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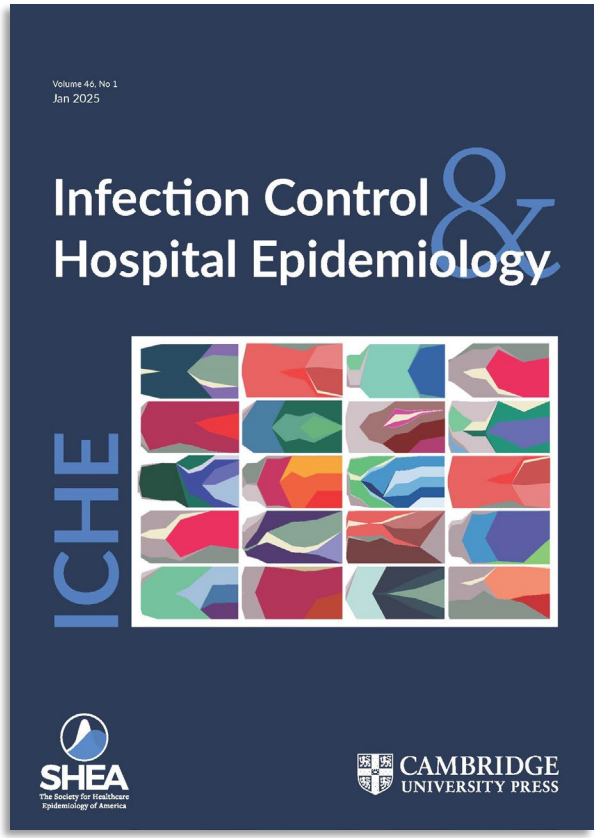

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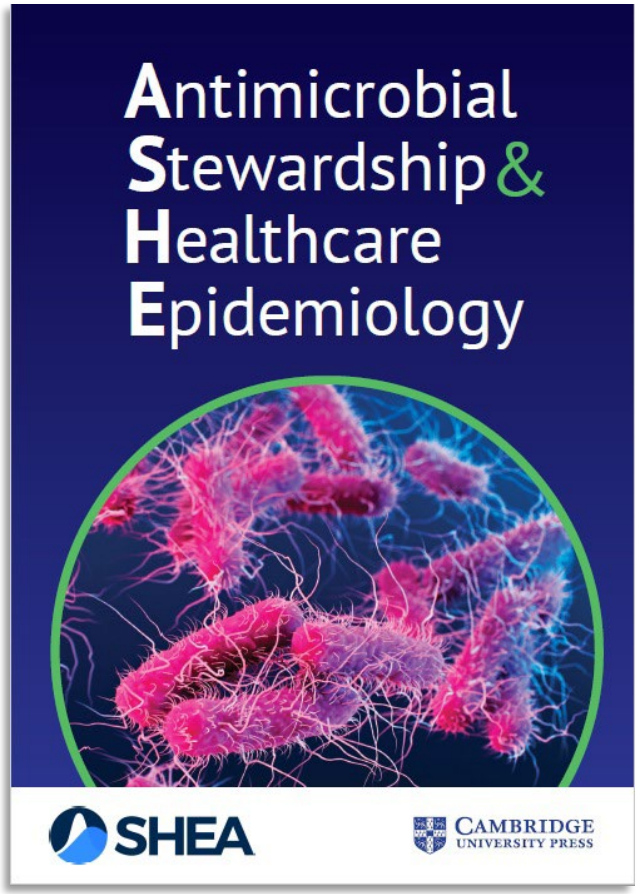

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In this case-based webinar, presenters will describe ways in which AS and IP teams can collaborate to support each other and optimize their outcomes.

Raising the Bar: How to Advocate for Resources for Effective IPC Teams
August 21, 2025 | 2:00– 3:00 pm ET
*Course consists of multiple live sessions. Register before August 21 to receive access to the entire course - recordings and materials included.

