

Health Officer Report

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Tracie Newman, MD, MPH, FAAP



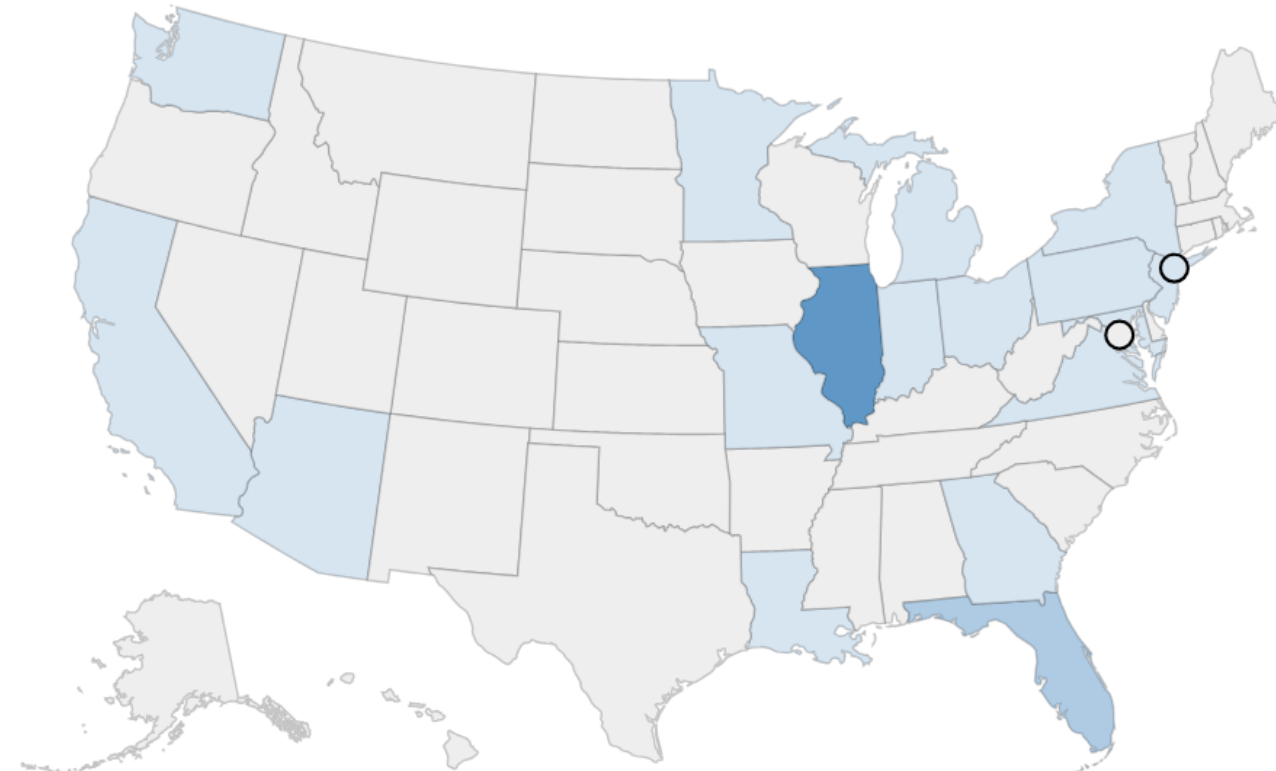
Fargo Cass
Public Health
Prevent. Promote. Protect.

Measles Update

- **125 cases** in 18 U.S. jurisdictions in 2024
- 54% hospitalization rate (65% for < 5 yrs)
- 95% unvaccinated, undervaccinated, or unknown status
- Current outbreak in Chicago, IL (63 cases for 2024)
- Highly infectious virus: 1 infected person can infect 12-18 others

