EPI WATCH

Monthly Epidemiology Newsletter

Raw Milk Consumption

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Cow's milk pasteurization was introduced in Chicago in 1908 but wasn't widely adopted until 1916[1]. Public health officials became concerned about bovine tuberculosis transmission from cow's milk to humans and estimated that as many as 10% of all human tuberculosis cases were caused by infection via milk consumption. In 1910, a tuberculosis epidemic spread through Illinois infecting over 300,000 cattle and because tuberculosis-free herd certifications became more difficult to manage, pasteurization became popular.

In 1924, the U.S. Public Health Service developed the Standard Milk Ordinance for voluntary adoption by state and local agencies and is now called the Grade "A" Pasteurized Milk Ordinance (PMO). More states began adopting the PMO approach in subsequent decades and infections from milk borne disease outbreaks decreased from 25% (prior to 1938) to less than 1% (2015).

While tuberculosis infections are less of a concern in the United States, there are other human pathogens that raw milk can be contaminated with. Several countries have monitored the presence of different type of pathogens in raw milk and some studies have identified almost a third of all milk samples contained at least 1 type of pathogen such as *Campylobacter jejuni, Salmonella, Brucella* and *Listeria monocytogenes*.

The FDA[2] notes that raw milk is particularly unsafe for children due to their vulnerability and susceptibility to certain pathogens including *E. coli* O157:H7 which can lead to the development of Hemolytic Uremic Syndrome (HUS). The FDA notes several claims for the benefits of raw milk and provides an explanation based on scientific literature here.

The Centers for Disease Control and Prevention (CDC) notes the risk for Influenza A (H5N1) infection from raw milk consumption and advises against consumption as a way to obtain antibodies to prevent future illness.[3] H5N1 can be found in the mammary glands of cattle which can be passed to humans if pasteurization is not performed.

Raw milk can contain a variety of disease-causing pathogens and has frequently been identified as the source of disease outbreaks in the United States. Studies indicate over 200 recorded outbreaks since 1993 with recent investigations showing a 4-fold increase in outbreaks reported during 2007-2012[1]. While the investigations are well documented, these numbers likely represent a small proportion of illnesses associated with raw milk consumption due to lack of healthcare seeking behavior for gastrointestinal related illnesses.

Resources:

[1]https://pmc.ncbi.nlm.nih.gov/articles/PMC4890836/

[2]https://www.fda.gov/food/buy-store-serve-safe-food/raw-milk-misconceptions-and-danger-raw-milk-consumption

[3] https://www.cdc.gov/food-safety/foods/raw-milk.html

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Interim Evaluation of Respiratory Syncytial Virus Hospitalization Rates Among Infants and Young Children After Introduction of Respiratory Syncytial Virus Prevention Products—United States, October 2024–February 2025

Weekly / May 8, 2025 / 74(16);273–281

Summary

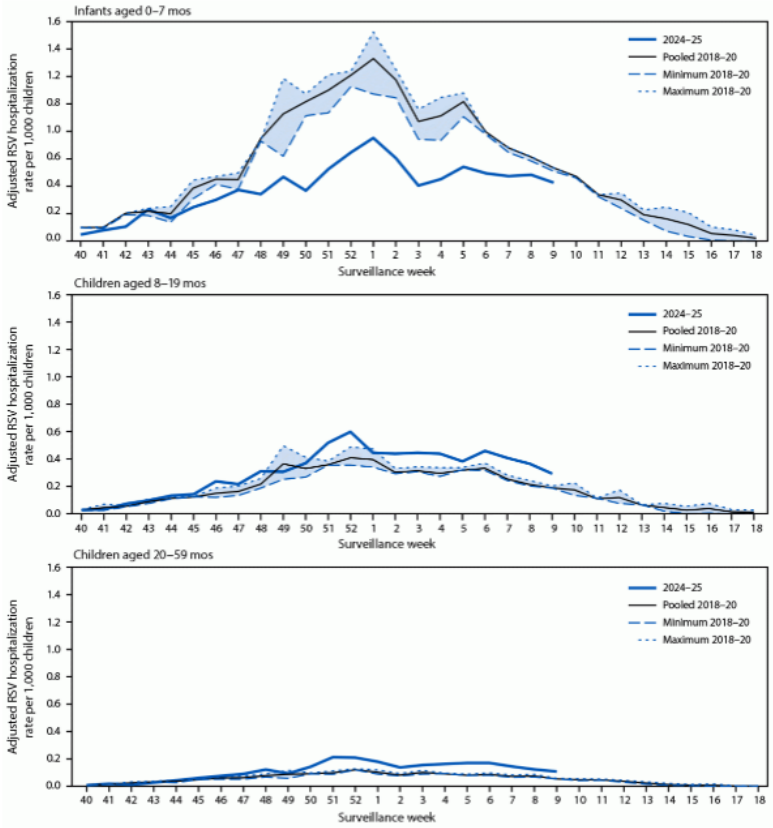
What is already known about this topic?
Maternal respiratory syncytial virus (RSV) vaccine and nirsevimab, a long-acting monoclonal antibody, help prevent infant RSV-associated hospitalizations; these products became widely available in the United States during the 2024–25 RSV season.

