Overview: National Center for Immunization and Respiratory Diseases

Nancy Messonnier, MD

Director

2017 New Health Official Orientation

May 1, 2018

Photographs and images included in this presentation are licensed solely for CDC/NCIRD online and presentation use. No rights are implied or extended for use in printing or any use by other CDC CIOs or any external audiences.

NCIRD Organizational Structure

ADS, ADLS, ADI, GHS, ICU

Office of the Director
Nancy Messonnier
DIRECTOR

Allen S. Craig
DEPUTY DIRECTOR

Kristin Pope
DEPUTY DIRECTOR,
Management and Operations

ACIP, ACD, ADP, MO

Influenza Division
Dan Jernigan
DIRECTOR

Jackie Katz
Deputy Director

- Epidemiology and Prevention
- Immunization and Pathogenesis
- Virology Surveillance and Diagnostics

Division of Viral Diseases
Mark Pallansch
DIRECTOR

Rita Helfand
Acting Deputy Director

- Viral Gastroenteritis
- Polio and Picornavirus Laboratory
- Respiratory Viruses
- Viral Vaccine Preventable Diseases

Division of Bacterial Diseases
Barbara Mahon
DIRECTOR

Vacant
Deputy Director

- Meningitis and Vaccine Preventable Diseases
- Respiratory Diseases

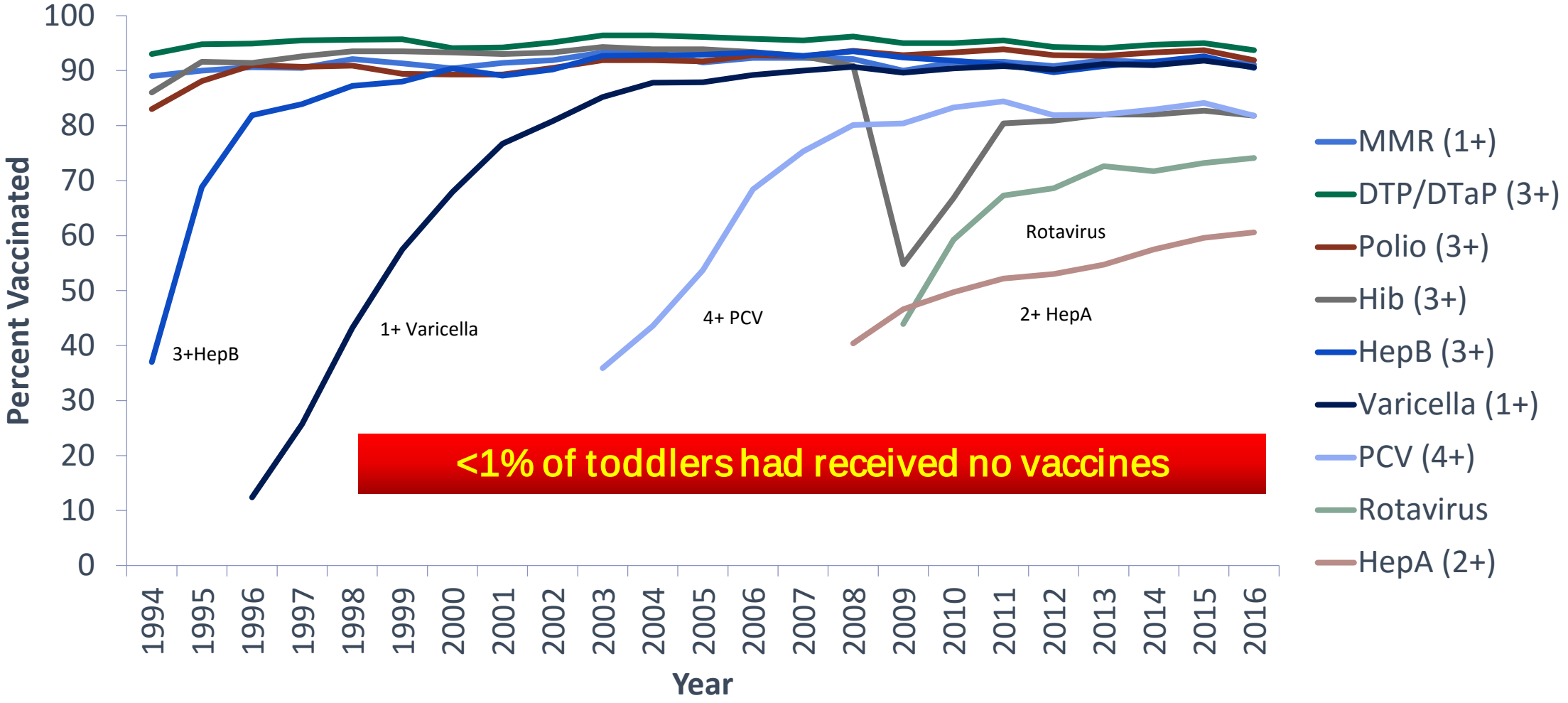
Immunization Services Division
Melinda Wharton
DIRECTOR

