

# Measles: Vaccinate to Eradicate

Kentucky Health Departments Association

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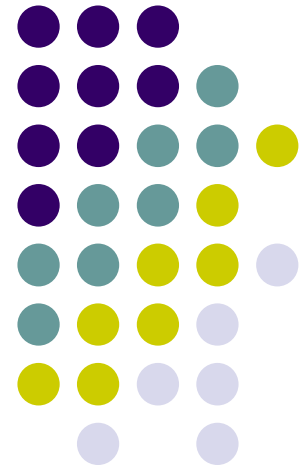
KHDA West Region Representative

Sara Jo Best, MPH, REHS

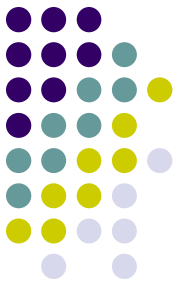
KHDA Past President



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# Vaccines



- Vaccines are one the most important public health advance in the last century
- Children are routinely vaccinated for 16 different diseases in the US
- Childhood vaccines, after testing and approval by the FDA, are given according to schedules approved by the ACIP and AAP
- Vaccines, after licensing by the FDA, are monitored by the FDA and CDC according to “post licensure monitoring” guidelines



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## Recommended Immunizations for Children Birth Through 6 Years Old

	Birth	1 month	2 months	4 months	6 months	8 months	12 months	15 months	18 months	19-23 months	2-3 years	4-6 years
RSV	✓ 1 dose during RSV season					✓ 1 dose during RSV season for those at high risk						
HepB	✓	✓			✓							
RV			✓	✓	✓							
DTaP			✓	✓	✓			✓				✓
Hib			✓	✓	✓		✓					
PCV			✓	✓	✓		✓					
IPV			✓	✓	✓							✓
COVID-19					✓	As recommended for age group						
Influenza					✓	Yearly						
MMR							✓					✓
Varicella							✓					✓
HepA							✓ Dose 2: 6 months after dose 1					

For more information, visit [healthychildren.org/immunizationschedules](https://www.healthychildren.org/immunizationschedules).



healthychildren.org

Powered by pediatricians. Trusted by parents.  
from the American Academy of Pediatrics

# Measles



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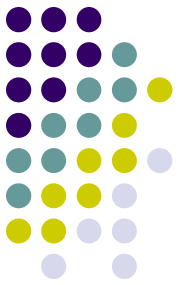


- Caused by a virus so there is no treatment
- Common symptoms are rash, fever, runny nose, red eyes
- Measles is one of the most contagious diseases
- If susceptible and exposed, 90% of people will become infected
- Someone with measles is generally contagious from 4 days before rash onset until 4 days after

# Measles Morbidity



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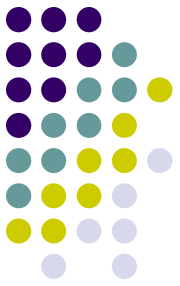


- 1 in 4 infected will be hospitalized
- 1 in 20 will develop pneumonia
- 1 in 1000 will develop encephalitis
- 1-3 per 1000 will die.
- Prior to vaccine, everyone in U.S. was infected by age 15
- Each year 48,000 children were hospitalized, 7000 had seizures, 1000 had permanent brain damage, 450 died