Measles Cases in 2024

as of April 18, 2024



Legend

○ 0

● 10-19

● 50-99

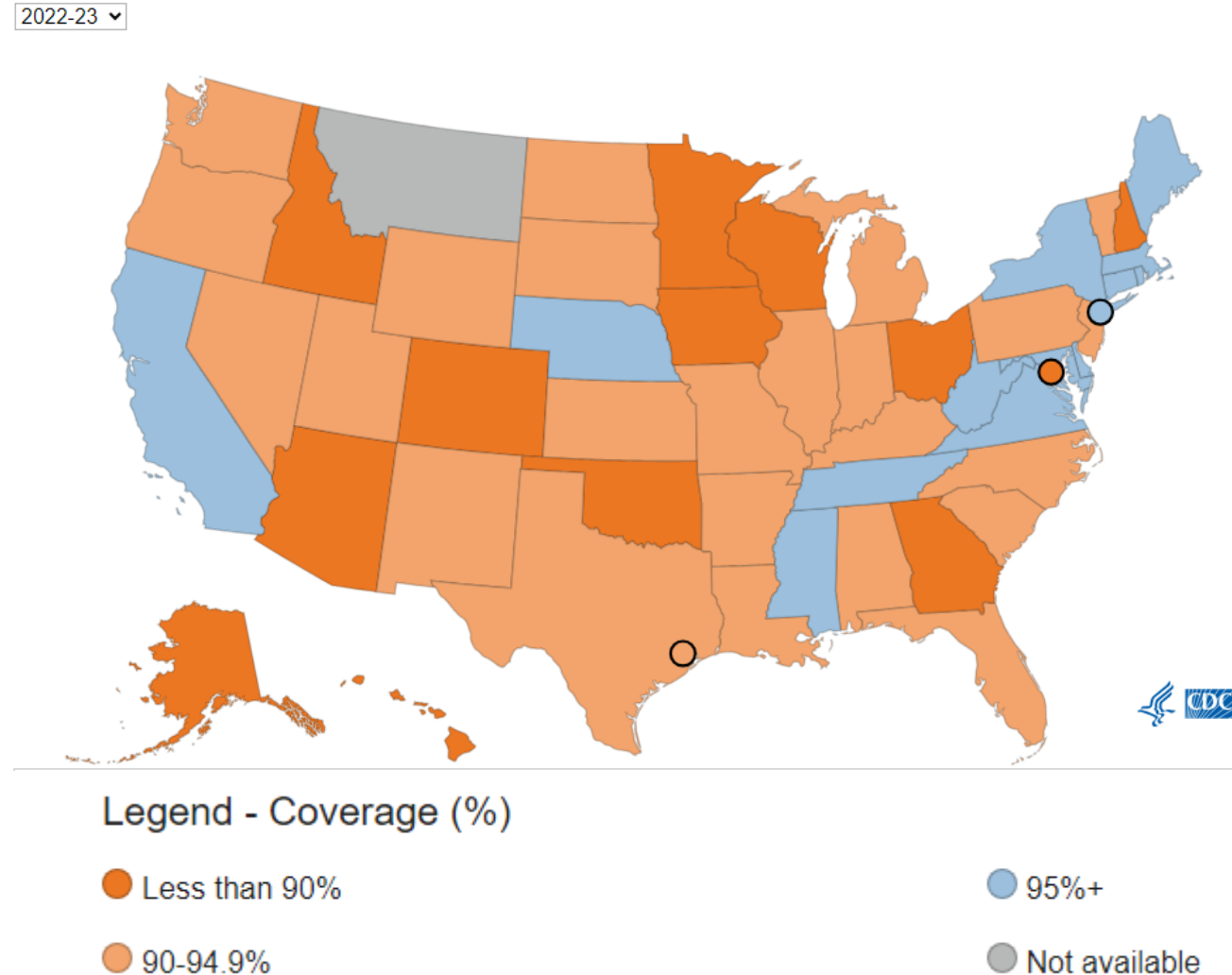
● 1-9

● 20-49

● 100+

Kindergarten MMR Vaccine Coverage Rates

- Goal of 95% for herd immunity
- U.S. total 93.1%
- N.D. total 91.2%
(N.D. rate ages 19-35 mos 80%)
- Cass County 92.7%
(Cass rate ages 19-35 mos 83.7%)



Measles Facts



Measles is contagious 4 days prior to rash through 4 days after rash



> 100,000 pediatric deaths worldwide every year



Measles mortality rate: 1-2:1000 (even with access to care)



