

## **MEASLES PREPAREDNESS AND RESPONSE: A LOCAL HEALTH DEPARTMENT PERSPECTIVE**

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**Westchester Rockland Immunization Coalition  
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## **Measles Preparedness Efforts**

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**October 2018 – Outbreak identified in neighboring jurisdictions**

- **Initiated efforts in Westchester County**
- **Information and outreach to affected and medical communities and general public**

**Internal departmental training and procedures:**

- **Reporting and Investigation**
- **MD On Call**
- **Mock Drill**

**March 2019 – Measles Case at WC College Campus**

## Westchester County Measles Case

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- **January 2019 – Measles IgM ECLRS Report received**
- **April 2019 – First symptomatic case in WC resident reported**
  - 6 month old hospitalized with measles pneumonia
- **Ultra Orthodox Jewish community**
- **N=18**
  - 2 hospitalized with pneumonia
- **Age range: 6 months to 14 years**
  - Mean: 6.2 years
  - Median: 7 years
- **Onset date range:**
  - late November 2018 to April 12, 2019
- **Total Number of Contacts: 459 (Household/Yeshiva/Hospital/Urgent Care)**

## Westchester Measles Response

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- **Case and Contact Investigations**
- **School Vaccine Records Audits with NYSDOH**
- **Vaccine Clinics**
- **Medical Community**
- **Community Outreach/Cultural Sensitivity**
- **Hudson Valley Regional Health Officers Network Meeting (HVRHON)**
- **Camps**
- **Public Information/Website/Media**

## Household Contact Investigations

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- **4/8/19 - Home visit to family with 2 hospitalized cases**  
Gain family/community goodwill, trust, and co-operation and for infection control concerns
  - Histories, lab specimens - NP/urine and serologies
  - 2 additional family members with measles rash identified
  - 3rd case measles PCR (+) prior to rash onset
- **Conducted for all 18 cases**
  - Multiple cases in 5 families
  - 26 contacts

## School Contact Investigations

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- **Yeshivas – 2 WC schools:**
  - 13 cases attended a Boy's K-9 Yeshiva
  - 3 cases attended a Girls K- 8 Yeshiva
    - 156 boys (32 excluded)
    - 120 girls (29 excluded)
    - 14 Rabbis (1 excluded)
    - 13 Teachers
  - 1 case attended a Yeshiva in another county
  - 99% and 97% measles immunity by MMR x 2 or (+) measles IgG serologies at K-9 Boy's and K-8 Girls yeshivas achieved

## Westchester County Yeshivas

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- **6 Ultra-Orthodox at 4 locations**
  - 1 location with 3 schools – Girl’s and Boy’s K-8 and Boy’s High School
- **Identified through Food Service Establishment (FSE) Registrations/Permits**
- **Not all on file with NYS Education/Schools use multiple names**
- **Multiple sects – Pupa, Nitra, Viznitz, Kasho**
- **4 with “parent institution”/main location or administrators in Brooklyn and 1 in Rockland**
- **Significant contact with individuals from communities with ongoing measles transmission outside of Westchester**
  
- **2 Modern Orthodox**

## School Vaccine Audits

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- **Vaccine records review of 2 schools attended by cases part of contact investigation/routine control measures**
- **NYSDOH has authority to audit vaccination records at schools in the absence of a reportable VPD**
- **2 additional Yeshivas:**
  - No vaccine surveys on file with NYSDOH
  - Not all use conventional K-12 grades
  - Potential exposures to cases outside of WC
  - 1 – residential school - all students Rockland residents and same campus where a number of cases live
  - 1 – with large number of cases at Brooklyn “main” campus location
  
- **Achieved 94% and 97% immunity either by MMR x 2 or (+) measles IgG serologies**

