

# Public Health measles response

---

Brianna Dannen, RN, MPH, Public Health Nurse II

April 17, 2019



# Beginning of the outbreak

---

- **Dec. 31:** First known case visited Memorial Urgent Care.
- **Jan. 4:** Lab confirmation of measles in a child 1-10 years old with unknown immunization history.
- **Jan. 15:** Two additional confirmed cases and 11 suspect cases.
- **Jan. 15:** Public Health activated Incident Command System to respond to the outbreak.



# Incident Command System

The Incident Command System is a standardized approach to incident management.

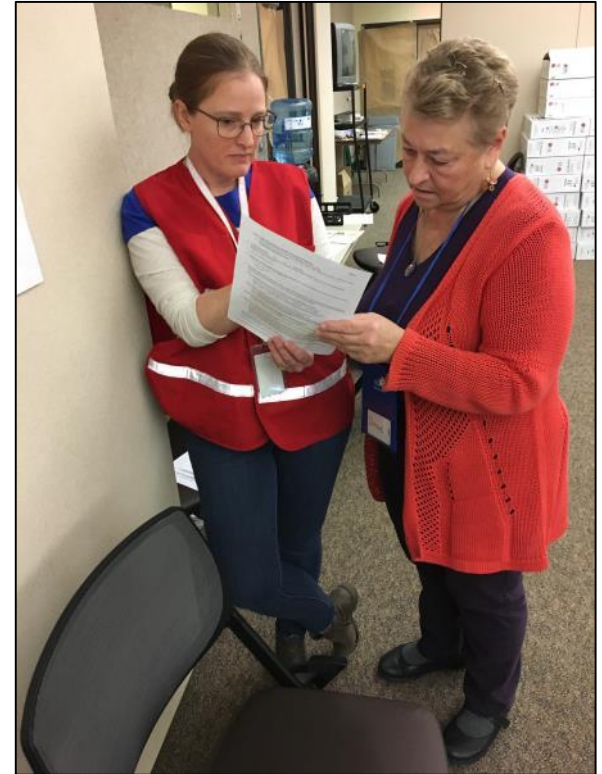
- Incidents of all sizes at all levels of government
- Emergencies and planned events
- Flexible and scalable
- Clear chain of command and supervision responsibilities
- Coordinated response between jurisdictions and agencies



# Case investigation

---

- Measles is a notifiable condition. State law requires providers to notify Public Health of any suspected measles cases.
- Providers collect specimens and coordinate with Public Health to arrange testing at Washington or Oregon public health labs.
- Public Health staff interview the case/parents of the case to gather information about illness onset and where the case had been the previous 21 days.
  - Used to identify where the case may have been exposed and where they may have been while contagious.