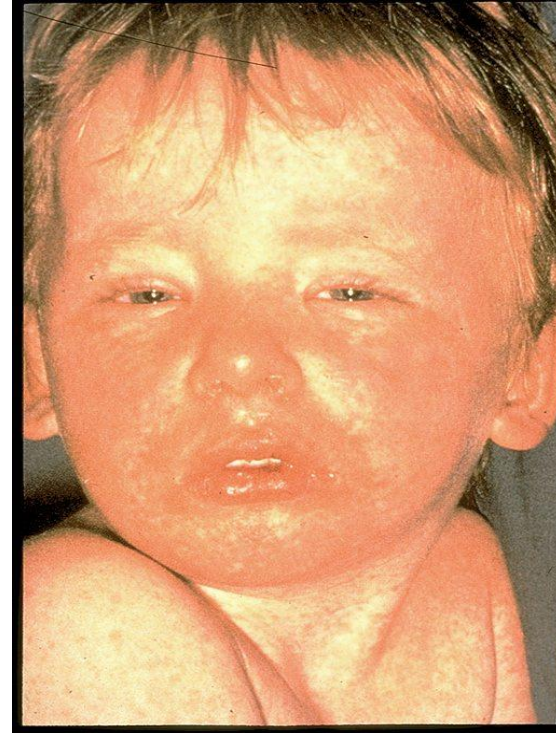
# When to Suspect Measles



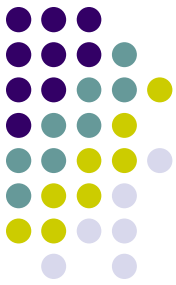
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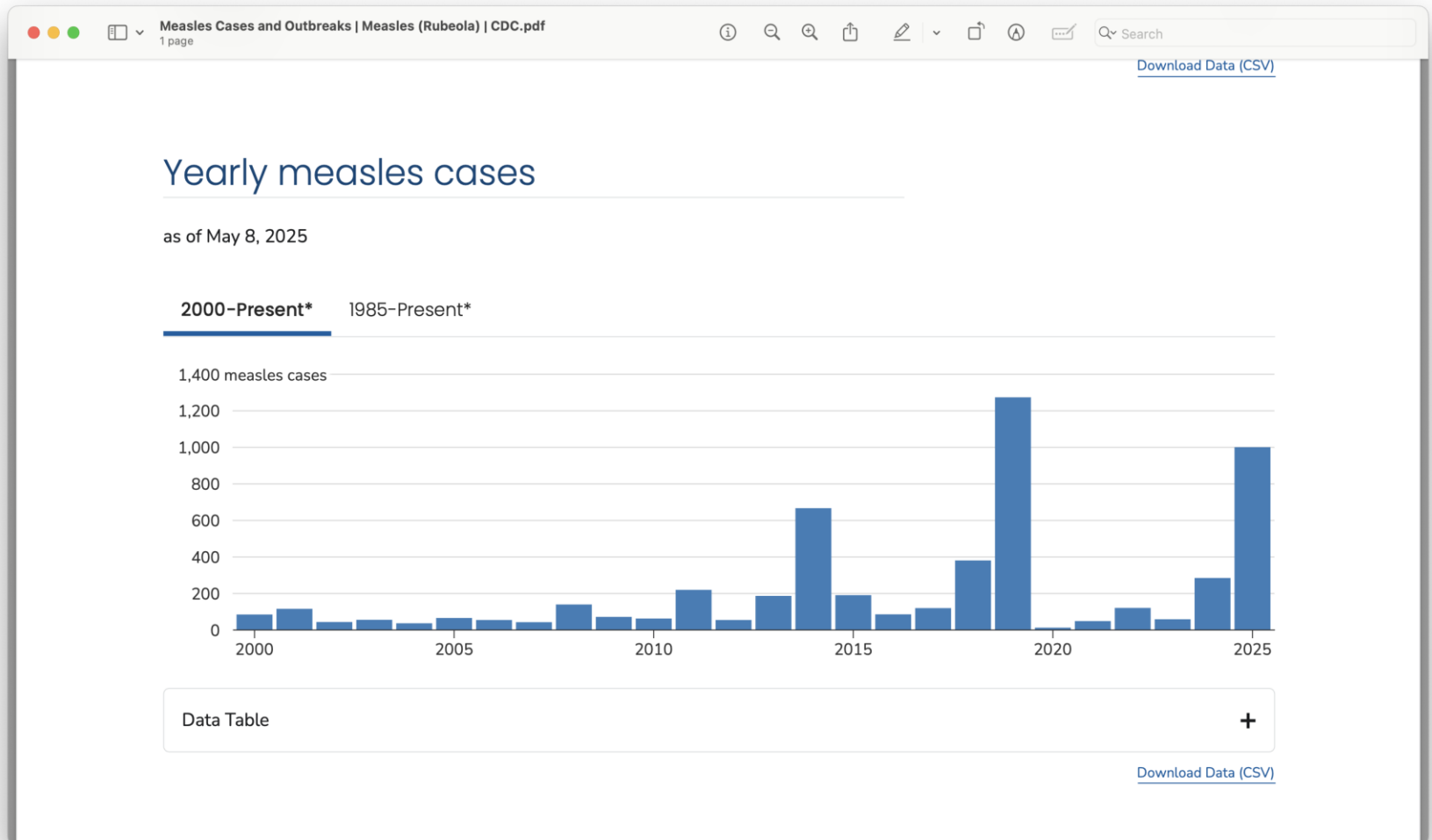
- Fever over 101 F
- One of the 3 Cs
  - Cough
  - Coryza
  - Conjunctivitis
- Rash