A Master Class in Environmental Cleaning & Disinfection: From Fundamentals to Emerging Practices
August 25, 2025 | 3:00– 4:00 pm ET
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August Town Hall Panelists:

Dr. Marci Drees
ChristianaCare

Dr. Trish Perl
UT Southwestern Medical Center

Dr. Matthew Linam
Emory University

Dr. Erica Shenoy
Mass General Brigham

Invited Panelist:

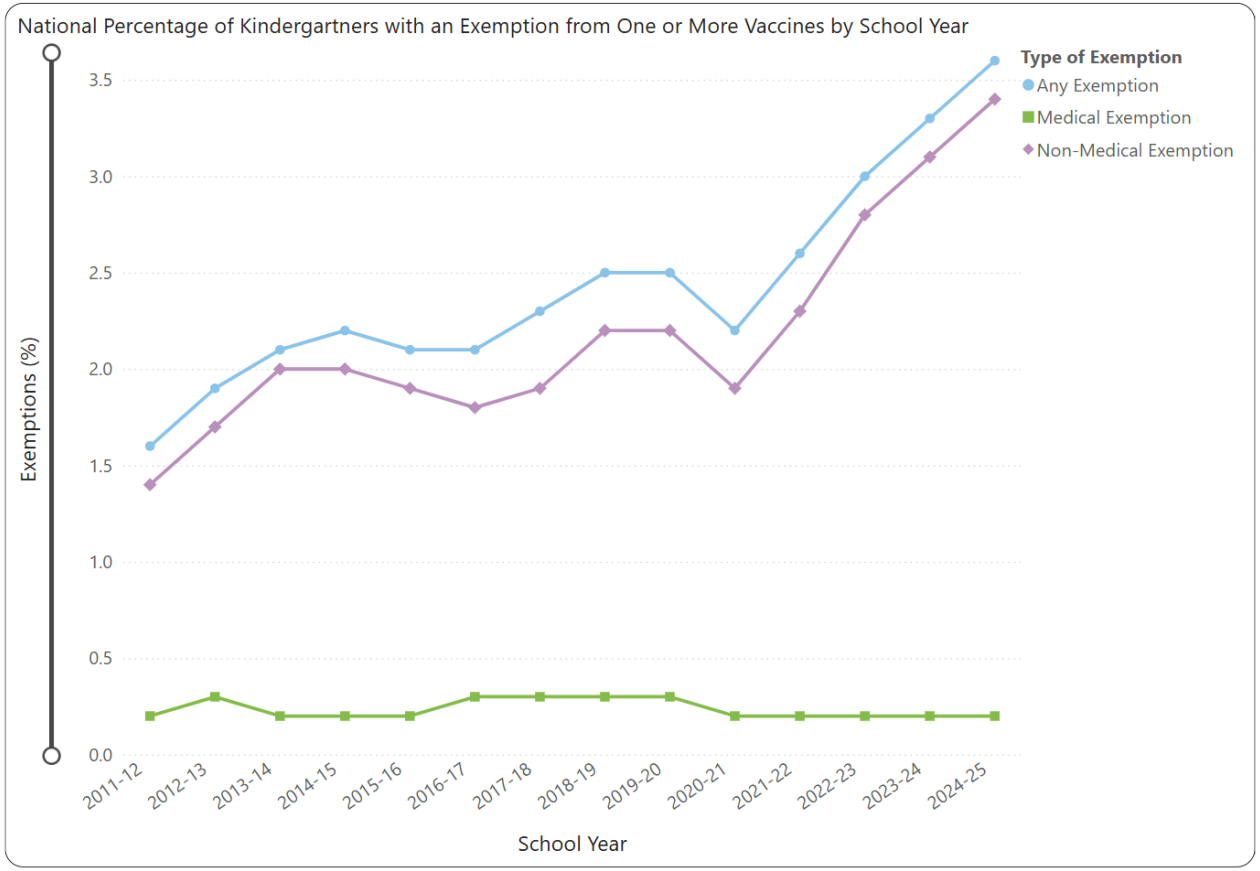
Emily Sickbert-Bennett, PhD, CIC
Director of Infection Prevention
UNC Health