# Case and contact investigation

---

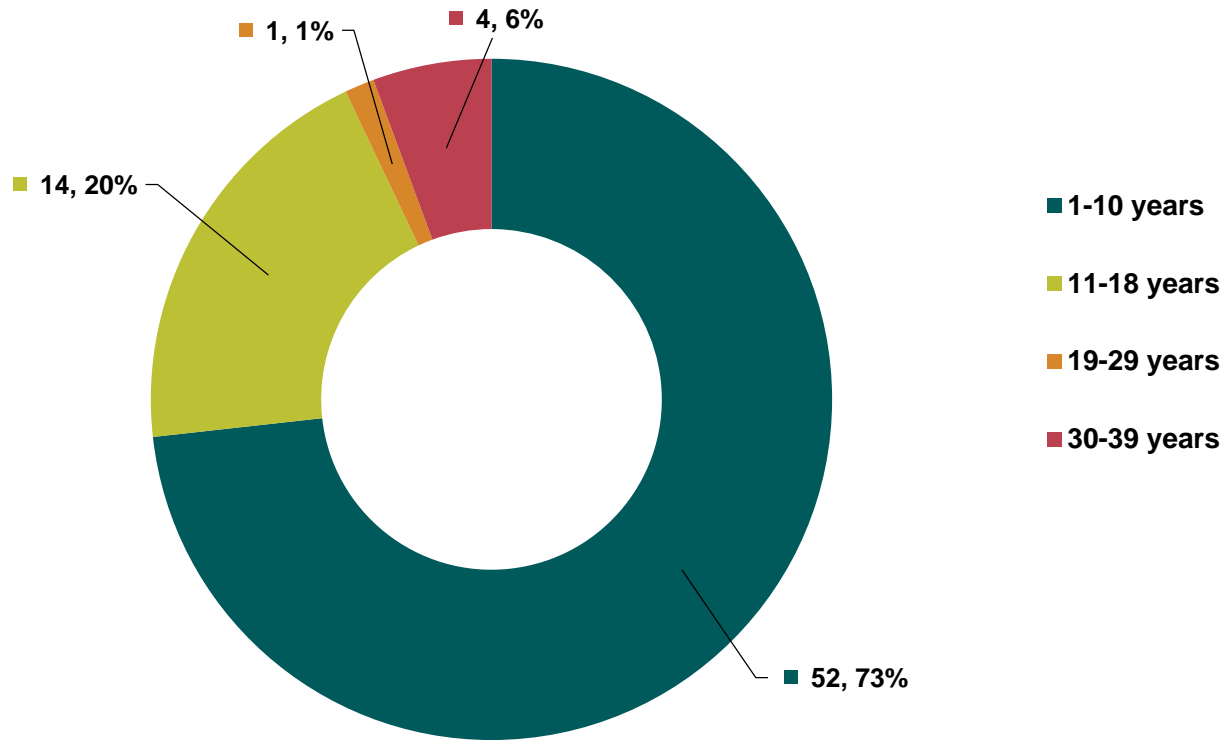
- Case at a large public setting while contagious:
  - Notify public through news releases, website and social media
- Case at school while contagious:
  - Identify susceptible students and staff
    - Exclude from school and other public settings for 21 days
    - Actively monitor for 21 days (daily calls)
- Case at a health care facility while contagious:
  - Obtain list and contact information of exposed patients and contact them
  - Identify those who are susceptible and actively monitor for 21 days (home quarantine, daily calls)
    - If < 72 hours after exposure provide, MMR for exposed susceptible children and susceptible non-pregnant adults
    - If < six days after exposure provide IG for infants, susceptible pregnant women and immunocompromised
  - Identify whether anyone else was present/exposed and contact them