Cindy Weinbaum
Deputy Director

- Immunization Information Systems Support
- Program Operations
- Vaccine Supply and Assurance
- Communication and Education
- Assessment

Updated: April 2018

Vaccine Coverage among Children 19-35 Months, National Immunization Survey, United States, 1994-2016



The Healthy People 2020 target for coverage is 90% for all these vaccines with the exception of rotavirus (80%) and HepA (85%).

Abbreviations: MMR = measles, mumps, and rubella vaccine; DTP/DTaP = diphtheria, tetanus toxoids, and pertussis vaccine / diphtheria, tetanus toxoids, and acellular pertussis vaccine; Hib = Haemophilus influenzae type b vaccine; FS = full series; HepB = hepatitis B vaccine; PCV = pneumococcal conjugate vaccine; HepA = hepatitis A vaccine

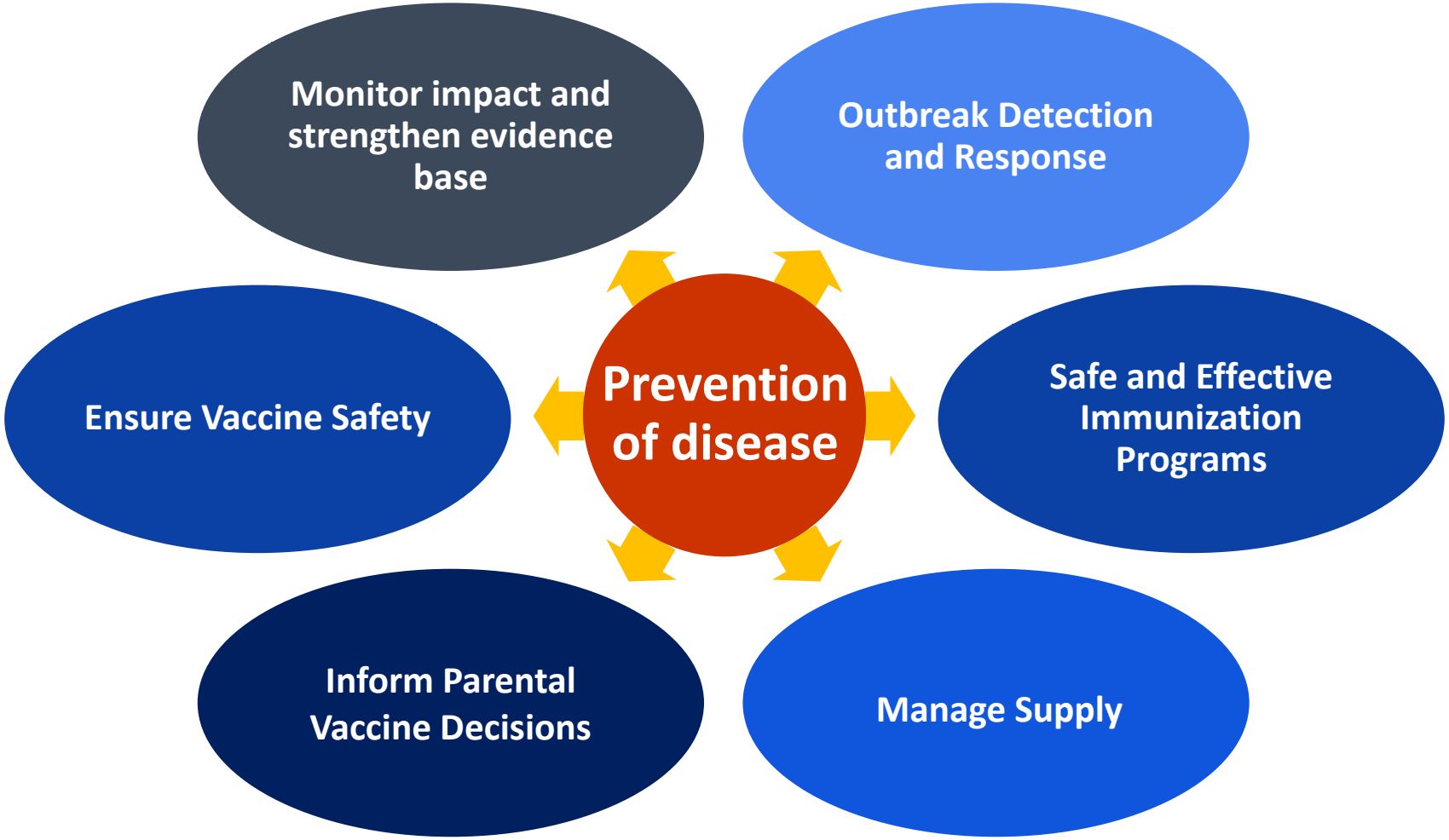
U.S. Childhood Immunization Provides Big Savings

CDC estimates that vaccination of children born between 1994 and 2016 will:

- Prevent 381 million illnesses
- Prevent 24.5 million hospitalizations
- Help avoid 855,000 early deaths
- Save nearly $360 billion in direct costs and $1.65 trillion in total society costs

Updated data from previous article: Benefits from Immunization During the Vaccines for Children Program Era – United States, 1994-2013. *MMWR*. 25 April 2014

