



Healthcare Providers' Knowledge, Attitudes, and Behaviors Regarding MMR Vaccination and Measles in Adults: Preliminary Survey Results

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Outline

- Background and Purpose of Survey
- Methods and Survey Questions
- Results
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Background and Purpose of Survey

Measles



- Highly contagious disease that can lead to serious complications.
- Symptoms generally appear 7-14 days after contact with the virus.
- Typically includes high fever, cough, runny nose, and watery eyes.
- Rash typically appears 3 to 5 days after the first symptoms.
- Can be prevented with MMR vaccine.
(1 dose = 93% effective; 2 doses = 97% effective.)

MMR Recommendations: Children, Teens/Adults



Children:

First Dose = 12-15 months

Second Dose = 4-6 years

Teenagers and adults with no evidence of immunity:

First Dose = ASAP

Second Dose = N/A



MMR Recommendations: International Travelers

Infants under 12 months old:

Get an early dose at 6-11 months.

Follow the recommended schedule and get another dose at 12-15 months and a final dose at 4-6 years.

Children over 12 months old, teens/adults with no evidence of immunity:

Get the first dose immediately.

Get the second dose at least 28 days after the first dose.



Measles in the U.S., 2018-2019

- Prolonged measles outbreaks in NYC & NYS starting late 2018
- Jan–Sept 2019: 1,249 U.S. measles cases reported
- Most cases associated w/ large & closely related outbreaks in NY
- 89% of patients = unvaccinated or unknown vaccination status
- 86% associated w/ outbreaks in under-immunized, close-knit communities; including 2 outbreaks in Orthodox Jewish communities
- U.S. measles elimination status threatened
- CDC led response to support NY in stopping the outbreaks

The New York Times



GLOBAL HEALTH
Measles Cases Surpass 700 as Outbreak Continues Unabated

The outbreak is now the worst in decades. Children under age 5 account for about half of the cases.

· By DONALD G. MCNEIL JR.



Measles Outbreak: N.Y. Eliminates Religious Exemptions for Vaccinations

New York, where measles has spread in ultra-Orthodox Jewish communities, joins California and a handful of other states in revoking religious exemptions.

· By JESSE MCKINLEY

Measles Outbreak Questions and Answers: Everything You Want to Know

The disease was declared eliminated in 2000. So far this year, there have been more than 970 cases.



· By PAM BELLUCK and ADEEL HASSAN

Purpose of Survey

- 29% of measles cases in 2019 were adults (18 yrs)
- Outbreaks prompted questions from clinicians/public about measles/MMR vaccination.
 - *I only got one dose of measles vaccine as a child. Do I need a second dose?*
 - *What do I do if I am unsure whether I am immune to measles?*
 - *Can I still get measles if I am fully vaccinated?*
 - *How effective is the measles vaccine?*

Purpose: To assess healthcare providers' (HCPs) knowledge, attitudes, and behaviors (KAB) regarding adult measles and MMR vaccination in order to support response to questions and concerns, and ultimately, to prevent measles cases and outbreaks in the U.S. , as well as unnecessary vaccination and testing.

Methods and Survey Questions

Data Collection: Survey

- Porter-Novelli web-based survey of HCPs
- Oct 3- Nov 3, 2019
- Qualifications:
 - Practice in the United States
 - Actively see patients
 - Work in an individual, group, or hospital practice
 - Have been practicing for at least 3 years
- 158 questions on attitudes and counseling behaviors on a variety of health issues and information sources
- 6 questions on measles/MMR

Respondents

1,250 HCPs answered measles questions

- Median age = 47
- Male = 60%
- Median number of years practicing medicine = 16
- Worked in a group outpatient practice = 64%
- Median number of patients seen per week = 100
- Region: Midwest (25%), South (21%), Northeast (34%), West (20%)

Survey Questions

1. Have you seen an increase in the number of adult patients asking about measles or MMR vaccination in the last 12 months? Yes/No
2. Under what circumstances do you check the measles vaccination status or initiate a conversation with your adult patients about measles vaccination?
 - Patients with immune system issues
 - Patients planning to travel internationally
 - When a patient is pregnant
 - When a patient has travelled abroad
 - Patients planning to travel domestically
 - At every visit
 - Never

Survey Questions

3. What MMR vaccination-related topics have your adult patients asked you about in the last 12 months?

- Need for an additional dose (“booster”)
- Serologic testing for measles immunity
- Presumptive evidence of immunity
- Recommendations for adults (general)
- Recommendations for international travel
- Recommendations for domestic travel
- MMR vaccine safety
- MMR vaccine efficacy
- MMR vaccine ingredients/how it’s made
- None

Survey Questions

4. What measles-related topics have your adult patients asked you about in the last 12 months?
- Risk of measles related to an outbreak
 - Measles exposure/transmission
 - Measles symptoms/diagnosis
 - Measles complications
 - Measles treatment
 - None

Survey Questions

5. What types of materials do you prefer for counseling adult patients on measles and/or MMR vaccination?

- Handouts/brochures
- Vaccine Information Statement (VIS)
- Posters
- Infographics
- Videos
- None

Survey Questions

6. What additional types of information or tools would be useful for you to counsel adult patients on measles and/or MMR vaccination?

- MMR vaccination reminders on patient records
- Clinical decision-making tool
- Criteria for presumptive evidence of immunity
- Measles protection protocols
- Guidance on diagnosing measles
- Preventing exposures at your facility
- Criteria for evidence of immunity among staff
- None

Analysis

Descriptive analysis using SAS 9.4

Results

Key Findings

Adult Patients Asking about Measles/MMR in Previous 12 Months

51% of HCPs saw an increase

Top MMR-related Topics

51% Need for an additional dose (“booster”)

48% Serologic testing for measles immunity

45% Recommendations for adults (general)

Top Measles-related Topics

48% Risk of measles related to an outbreak

40% Measles exposure/transmission

Key Findings

Top Reasons HCPs Check Measles Vaccination Status/Initiate a Conversation about Measles Vaccination

46% Patients with immune system issues

45% Patients planning to travel internationally

38% When a patient is pregnant

33% When a patient has travelled abroad

Key Findings

Types of Materials Preferred for Counseling Patients on Measles/MMR

55% - Handouts/brochures and *Vaccine Information Statements*

Additional Types of Information/Tools That Would Be Useful

50% - MMR vaccination reminders on patient records

Implications and Limitations

Implications

Outbreaks in the news led to an increase in questions/concerns from adults about measles and the need for HCPs to counsel adult patients on measles/MMR.

Specific information gaps exist among adult patients around topics such as duration of protection from MMR and risk of measles during outbreaks.

Additional development and dissemination of materials targeting sub-populations (e.g., travelers) would support HCP counseling of adult patients around measles/MMR.

Limitations

- Small sample size
- Convenience sample
- Limited survey structure

Thank you!

Questions?

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

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