# Measles cases

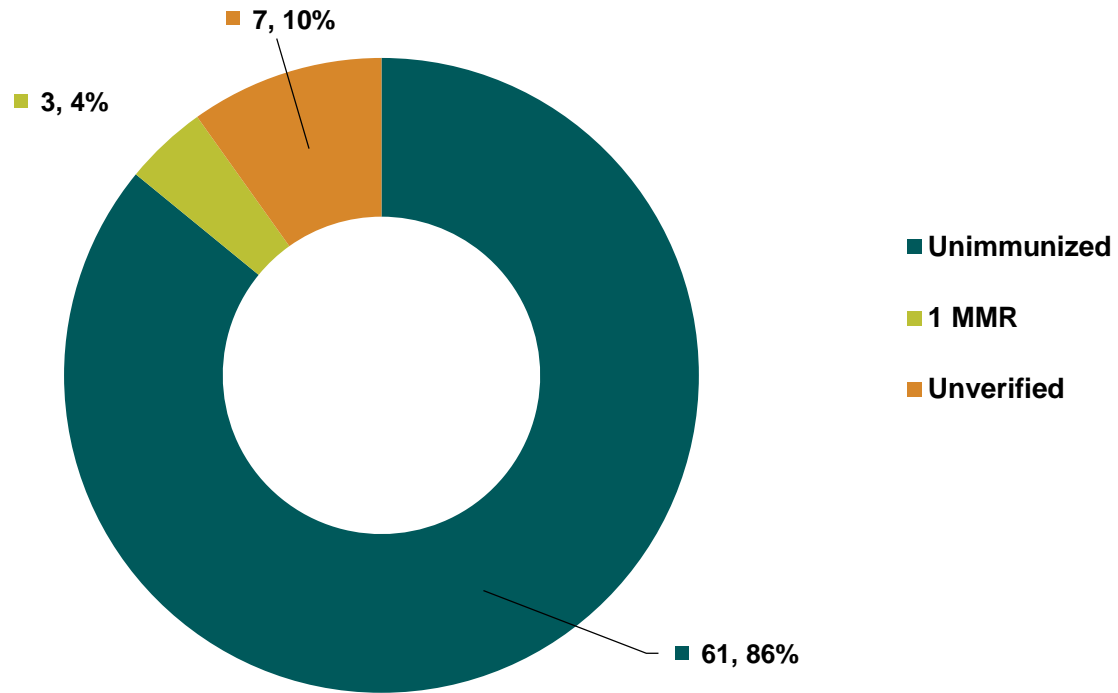
---

Age Breakdown of Measles Cases in Clark County (n=71), as of 4/13/19



# Measles cases

Immunizations Status of Measles Cases in Clark County (n=71), as of 4/13/19



# Exposure sites

---

## 96 public exposures

### 54 exposure sites, some with multiple exposure times

- 12 health care facilities, 29 exposures
- 15 schools, 31 exposures (three public school districts, two private schools)
- 1 child care facility, 2 exposures
- 26 other locations, including churches, grocery stores, Moda Center and Portland International Airport





# School exclusions

---

Public Health excluded susceptible students and staff at 13 public schools in three school districts and two private schools.