## Contact Investigations Healthcare Facilities

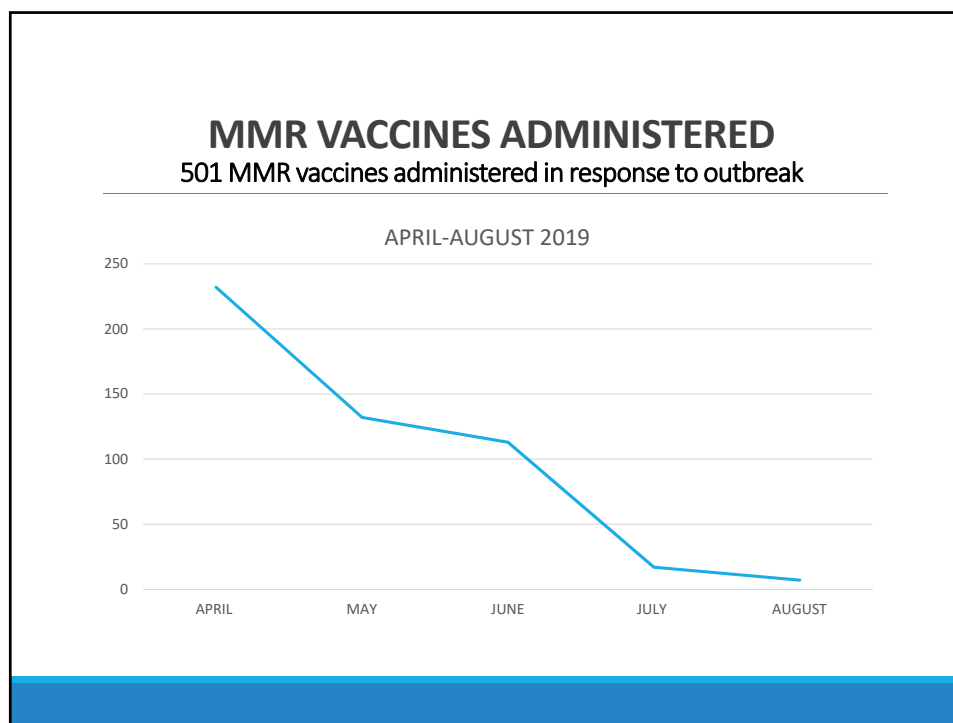
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- Urgent Care - 26 patients/visitors and 10 healthcare workers exposed
- Hospital – 2 cases hospitalized with pneumonia - almost 100 patients/visitors exposed
  - One case never diagnosed or isolated for duration of hospitalization/underscored need to provide measles information to medical community
  - NYSDOH handled hospital exposure/investigation –
  - No additional cases identified due to HCF exposures
- Disruptive – facility closure and contact investigation for all present 2 hours following exposure

## Clinics

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- Proactively had a measles patient drill in December 2018 to identify gaps in education re: patient management
- Ensuring staff measles immunity
  - Review of vaccination records for Article 28 staff
  - Offered vaccine to non-Article 28 staff without documented immunity
- Set up on and off site clinics administering MMR
- Staffing for high volume provider and public inquiries during clinics



### Medical Community

#### Need for measles information to medical community

Victim of our own success

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- **Assessing risk for measles**
  - Not considering measles diagnosis in those at high risk
  - 36 without risk factors tested – disruptive to clinical setting and diversion of resources
- **Recommended Diagnostic Testing and Infection Control**
- **Urgent Cares, Medical Practices, Hospital EDs**
- **Reinforce vaccine recommendations, especially early or accelerated schedule due to outbreak or international travel**
- **Materials developed, compiled, posted to WCDH website, and distributed and/or reviewed in meetings, conference calls:**
  - Measles Risk Assessment Poster
  - Public Health Update
  - Measles Quick Facts
  - FAQ's in Yiddish and English
  - Tzim Gezint Publication





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## Community Outreach/Cultural Sensitivity

- Work through community leaders, treating providers and not directly with affected community
- WCDH Disease Control staff with thorough familiarity of affected community and fluent in written and spoken Yiddish
- Best way to communicate to elicit information of interest while respecting customs and culture
  - Sabbath and Jewish holidays
  - Reference to Jewish holidays to establish dates
  - Use of male nurse/staff
- Identification of liaison vs. decision makers for household or community
  - Role of patriarch vs. matriarch
  - Head of school vs. site administrator, community vs. synagogue religious leader
  - County Executive liaison with community
- Preference for getting MMR vs. measles serologies
  - WCDH held on site clinic with poor vaccine uptake, greater interest in "titers" or "blood tests"
  - Community members preferred getting vaccinated or being seen by treating MD



