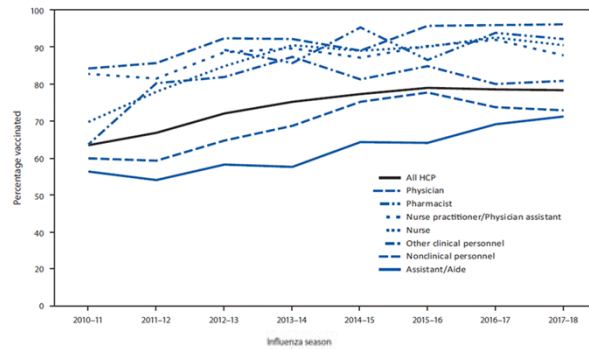


* Respondents could select more than one work setting. The "ambulatory care/physician office" category includes physician's office, medical clinic, and other ambulatory care settings. The "other clinical setting" category includes dentist office or dental clinic, pharmacy, laboratory, public health setting, emergency medical services setting, or other setting where clinical care or related services were provided to patients.



How Are We Doing with Flu Vaccination in Healthcare Personnel?

FIGURE 2. Percentage of health care personnel (HCP) who received influenza vaccination, by occupation* — Internet panel surveys, United States, 2010–11 through 2017–18 influenza seasons



* In the 2010-11 season, dentists were included in the physician category. Before the 2012-13 season, separate data on pharmacists were not collected. Other clinical personnel category includes allied health professionals, technicians, and technologists. Nonclinical personnel category includes administrative support staff members or managers and nonclinical support staff members (e.g., food service workers, laundry workers, janitors, and other housekeeping and maintenance staff members).

* Respondents were recruited from two preexisting national opt-in Internet sources: Medscape, a medical website managed by WebMD Health Professional Network, and general population Internet panels operated by Survey Sampling International.

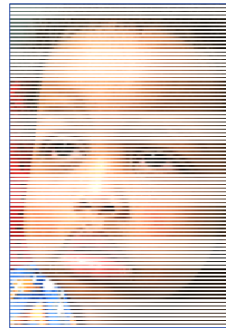


MMR

- Documentation of vaccination with 2 doses of MMR

If not:

- 1 dose upon hire, dose #2 at least 28 days later
- OR lab evidence of immunity
- OR lab confirmation of disease
- OR if born before 1957 and unvaccinated, and no lab evidence of immunity or lab confirmation of disease, give 2 doses MMR



www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm

Varicella (Chickenpox)

- If you have not had chickenpox, or have not had vaccine, or no current blood tests that show proof of immunity, get vaccinated
- 2 doses of varicella vaccine 4 weeks apart
- Having shingles requires previously having had varicella so no need to give varicella vaccine



Pertussis (Whooping Cough)

- Get one time Tdap vaccine as soon as possible if have not had one previously
- No minimum interval from last Td
- Get Td booster every 10 years thereafter
- Pregnant HCPs need a dose of Tdap vaccine with EACH pregnancy



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Meningococcal: For Lab Staff Who Handle Isolates Only

- One dose of each meningitis vaccine to lab staff who handle isolates of *N. meningitidis*
- Give both MenACWY and MenB to microbiologists
- May give both at same time (administer in different site)
- Every 5 years boost with MenACWY if risk continues



www.immunize.org/catg.d/p2017.pdf



Developing a Roadmap for Improvement & Engagement

Summit Overview:

Identification of the issues challenging forward progress in improving adherence to existing national guidelines

Recommendations offering approaches that seek to engage a full spectrum of stakeholders and partners

NFID Call to Action available at:
www.nfid.org/hcp-immunization



Strategies for Overcoming Barriers to Healthcare Personnel Immunization



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Strategy 2

Prepare for Common Conundrums

To titer or not to titer, that is the question

Living in the shadow of influenza



A Patient Case...



New patient presents to you for a pre-employment physical. She is starting medical school and isn't sure, but thinks she needs blood work.

You review her immunization record and she is up to date.



Poll Question

Does she need serologic titers drawn today?

1. Yes
2. No
3. Not sure



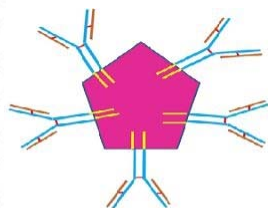
To Titer or Not To Titer...



- Serum titers
 - Blood tests that measure whether or not you are immune to given disease(s)
 - Qualitative vs quantitative
 - IgG vs. IgM titers

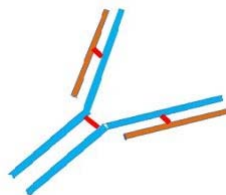


To Titer or Not To Titer...