## **Evergreen Public Schools**

- Six schools
- 293 students excluded

## **Vancouver Public Schools**

- Three schools
- 138 students excluded

## **Battle Ground Public Schools**

- Four schools
- 398 students excluded

## **Slavic Christian Academy**

- No students excluded

## **Cornerstone Christian Academy**

- 20 students excluded



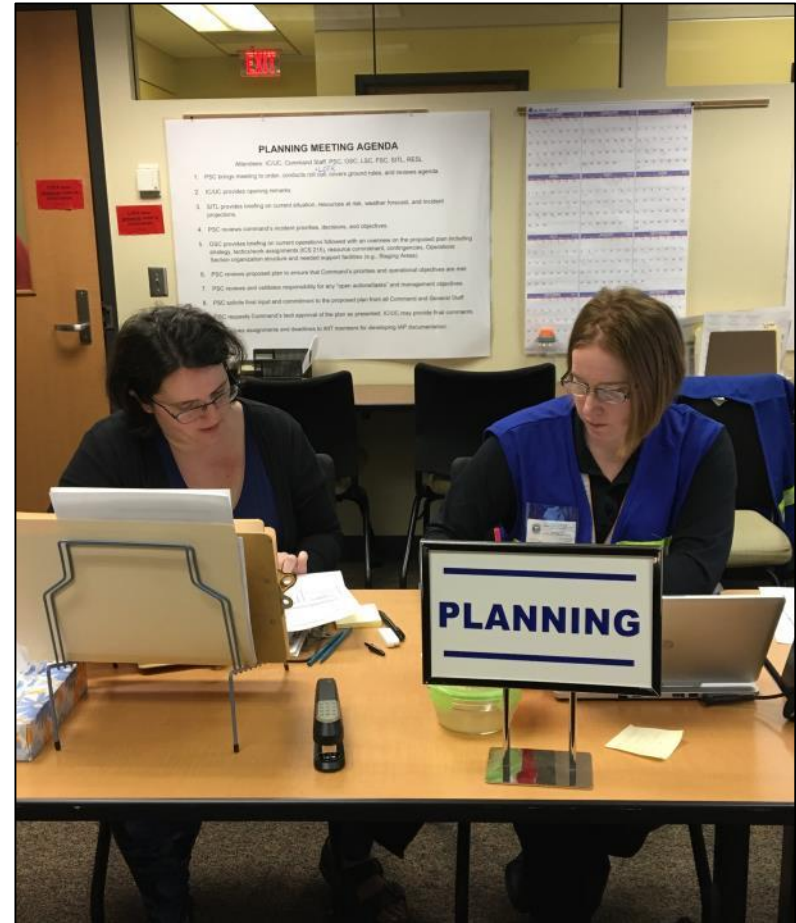
# Response staffing, cost

63 days in response

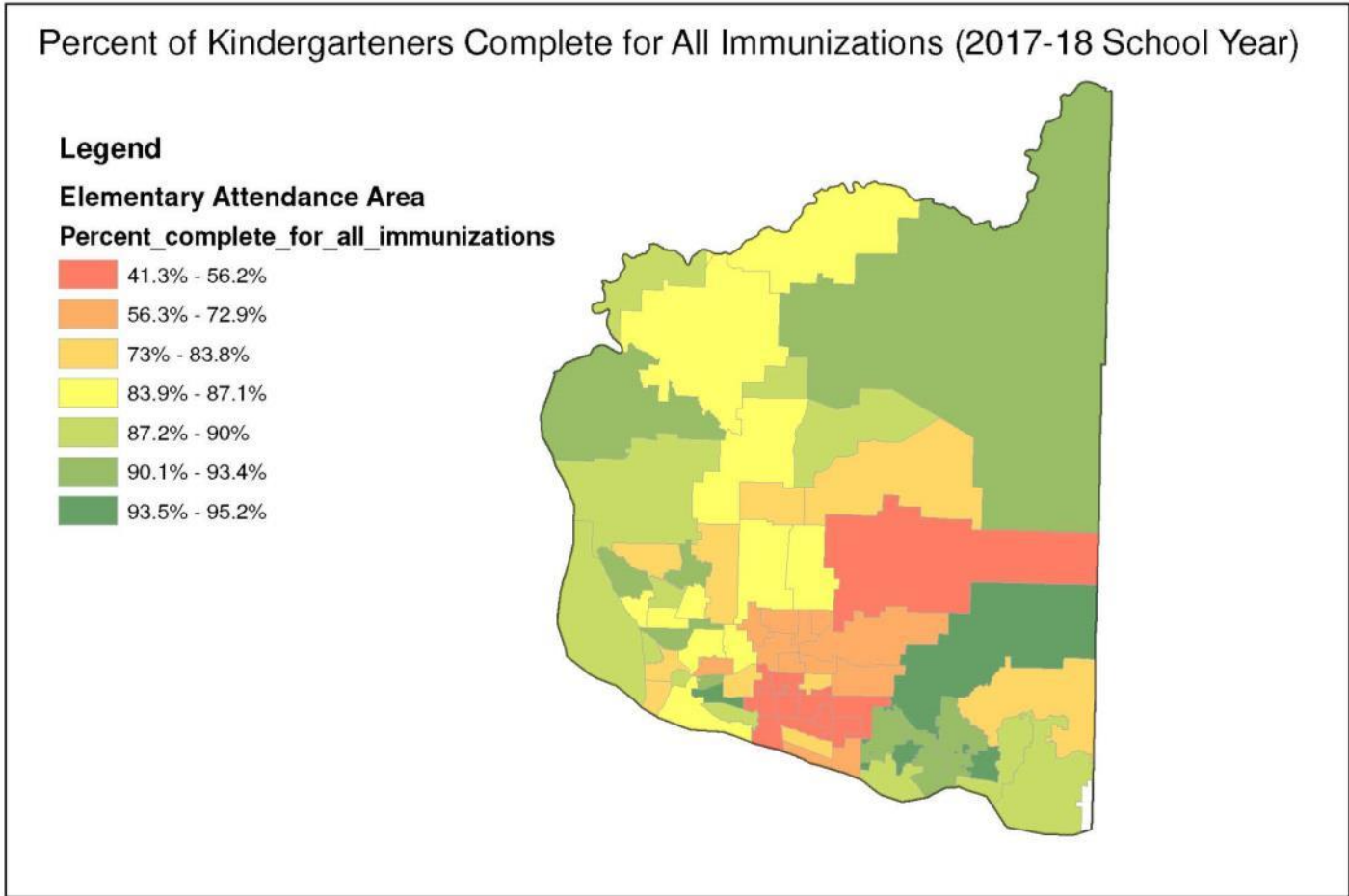
Total responders: 230

- Daily average: 40 to 50
- Public Health: 88
- Washington Department of Health: 56
- Centers for Disease Control and Prevention: 3
- Mutual aide: 19
- Medical Reserve Corps: 48
- Local volunteers: 8
- Emergency Management Assistance Compact: 2
- Interpreters: 6