August 2025 SHEA Town Hall Outbreak Update and Literature Review

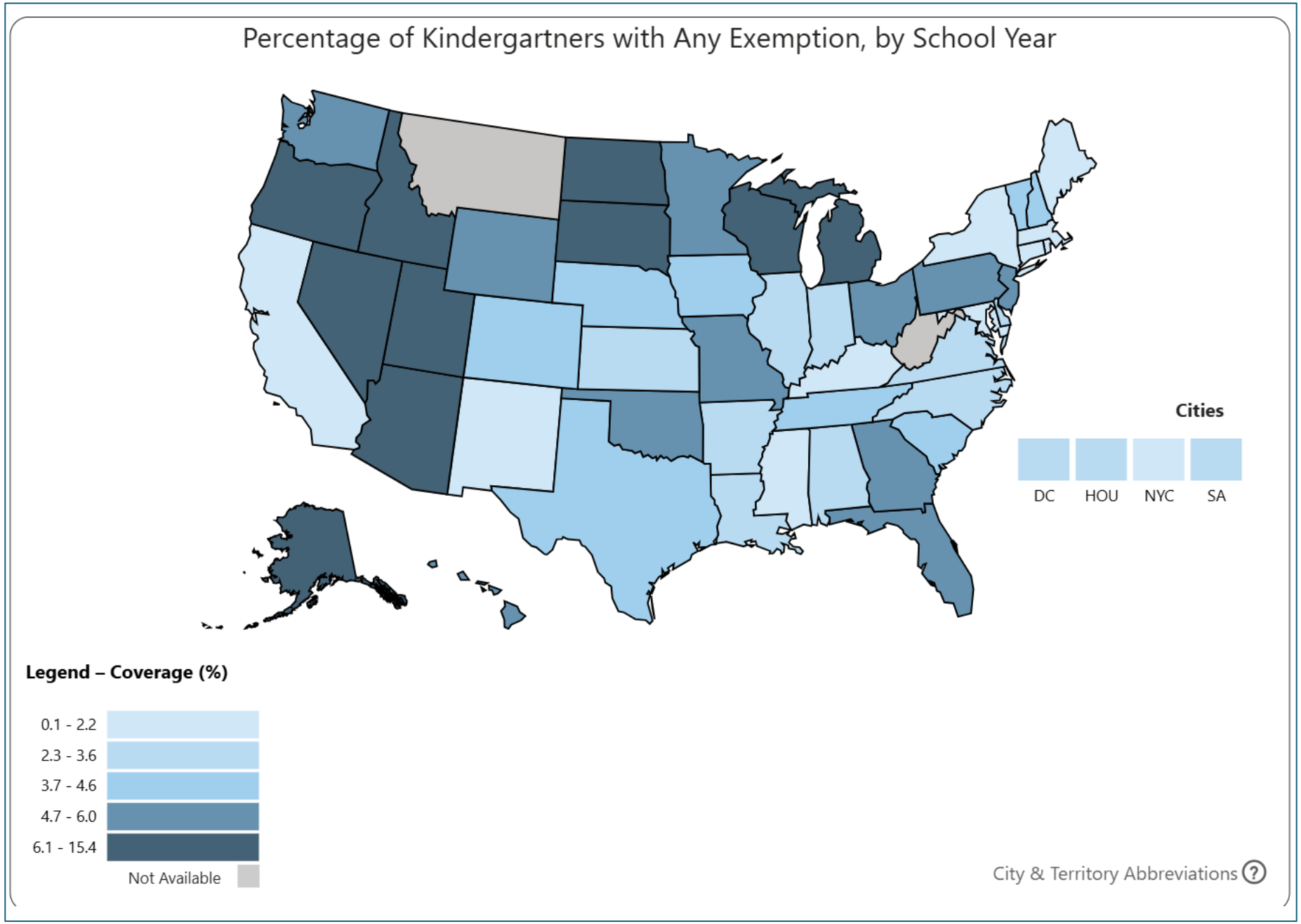
Matt Linam, MD, MS

Vaccination Coverage and Exemptions for Kindergartners (2024-2025)