IgM

- IgM serves as the first kind of defense, which means it is the first antibody to be immediately developed when any foreign particle is introduced, though its function is temporary

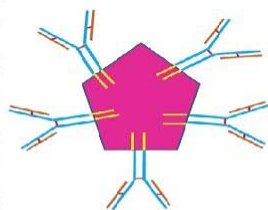


IgG

- IgG is a long term response for any disease and thus protect our body from viral and bacterial attacks



To Titer or Not To Titer...



IgM

- IgM serves as the first kind of defense, which means it is the first antibody to be immediately developed when any foreign particle is introduced, though its **function is temporary**



IgG

- IgG is a **long term response** for any disease and thus protect our body from viral and bacterial attacks



To Titer or Not To Titer...

You might need titers for:

- Hepatitis B (anti-HBs)
 - HCP without immunity give full vaccination series (2 or 3 doses)
 - Test titer at least 1 month after last dose & if still not immune, repeat series
 - Test titer at least 1 month after last dose & if still not immune: non-responder
 - Need counseling about protection
 - Need HBIG if any exposure occurs
 - HCP with documented full series
 - Check anti-HBs (before patient contact)
 - HCP with history of hepatitis C disease (anti-HBc positive)



To Titer or Not To Titer...

You might need titers for:

- Varicella (IgG)
 - No need to test if documented 2 doses of VZV
 - If disease suspected, check titers
 - HCP without documented immunity, give 2 doses
 - Varicella titers in use were developed for wild-type disease strain, not for vaccine protectiveness



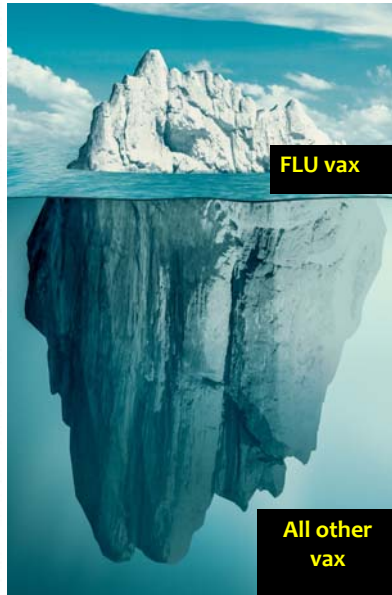
To Titer or Not To Titer...

You might need titers for:

- Measles, Mumps, Rubella (IgG)
 - HCP has no documented doses, vaccinate with 2 doses without checking titers
 - HCP with 2 doses of MMR are not recommended to be tested for immunity
 - If you test anyway and the result is equivocal, no additional dose of MMR recommended
 - HCP born before 1957: need lab titer OR 2 dose vaccination
 - Not immune to measles or mumps: Give 2 doses of MMR
 - Not immune to rubella: Give 1 dose MMR



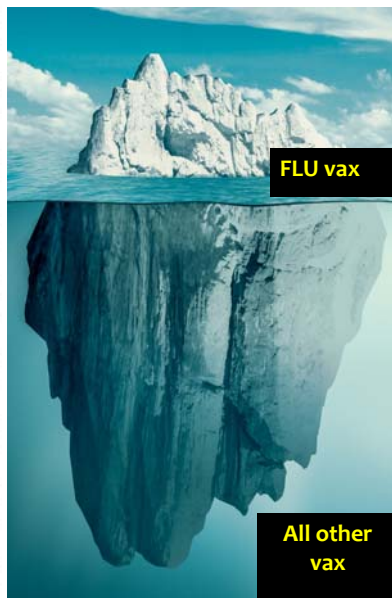
Living in The Shadow of Influenza



- Primary emphasis on influenza (flu) vaccine, inadvertently minimizing the importance of all other vaccines important to HCP
- Minimization emphasized by regulators (e.g., Centers for Medicare and Medicaid Services) and accrediting bodies (e.g., The Joint Commission)
 - Impacts hospital tracking & reporting priorities (e.g., investments in tracking or events)



Living in The Shadow of Influenza



- Annual campaigns are easy to plan & track
- Double-edged sword of publicity
 - Mismatched years
 - Recurrent coverage for influenza
- Misunderstanding about importance of other vaccines



Addressing Influenza Overshadowing Issues

- Use annual campaigns as opportunities to check (and deliver) other vaccines
- Leverage media for education/delivery events
 - Local outbreaks
 - National press
- Explore expanding influenza tracking processes to include other vaccines



Strategy 3

Leverage Best Practices



Selected HCP Best Practices

- Immunization champions
- Campaigns
 - Education
 - Provide vaccination free/low cost on-site
- Mandates, monitoring, and tracking
- Recognition
 - Incentives
 - Awards



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Questions & Answers



www.nfid.org/hcp-immunization



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