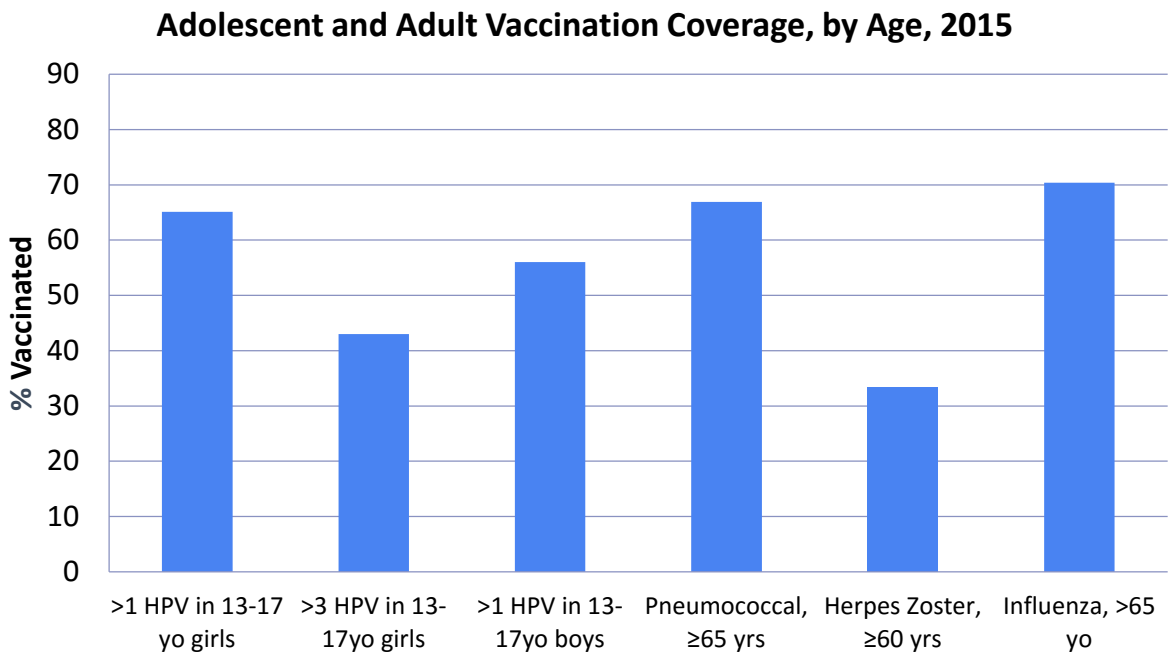
Public Health's Role in Immunization

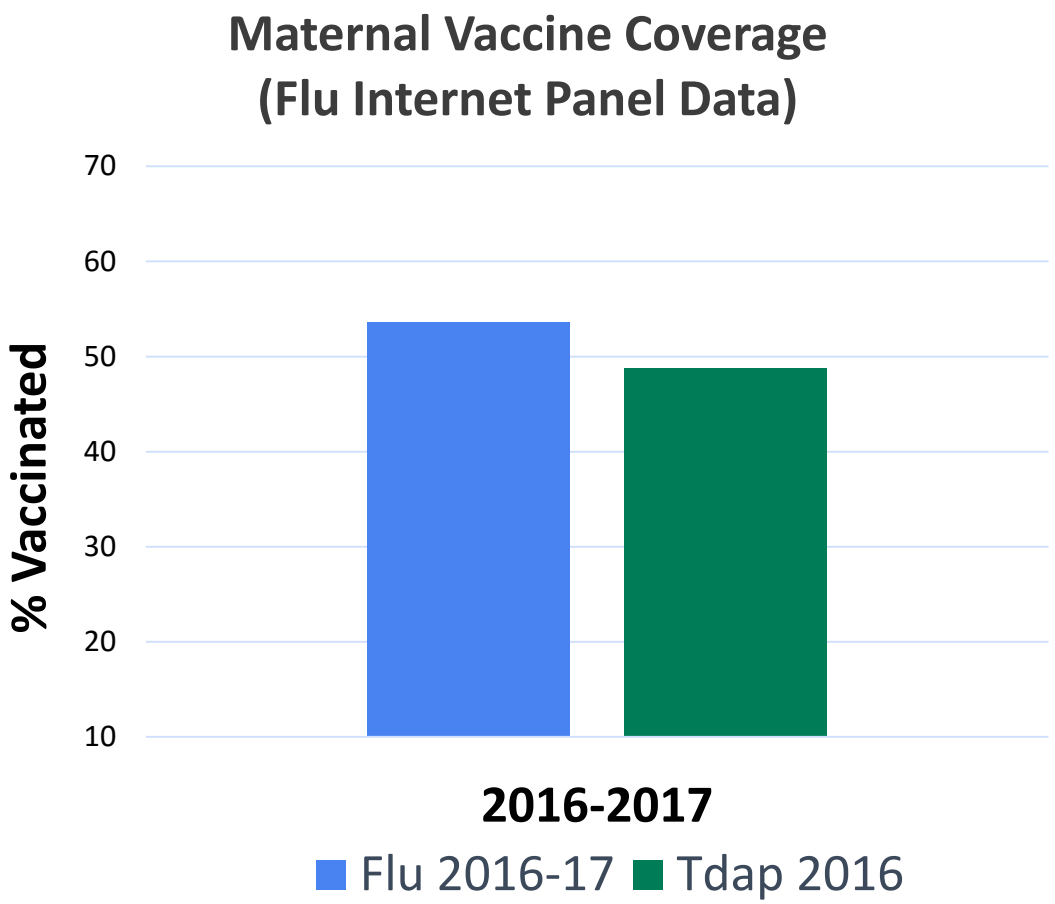


NCIRD's VPD Epi and Lab Support in 2017

- *44 SPHLs and 8 county laboratories were submitting to VPD Reference Centers*
- *Over 12,600 tests were performed for measles, mumps, rubella and varicella zoster virus, with more than 1400 measles and mumps specimens being genotyped (between 2014 and 2017)*
- **Assisted states in investigated 81 VPD clusters outbreaks**
- **CDC labs tested 971 measles, mumps, rubella, and varicella zoster specimens (can't be linked to specific clusters/outbreaks, this is total)**