\*Healthcare providers are required report all suspected cases to their local health department



# Measles Incidence by Year



# Measles



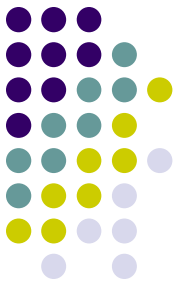
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- 14 U.S. outbreaks to date in 2025, involving 31 states
- The largest current outbreak is in West Texas. Total cases so far this year- 1,024 with 13% hospitalized (23% of cases 5 yrs and under) and 3 confirmed deaths
- In Kentucky there have been 2 confirmed cases in 2025

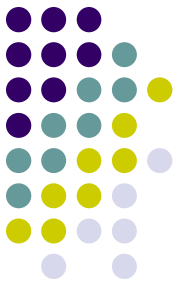


# Vaccine Concerns



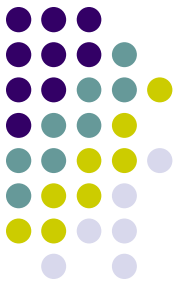
- Increasing numbers of parents who are refusing vaccinations according to the ACIP/AAP recommended schedules
- A national survey done in 2009 and published in Pediatrics in 2010 showed that 11.5% of responding parents refused at least one vaccine for their children

# Vaccine Facts



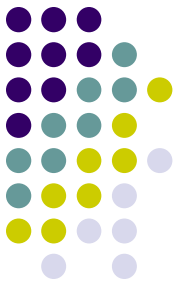
- Children are exposed to far fewer antigens today with more vaccines than they previously were with fewer vaccines
- Nobel scientists have determined that humans can produce about 10 billion different antibodies
- Vaccines are only accessing a miniscule portion of a baby's immune system

# Vaccination



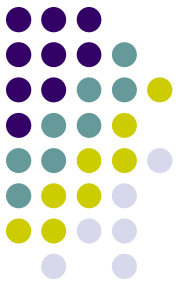
- Measles can be prevented through vaccination
- Measles vaccine schedule is typically 12-15 months and 4-6 years
- The vaccine is safe and effective
- Everyone should have 2 doses of measles vaccine unless they have medical confirmation of measles or laboratory confirmation of immunity, or they were born before 1957
- Measles vaccine introduced in the 1960s

# Vaccination in KY



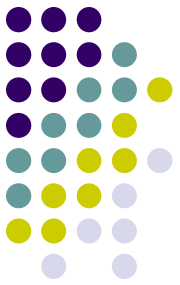
- The 2024-2025 assessment of kindergarten vaccines has dropped to 86.9%
- 7<sup>th</sup> and 11<sup>th</sup> graders remained stable
- Rates of religious and medical exemptions have increased 2.1%
- CDC has issued a Level 1 Travel Advisory for international travel that all travelers should be fully vaccinated for MMR
- [Measles - Cabinet for Health and Family Services](#)

# References



- Advisory Committee on Immunization Practices
- American Academy of Pediatrics
- Centers for Disease Control
- Carey Dodds, MD, Board certified pediatrician
- Department of Public Health (Dr. Kathleen Winters, Epidemiologist)

# Questions



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