Estimated cost: \$823,000



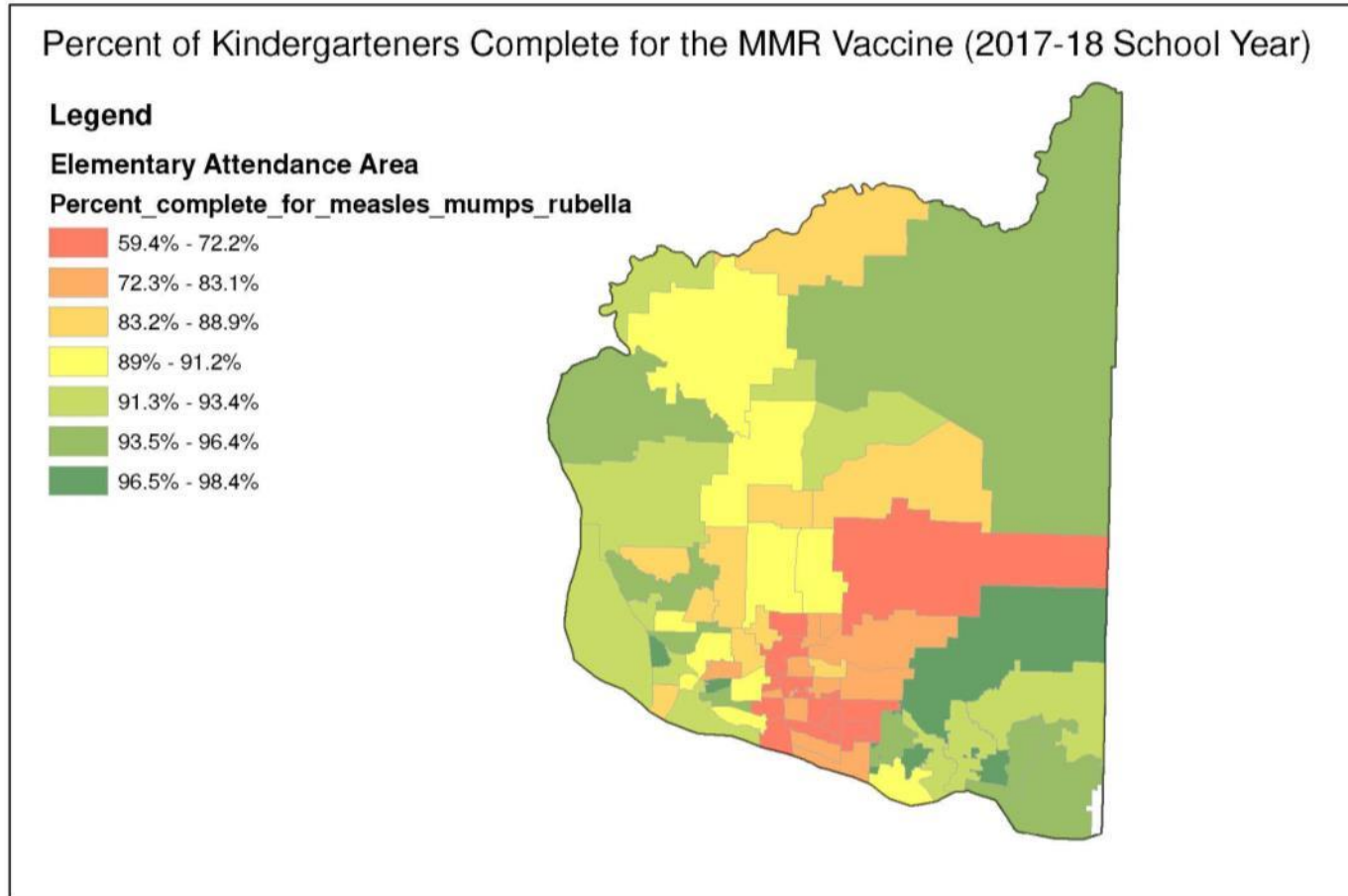
# Immunization rates



Washington State School Immunization Slide Set, 2017-2018 School Year. Washington State Department of Health, 2018. Updated March 2018.