- **Engaged in 32 responses/consultations to states on meningitis and pertussis and provided laboratory testing on 140 specimens**

Adolescent and Adult Vaccination





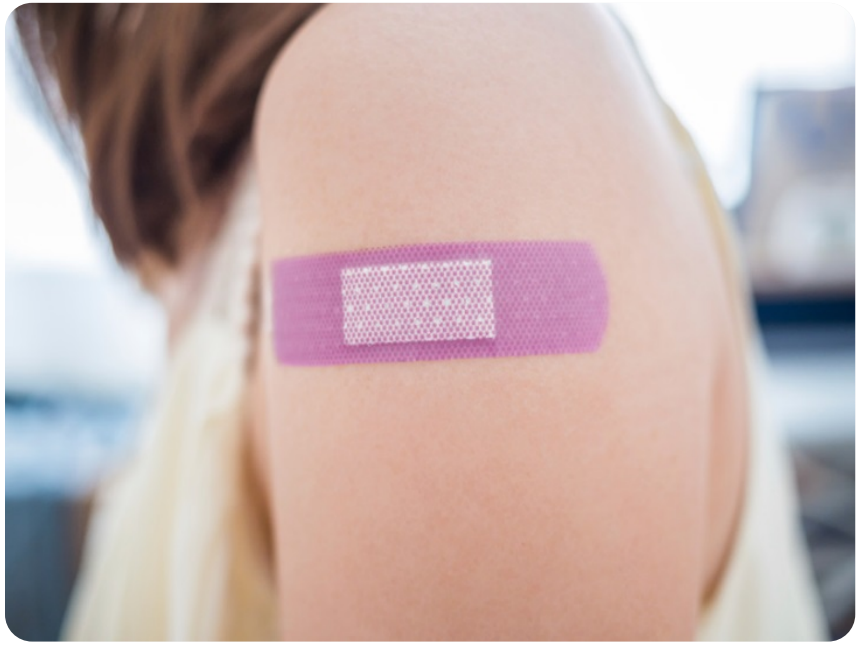
www.cdc.gov/vaccines/adults

www.cdc.gov/vaccines/parents

www.cdc.gov/pertussis/pregnant

HPV: MMWR 2017 66(33): 874-882
Pneumococcal, Herpes Zoster, Influenza (2015-16 season): NHIS 2016,
(see https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/NHIS-2016.html)

What can State Health Departments Do to Increase HPV and Adult Immunization?