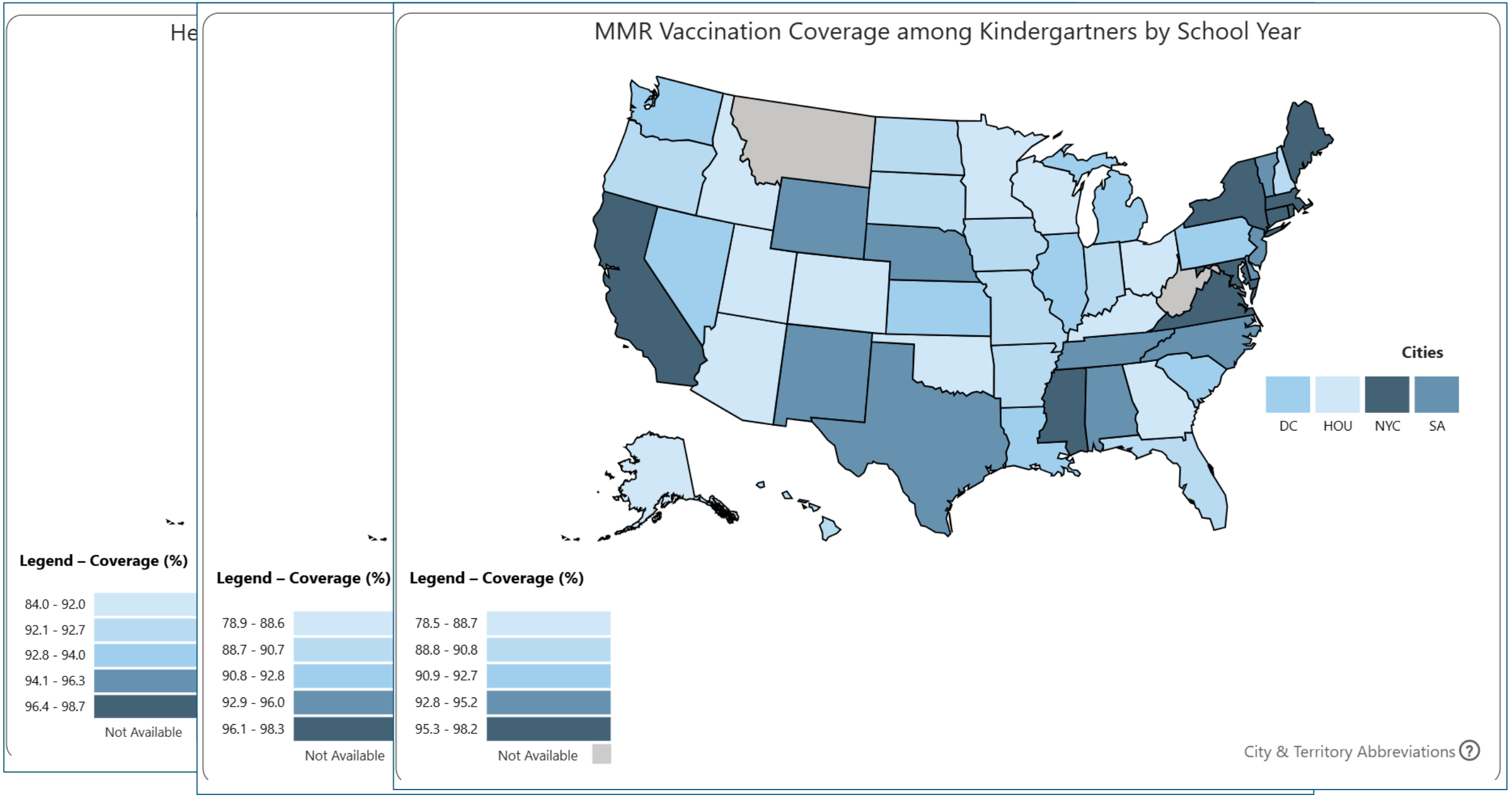
- **Vaccination coverage:**
  - Decrease in coverage for all reported vaccines
  - Decrease coverage for MMR, polio, DTaP and varicella in > 50% of states
- **Vaccination exemptions:**
  - Increased to 3.6% from 3.3% (2023-24)
  - Exemptions increased in 36 states
  - > 5% increases in 17 states



