

MEASLES OUTBREAK NEW YORK CITY, 2018-19

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Disclosures

Jennifer Rosen has nothing to disclose with regard to commercial relationships



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BACKGROUND: 2018-2019 MEASLES OUTBREAK

- Began Oct 2018 with an unvaccinated child from Brooklyn who acquired measles in Israel, where a large outbreak was occurring
- 649 cases (onsets Sept 30, 2018 to July 15, 2019)
- Declared over Sept 3, 2019
- Largest U.S. outbreak since 1992*
- Multiple importations from Israel, UK, Ukraine, NY (outside of NYC) and NJ

*CDC. Measles—United States, 1992. MMWR 1993



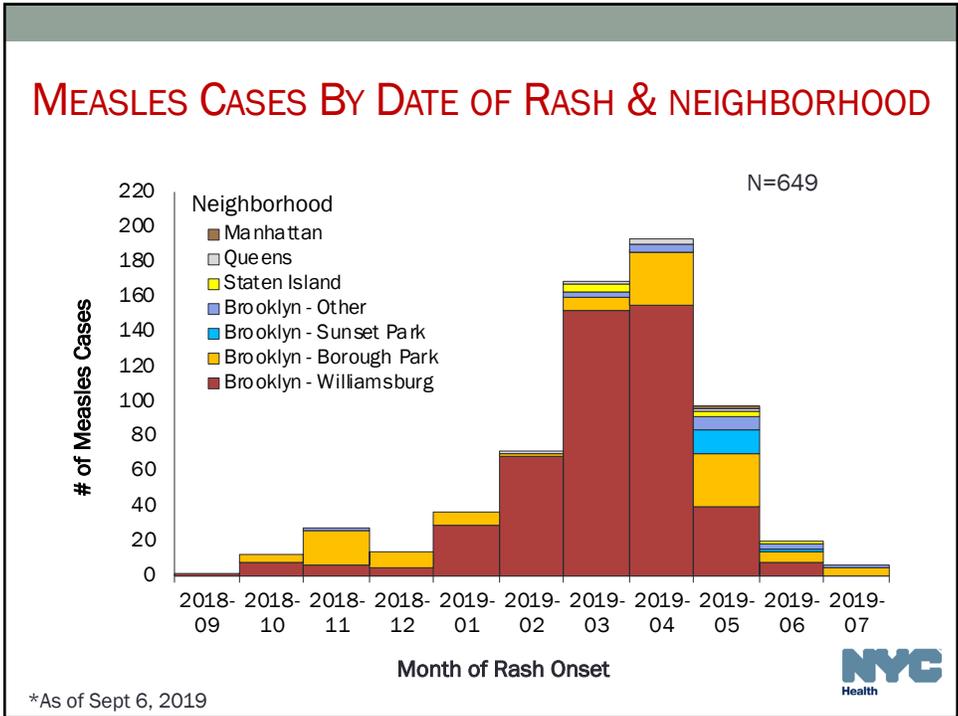
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FOCUS IN ORTHODOX JEWISH NEIGHBORHOODS WILLIAMSBURG AND BOROUGHPARK, BROOKLYN