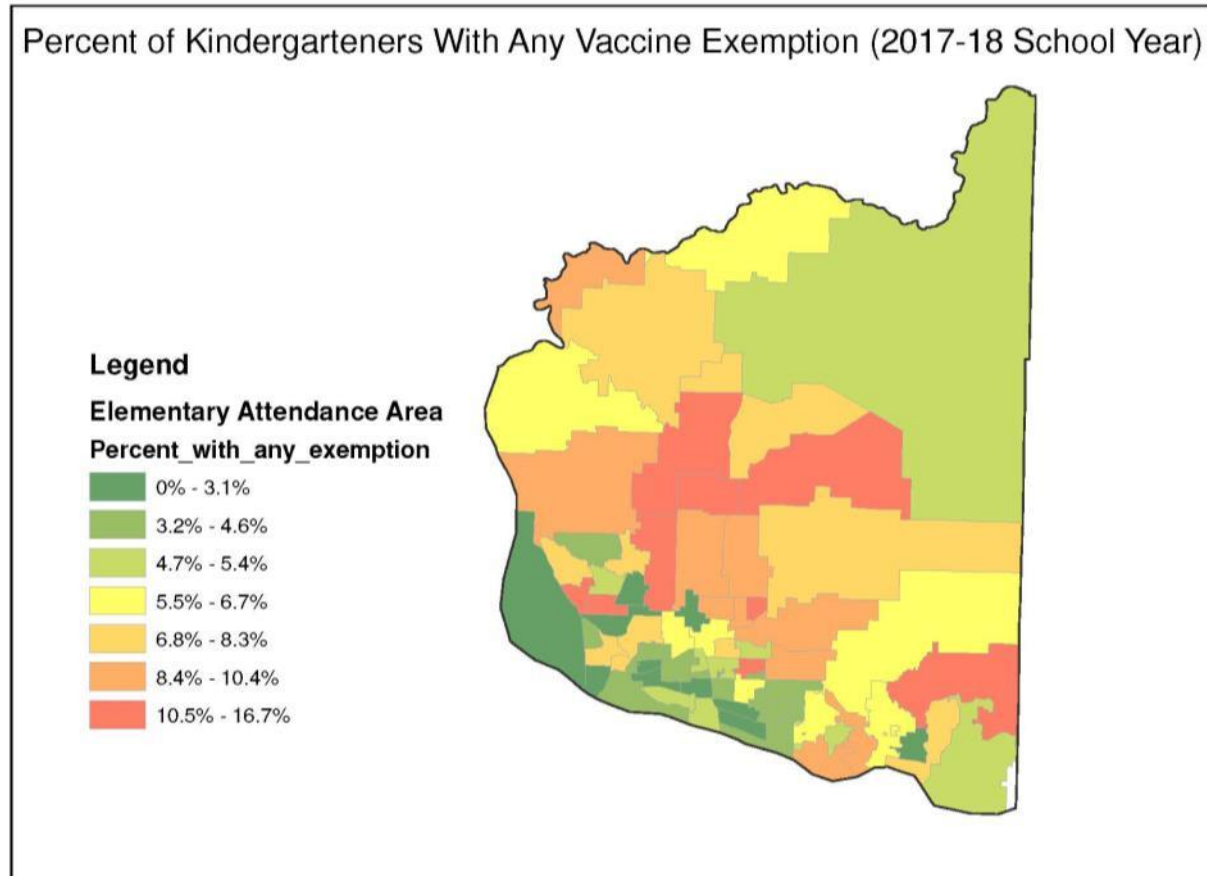
# Immunization rates



Washington State School Immunization Slide Set, 2017-2018 School Year. Washington State Department of Health, 2018. Updated March 2018.



# Exemption rates



Washington State School Immunization Slide Set, 2017-2018 School Year.  
Washington State Department of Health, 2018. Updated March 2018.





# Immunization misinformation

## Common misinformation on social media

- Getting measles is best way to develop immunity
- Measles prevents cancer
- Measles is benign
- Measles vaccine sheds and infects others
- Measles vaccine causes autism, seizures, encephalitis

Dr Melnick and Dr Lutz have changed their tunes about the massive deaths by measles, thanks to Washington State Historical data.

But now they are pushing the fear of encephalitis (brain swelling) from the measles.

Interestingly enough... the MMR also causes encephalitis. And VAERS has compensated individuals for permanent brain swelling. This can and does happen.

The discussion needs to happen. How many possibly avoided measles infections justifies doing this to a family?  
<https://www.facebook.com/1203009078/posts/10215609806817241?sfns=1>

Like · Reply · Message · 2w · Edited



Kathy Hennessy the media hype certainly tries to scare parents into thinking its some big scary monster. 😬 Before the vaccine was available, measles was viewed in the U.S. as a mild, inevitable illness of childhood.

Like · Reply · Message · 4d



Duncan, more kids are being injured and dying from the vaccine than from the illness... but feel free to keep believing the people who make money off the shots with zero liability if it kills you. 🙄

Like · Reply · Message · 1d



Why are people born before 1957 considered immune? Oh, right... Because actually getting measles is the best way to obtain LIFELONG immunity. Measles is a mild, normal childhood illness. I really wish CCPH would stop fear mongering. When did we become so afraid of normal sicknesses?