Vaccination Coverage and Exemptions among Kindergartners | SchoolVaxView | CDC



[Vaccination Coverage and Exemptions among Kindergartners | SchoolVaxView | CDC]

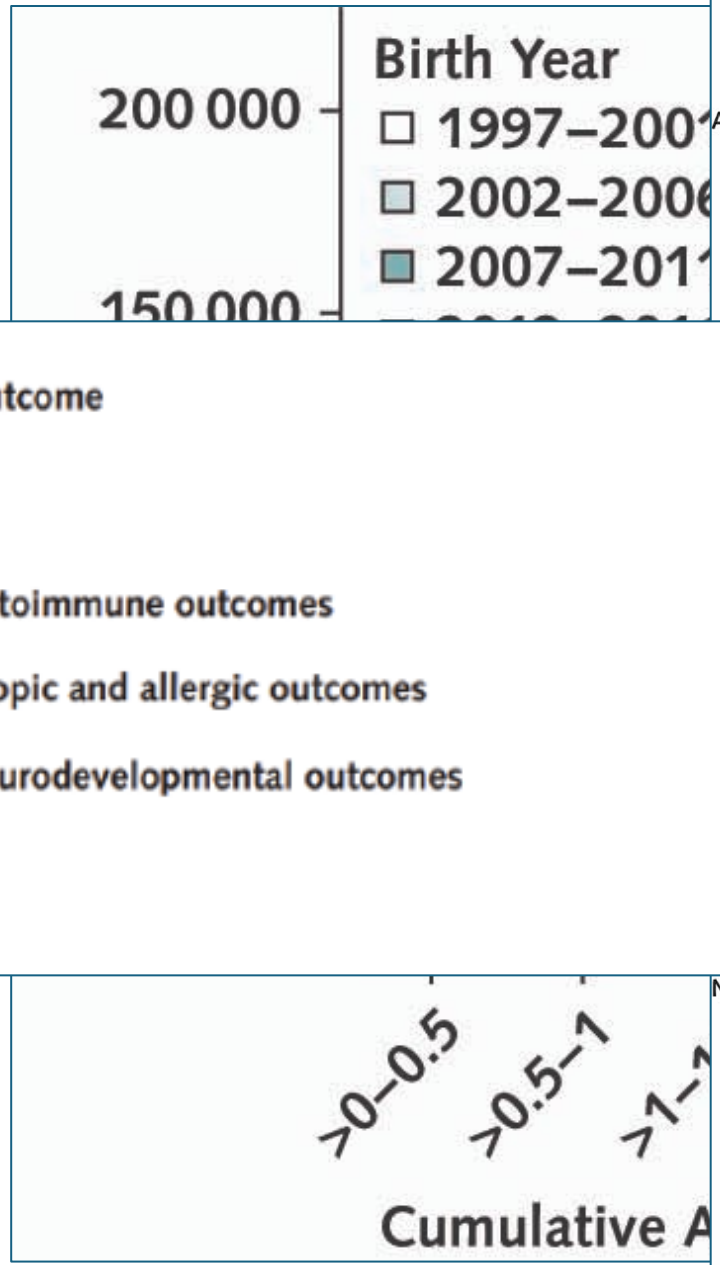


[Vaccination Coverage and Exemptions among Kindergartners | SchoolVaxView | CDC]

Aluminum-Adsorbed Vaccines and Chronic Diseases in Childhood: A Nationwide Cohort Study