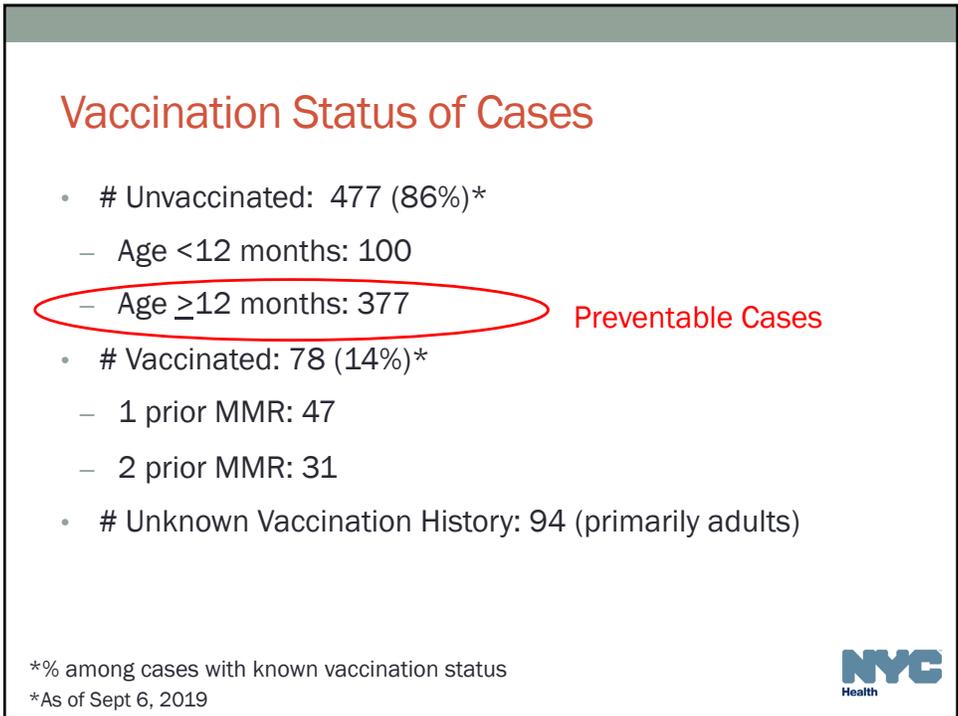
93% Orthodox
Jewish



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NEW YORK CITY DEPARTMENT OF HEALTH RESPONSE



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Revised MMR Recommendations During Outbreak (No longer apply)

- For persons residing or regularly spending time in areas with ongoing measles transmission*
- Same as international travel recommendations
- Children aged 6 to 11 months: early, extra dose of MMR**
- Children ages 1 to 4 years: early 2nd MMR**
- Children and adults aged ≥ 4 years: 2 MMRs (or proof of immunity)

*Consider early, extra dose for Orthodox Jewish infants ages 6-11 months living anywhere in NYC

**Maintain 28 days between doses of live vaccines: MMR, varicella, intranasal flu



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Survey of Infection Control Practices

- Population: Outpatient practices that reported suspect measles cases from Sept–Dec, 2018 (15 of 17 responded)
- Avoided use of private exam for 2 hours (93%)
- Screening for measles by phone (87%)
- Posted signs about measles symptoms (100%)
- Written protocols for measles (60%)
- Alternative isolation practices
 - Seeing patients outdoors (60%)
 - Using entrances/exits of different buildings (40%)
 - Evaluating patients after hours (27%)
 - Home visits (27%)

Source: Alroy et al. Interventions to reduce measles virus exposures in outpatient health care facilities—NYC, 2018. MMWR. 2019. 68(36)791-2.



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Provider Outreach

- Multiple health alerts and presentations to clinicians
- Reminders to recall unvaccinated patients
- Clinical and infection control technical assistance
- Distribute posters and pamphlets in English and Yiddish to medical facilities
- Ensure providers have enough MMR vaccine on hand
- Guidance for post-exposure prophylaxis and home quarantine for exposed persons



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Community Engagement

- Meetings with local religious, community and elected officials
- Collaborated with key community partners
- Letters sent to parents through schools
- Letters sent to households with unvaccinated children
- Robocalls (multiple times, ~75,000 contacts)
- Immunization hotline



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Media and Community Education

- Focused on print and digital media serving the community
 - English and Yiddish
 - Measles symptoms and travel warning, MMR vaccination
 - Co-branded
 - WhatsApp
- Distribution of materials, Tzim Gezint booklet and Slice of PIE, through providers and local community-based organizations
 - Mailing to 29,000 households



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School & Child Care Outreach

- Policy change on December 7, 2018 required exclusion of unvaccinated students with medical/religious exemptions in impacted zip codes (*no longer applies*)
- DOHMH audits to ensure compliance with immunization requirements (n=101 facilities)
- Commissioner's Orders and Notices of Violation to non-compliant facilities
- 12 schools closed temporarily for failing to provide access to medical and attendance records or for having students without required documentation of MMR in attendance*