High rate of hospitalization (>50%) and complications

Pneumonia 1:500

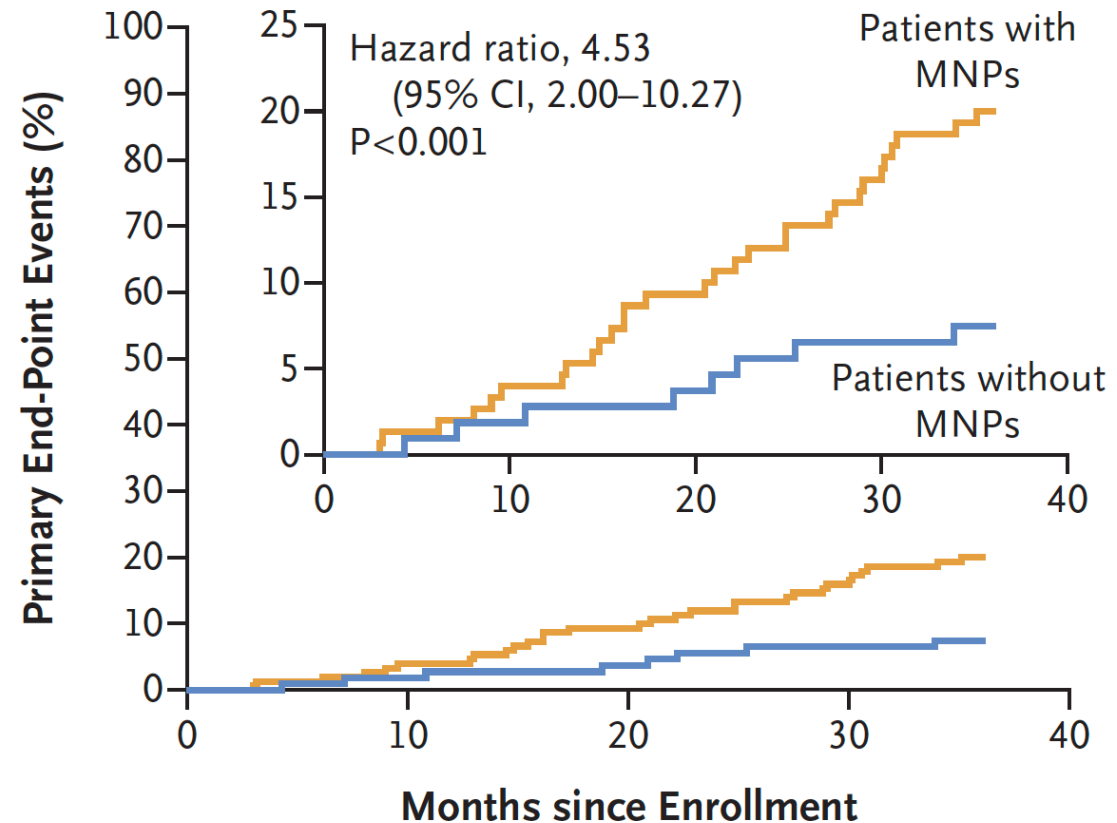
Encephalitis
1:1000



2 doses MMR > 97% effectiveness; vaccine very safe

Microplastics and Health

- Plastics are ubiquitous in our every day lives (medicine, technology, treatments domestic appliances)
- We inhale and ingest small plastic particles; these end up in our tissues
- A recently published study links microplastics and increases in:
 - Heart attacks
 - Strokes
 - All-cause deaths
- EPA passed new standards for drinking water limiting certain chemicals (PFAS) which can be microplastics



No. at Risk

Patients with MNPs	150	144	136	126	120
Patients without MNPs	107	105	103	99	99



Avian Flu H5N1

- Outbreaks of avian influenza A(H5N1) in dairy cows in 8 states (including S.D.)
- Virus spreading quickly among wild birds, poultry, other mammals, which means increased potential for viral mutation and human exposure
- To date, one human dairy worker infected
- Current risk to general public low
- CDC continues careful surveillance and monitoring

Planetary Health impacts Human Health

- **Planetary health**: cross-disciplinary field focusing on how the transformation of nature (human alteration of the planet's natural systems) affects health
- Loss of biodiversity, climate change, air/soil/water pollution, alterations in land use and land cover (all driven by human activity) impact all dimensions of health and increase disease burdens
- Green spaces (gardens, parks) and water spaces benefit health
 - Physical health: studies show decrease in diabetes, heart disease, preterm births
 - Mental health: studies have found the psychological well-being of a population can be linked with proximity to green and blue spaces
 - Exposure to green spaces lowers depression
 - One study found green spaces reduce community violence