What is added by this report?
In this ecologic analysis comparing RSV-associated hospitalization rates among infants aged 0–7 months during 2024–25 with those during pre–COVID-19 pandemic RSV seasons in two surveillance networks, rates during 2024–25 were lower by an estimated 28% and 43%.

What are the implications for public health practice?
In the first RSV season with widespread availability of maternal vaccine and nirsevimab, RSV-associated hospitalization rates among infants were lower than in prepandemic seasons. Effective health care planning is needed to protect infants as early in the RSV season as possible through maternal vaccination during pregnancy or infant receipt of nirsevimab.

For more information: https://www.cdc.gov/mmwr/volumes/74/wr/mm7416a1.htm?s_cid=mm7416a1_w

FIGURE 1. Respiratory syncytial virus–associated hospitalization rates* among children aged <5 years, by age group and surveillance week — Respiratory Syncytial Virus–Associated Hospitalization Surveillance Network, United States, October–April 2018–20 and October–February 2024–25



Trends in Suspected Fentanyl-Involved Nonfatal Overdose Emergency Department Visits, by Age Group, Sex, and Race and Ethnicity-United State, October 2020-March 2024

Weekly / May 8, 2025 / 74(16);282–287

Summary

What is already known about this topic?
Overdose deaths involving synthetic opioids including fentanyl increased during the past decade, with declines beginning in mid-2023. Data on nonfatal overdoses involving fentanyl are limited.

What is added by this report?
Fentanyl-involved nonfatal overdose emergency department (ED) visit rates increased in a majority of demographic groups from late 2020 through mid-2023, with highest rates and largest increases among non-Hispanic American Indian or Alaska Native persons. Overall rates increased 8.7% per quarter from quarter (Q) 4 2020 to Q3 2023, then declined 11% per quarter from Q3 2023 to Q1 2024.

What are the implications for public health practice?
Despite recent declining trends, fentanyl-involved nonfatal overdose ED visits remain high (a rate of 2.9 per 10,000 ED visits in Q1 2024, versus 1.4 in Q4 2020). ED interventions to increase naloxone access and availability and linkage to and retention in evidence-based care of persons who have experienced an overdose could reduce future nonfatal and fatal overdoses.

For more information: https://www.cdc.gov/mmwr/volumes/74/wr/mm7416a2.htm?s_cid=mm7416a2_w

Select Reportable Diseases in Pinellas County

Disease	Pinellas		YTD Total		Pinellas County Annual Totals		
	Apr 2025	Apr 2024	Pinellas 2025	Florida 2025	2024	2023	2022
A. Vaccine Preventable							
Coronavirus 2019	416	563	2697	53200	19911	45495	110631
Measles	0	0	0	1	0	0	0
Mpox	0	0	0	5	12	6	162
Mumps	0	0	0	1	2	0	0
Pertussis	12	0	27	150	38	1	2
Varicella	5	59	8	58	175	25	24
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	0	1	0	10	3	1	3
Meningitis (bacterial, cryptococcal, mycotic)	0	3	0	20	16	6	12
Meningococcal Disease	0	0	1	2	1	3	2
C. Enteric Infections							
Campylobacteriosis	41	18	83	579	227	224	208
Cryptosporidiosis	1	1	7	33	30	28	38
Cyclosporiasis	0	0	0	1	7	11	21
E. coli Shiga Toxin (+)	1	3	9	84	34	37	26
Giardiasis	2	2	13	85	59	40	34
Hemolytic Uremic Syndrome (HUS)	0	0	1	3	2	2	0
Listeriosis	0	0	1	3	1	2	3
Salmonellosis	13	15	34	508	226	194	174
Shigellosis	8	5	26	107	46	56	37
D. Viral Hepatitis							
Hepatitis A	0	0	0	16	1	1	20
Hepatitis B: Pregnant Woman +HBsAg	2	2	3	45	4	17	20
Hepatitis B, Acute	1	1	4	36	32	37	33
Hepatitis C, Acute	9	8	26	141	92	106	120
E. Vectorborne/Zoonoses							
Animal Rabies	0	1	0	9	1	1	0
Rabies, possible exposure	21	31	78	649	249	227	151
Chikungunya Fever	0	0	0	0	1	0	0
Dengue fever	0	0	0	8	10	5	7
Eastern Equine Encephalitis	0	0	0	0	0	0	0
Lyme Disease	2	0	2	15	14	21	11
Malaria	0	0	0	3	2	4	4
West Nile Virus	0	0	0	0	1	0	0
Zika Virus Disease	0	0	0	0	0	0	0
F. Others							
Hansens Disease (Leprosy)	0	0	0	2	1	1	0
Legionellosis	5	4	14	46	36	16	38
Mercury Poisoning	0	0	0	4	0	0	0
Vibrio Infections	5	1	9	30	32	9	9
Tuberculosis	4	1	13	221	25	20	22
G. Sexually Transmitted Infections							
Chlamydia	263	327	1274	33619	3907	4256	4054
Gonorrhea	129	155	570	12221	1807	1802	1752
Syphilis, Total	30	57	174	4927	580	687	766
Syphilis, Infectious (Primary and Secondary)	13	27	65	973	286	361	347
Syphilis, Early Latent	11	12	70	1549	144	206	279
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	5	18	38	2329	143	112	135
Syphilis, Congenital	1	0	1	76	7	8	5

*YTD up to April 30, 2025

**includes travel and non-travel associated cases