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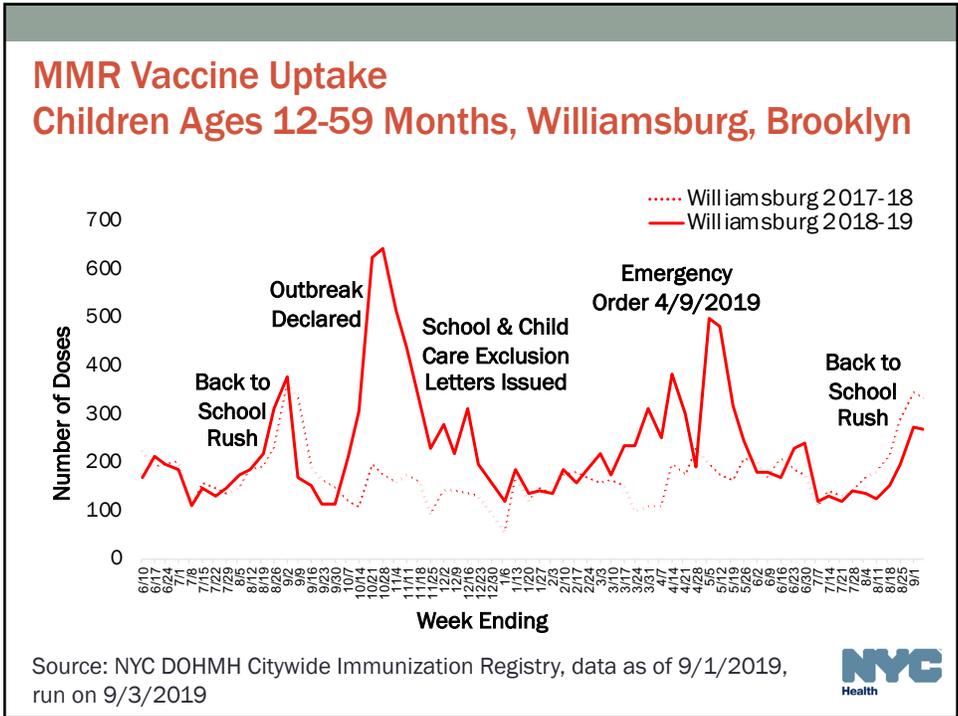
April 9: Public Health Emergency Declared Commissioner's Order (*no longer applies*)

- Every adult and child who lives, works or resides in Williamsburg (4 zips*) and has not received the MMR vaccine must be vaccinated
- Exemption: People who demonstrate they are immune from measles or should be medically exempt
- 232 individual summonses issued since 4/9/19
 - Many cancelled based on vaccination or proof of immunity
- \$1,000 fine if summons is upheld

*Zips: 11205, 11206, 11211, 11249



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Increases in Vaccination in Children*

- NYC, Citywide
 - 188,635 MMR doses administered
 - Represents a 14% increase (23,320 additional doses) vs. the same period last year
- Williamsburg, Brooklyn
 - 11,964 MMR doses administered
 - Represents a 54% increase (4,216 additional doses) vs. the same period last year
 - Proportion of children with ≥ 1 dose of MMR increased from 80% to 91%**

*Oct 1, 2018 through Sept 1, 2019; ages 12 to 59 months
 **2019 population estimates

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Challenges

- Need to rapidly ramp-up audits of schools and child cares
- Need to identify unvaccinated persons for individual summons in quick time-frame
- Measles “parties” to intentionally expose children
- Possible mistrust of DOHMH given school exclusions and mandatory vaccinations
- Religious exemptions to school-required immunizations had been allowed in NY and were steadily increasing in private schools
 - 1,420 (0.5%) in 2012-2013 to 3,914 (1.5%) in 2018-19
 - Orthodox Jewish schools: 678 (0.7%, range 0-14%) in 2012-13 to 2,869 (2.7%, range 0%-28.5%) in 2018-19



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The New York Times

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.



June 13, 2019



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Thank You

**TOGETHER WE CAN STOP
MEASLES**

One person with measles can infect an average of 12 to 18 people without immunity.



PROTECT YOURSELF, YOUR FAMILY AND YOUR COMMUNITY.
GET VACCINATED TODAY.
CONTACT YOUR DOCTOR IMMEDIATELY.

NYC
Health

**מיר קענען אינאיינעם אפשטעלן
מיזעלס**

אן איינצעלע מענטש מיט מיזעלס קען אנשטעקן פון 12 ביז 18 מענטשן וואס זענען נישט אימיון.



באשעס זיך, דיין פאמיליע און די קהילה.
ווערט היינט וואקסנירט.
וויסן פון אן ווערט וואקסנירט.

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