- **Implement effective strategies to improve immunization coverage:**
  - Support AFIX focused on adolescent vaccination
  - Promote Adult Immunization Practice Standards
  - Use HPV and adult immunization as a quality measure
  - Increase public awareness about adult vaccines and support for HPV vaccination as cancer prevention
- **Work with partner organizations to make increasing immunization coverage a priority**
- **Share data**

2017-18 Influenza Season Summary

- Influenza A(H3N2) viruses – usually associated with more severe seasons and reduced vaccine effectiveness – were predominant this season
- Intense, widespread and severe flu activity occurred simultaneously across the United States
  - Influenza-like illness peaked at 7.5%, the highest level recorded since the 2009 H1N1 pandemic (7.7%) and since 2010, second only to the 2003-04 season (7.6%) for a regular flu season. Second wave of influenza B viruses followed.
  - Hospitalization rates broke records
  - Mortality similar to the 2014-15 H3N2 “high” severity season
- Interim vaccine coverage estimates similar to past seasons (39%)
- Interim vaccine effectiveness against H3N2 similar to past H3N2 seasons, low (25%)
- Spot shortages of influenza antiviral medications

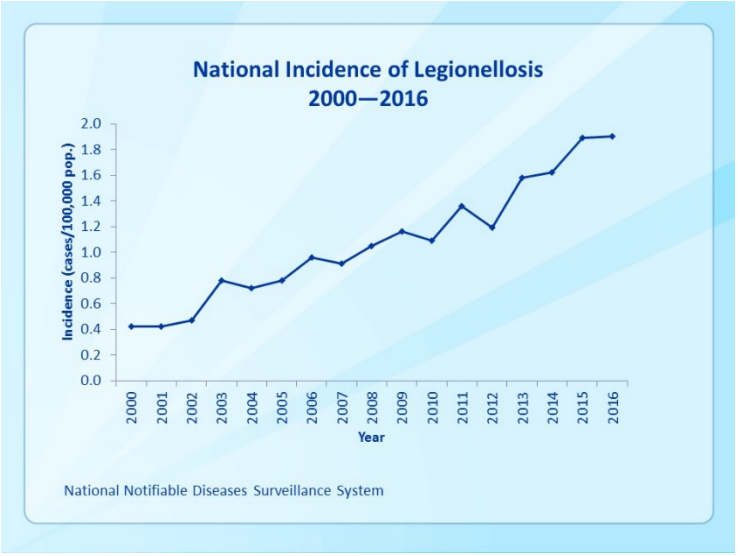
The 2017-18 Flu Season Underscores …

- Flu is unpredictable and can be severe
- More and better vaccine effectiveness data could help better inform flu policy
- We need to increase vaccine uptake and improve effectiveness of existing flu vaccines to further blunt the impact of the virus
- We need more and better treatment drugs
- A severe flu epidemic or pandemic can stretch and overwhelm existing public health capacity and bring intense media and public interests.
- A robust public health response and infrastructure, along with frequent, consistent, and accurate communications are imperative.

Legionnaires' Disease

Partnership efforts

- Developing partnership plan and strategy
  - Goal: Improve prevention, diagnosis, surveillance, and response
- Presenting at *Legionella* 2018 Symposium May 9-11
- Presenting on NACCHO webinar May 30
- Exploring opportunities with ASTHO



New Partner Resources Coming Soon!

www.cdc.gov/legionella

For Health Departments −

- Surveillance & Reporting Resources +
- Epidemiology Resources +
- Healthcare Resources +
- Environmental Resources
- Communications Resources
- Request CDC Assistance

Healthcare Resources −

- Defining Facilities & Disease
- Things to Consider: Healthcare-associated Cases and Outbreaks
- Preventing Healthcare-associated Disease

Prevention with Water Management Programs −

- Overview of Water Management Programs
- Water Management Program Toolkit +
- Monitoring Your Building Water
- Special Considerations for Healthcare Facilities +
- Considerations for Public Hot Tub Operators
- Considerations When Working with *Legionella* Consultants

In the next few months …

- 100th year commemoration of 1918 Influenza pandemic
  - May 7: CDC/Emory Symposium
- National Immunization Conference May 15-17
- Updated Vaccine Schedules App for Clinicians and Other Immunization Providers
- ACIP will be working on improving the homepage for the immunization schedules so links are more clear and available digitally
- Focus on overcoming barriers to maternal immunization and discrepancies in vaccine coverage, especially flu coverage rates
- National Immunization Survey results released in the Fall