## Challenges/Lesson Learned

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- Close-knit community/Distrust
- Jewish holidays-family celebrations
- Large families-different and multiple jurisdictions
- School enrolled student lists in Yiddish-matching immunization records to roster
- No school vaccine surveys on file with NYSDOH
- Different community leaders for each sect or even with a given sect;
- Communications:
  - Leaders often not members of organizations for “mass distribution”
  - No e-mail or internet access by community leaders or school staff
  - Communication required word of mouth or personal communication from individual they know or trust, hard copies at synagogues

## Camps

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- No legal authority to require vaccination for campers or staff in the absence of a current case, ongoing transmission, or outbreak
- Amendment to Westchester County Law strengthening WCDH and BOH authority to prevent disease
- 4/25/19 Camp Workshop – required annual attendance for the 228 permitted WC camps
- Template Form to track camper and staff vaccine documentation
- Few overnight camps
- “High risk” camps with international staff and campers or serving affected community identified for targeted efforts e.g. DC site visits to review measures to prevent and contain potential cases

## **Public Information/Website/Media**

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- **COH Letter with Measles Fact Sheets, MMR vaccines**
  - Schools, Childcares, WC Library System, CBOs
- **Press Releases/Media**
- **WCDH Phone Messages/Phone Line Staffing**
- **Medical Community and General and Targeted Public materials**
- **Website**

## **Acknowledgements**

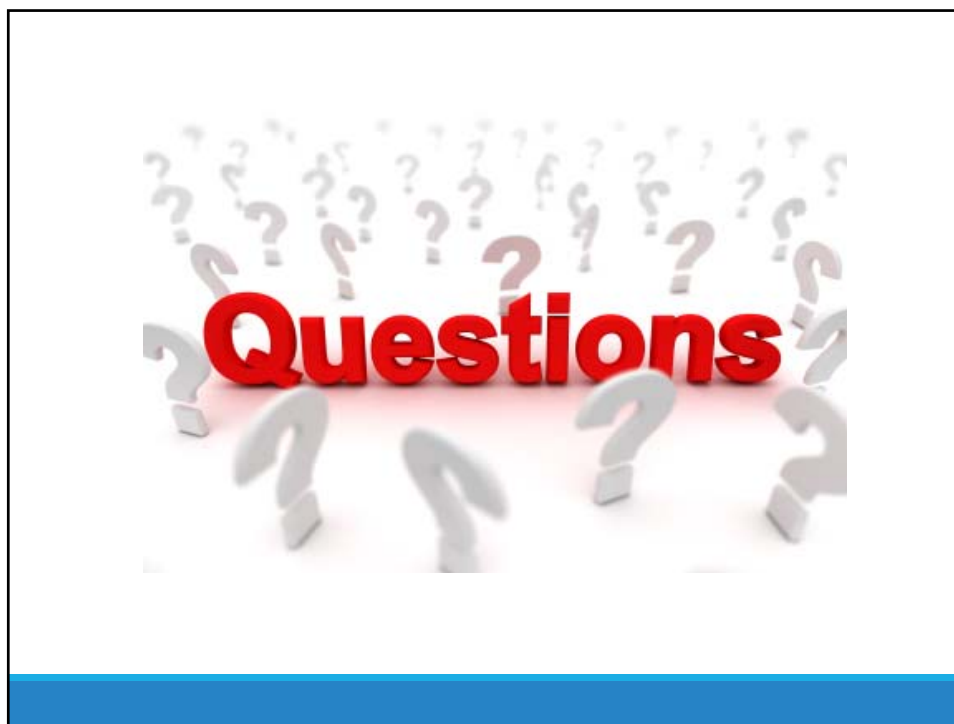
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### **WCDH**

- **Nursing**
- **Epidemiology**
- **Physicians**
- **Health Promotion**
- **Children With Special Needs**
- **Environmental Health**
- **Administration**

### **NYSDOH**

**Medical Community and Other Community Partners**



### For More Information

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