Like · Reply · Message · 2w · Edited

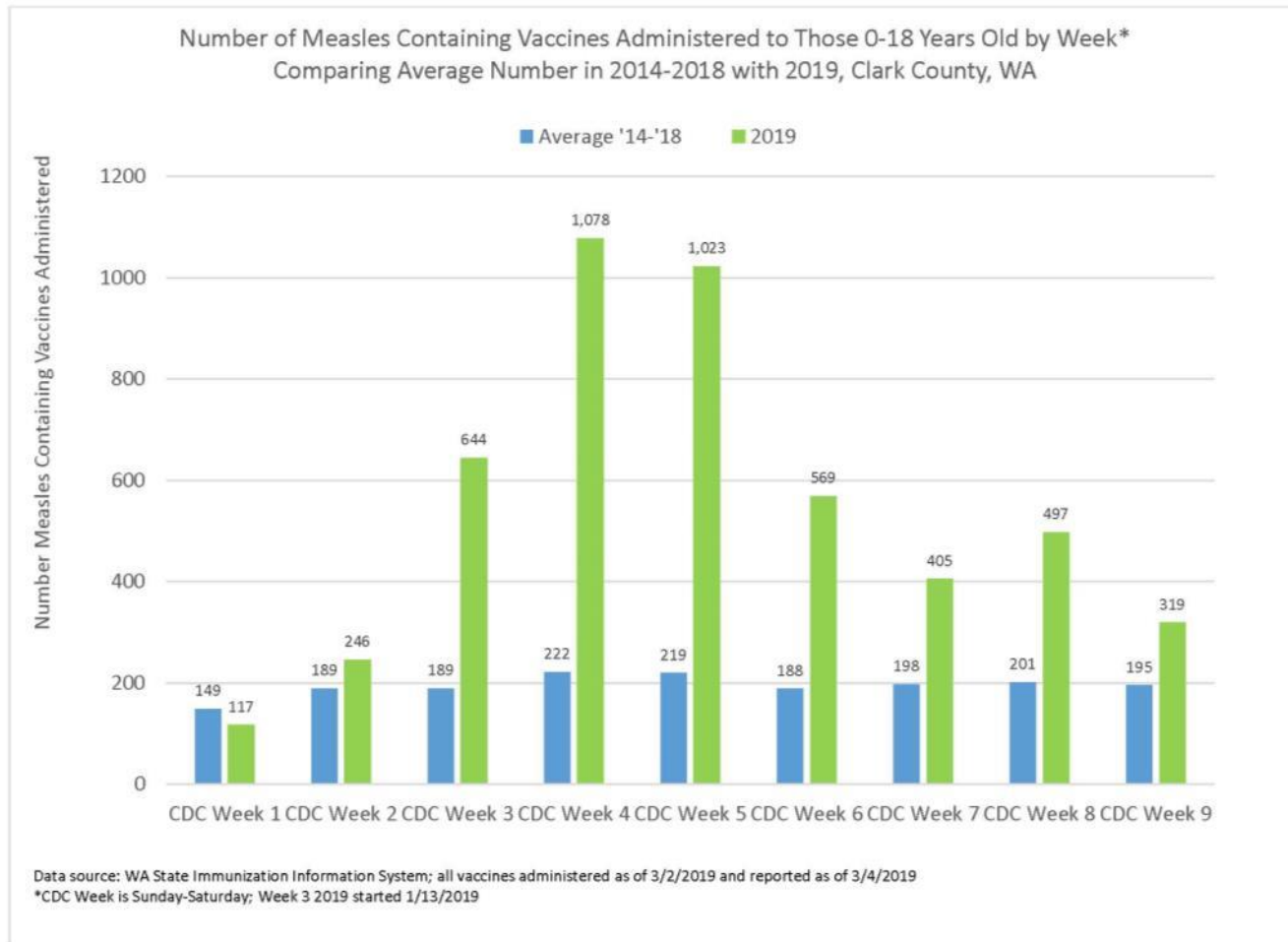


Vaccine strain measles virus detected in urine of vaccinated child 37 days after vaccination. MMR is a live virus vaccine. Recently vaccinated individuals shed the virus and can infect others; especially the immune compromised. Recently vaccinated individuals are far more of a threat to vulnerable children than those who have not been vaccinated. You can't spread what you don't have.

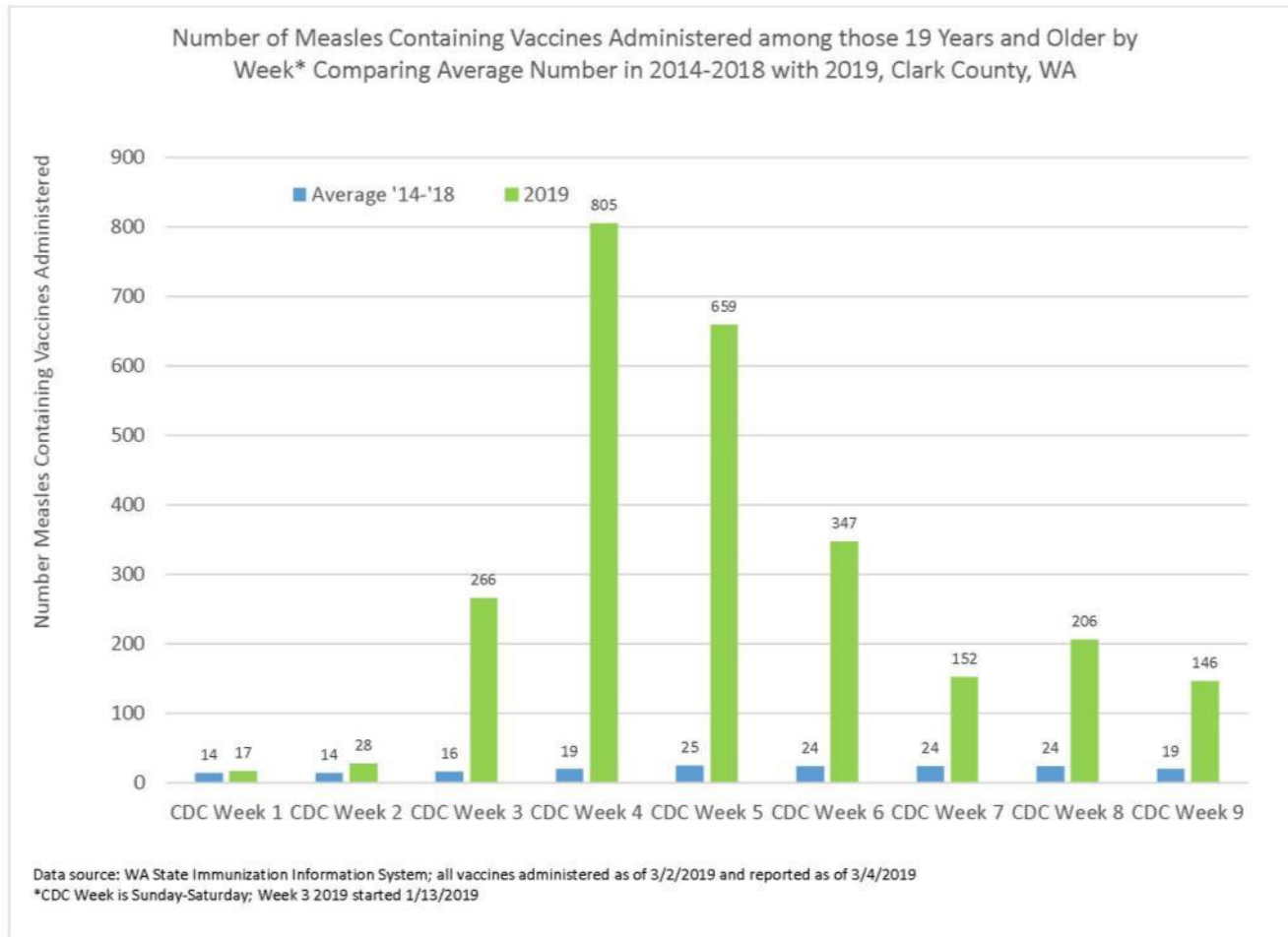
<https://jcm.asm.org/content/jcm/33/9/2485.full.pdf>  
#Measles #MMR #Vaccines #Shedding

Like · Reply · Message · 6d

# Immunization increases



# Immunization increases





# Thank you!

## Comments and questions

Clark County Center for Community Health

1601 E Fourth Plain Blvd. • PO Box 9825

Vancouver, WA 98666