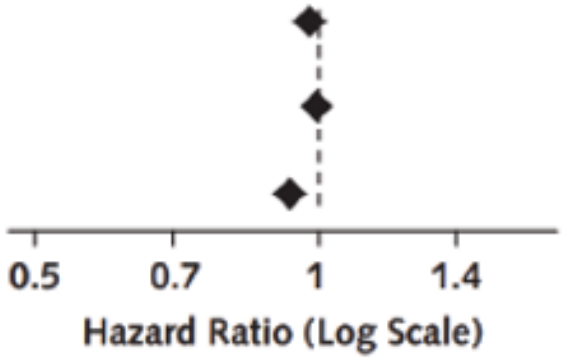
- Aluminum is used as an adjuvant in some non-live vaccines given to young children
  - Hib, PCV, DTaP, HAV, HBV
- Aluminum has been a target of anti-vax groups as a cause of multiple medical problems (theoretical concerns form animal studies).
- **Objective:** to evaluate the association between cumulative aluminum exposure from early childhood vaccination and risk for autoimmune, atopic or allergic, and neurodevelopmental disorders.
- Cohort study in Denmark using a national registry data from 1997-2020
- Included **> 1.2 million Danish children** under age 2yrs (born 1997-2018)
- **Cumulative aluminum amount** received (per 1-mg increase) through vaccination during the first 2 years of life
- **50 adverse events**: 36 autoimmune, 9 atopic or allergic, and 5 neurodevelopmental disorders
- Children were followed from 2yrs of age for study outcome events until 31 December 2020, or until they reached age 5 years, died, or were lost to follow-up, whichever came first.

Andersson NW, Bech Svalgaard I, Hoffmann SS, et al. Ann Intern Med. 15 July 2025.

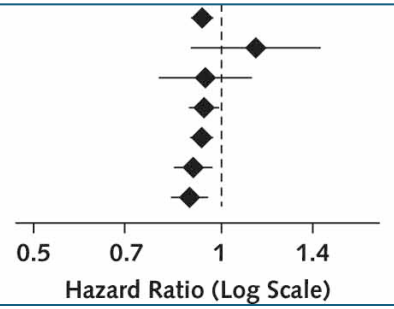


Outcome	Cases, *n*	Person-Years	Adjusted Hazard Ratio (95% CI) per 1-mg Increase in Aluminum Received Through Vaccines by Age 2 y
Autoimmune outcomes	5174	3 400 369	0.98 (0.94–1.02)
Rheumatoid arthritis	51	3 415 683	1.10 (0.72–1.68)
Hashimoto thyroiditis	26	3 415 737	0.92 (0.54–1.56)
Idiopathic thrombocytopenic purpura	422	3 414 006	1.13 (0.97–1.31)
Hypothyroidism	104	3 414 265	0.98 (0.74–1.30)
Vitiligo	39	3 415 724	0.80 (0.53–1.23)
Kawasaki disease	266	3 414 864	1.00 (0.83–1.19)

Outcome	Cases, *n*	Person-Years	Adjusted Hazard Ratio (95% CI) per 1-mg Increase in Aluminum Received Through Vaccines by Age 2 y
Autoimmune outcomes	5174	3 400 369	0.98 (0.94–1.02)
Atopic and allergic outcomes	39 465	1 562 490	0.99 (0.98–1.01)
Neurodevelopmental outcomes	5200	3 409 893	0.93 (0.90–0.97)



Neurodevelopmental outcomes	5200	3 409 893	0.93 (0.90–0.97)
Asperger syndrome	175	3 415 664	1.13 (0.89–1.44)
Atypical autism	276	3 415 524	0.94 (0.79–1.12)
Autistic disorder	2686	3 412 494	0.94 (0.89–0.99)
Autism spectrum disorder composite	4806	3 414 259	0.93 (0.89–0.97)
Attention deficit–hyperactivity disorder	1580	3 414 493	0.90 (0.84–0.96)
Other pervasive developmental disorders	1702	3 413 647	0.89 (0.83–0.95)

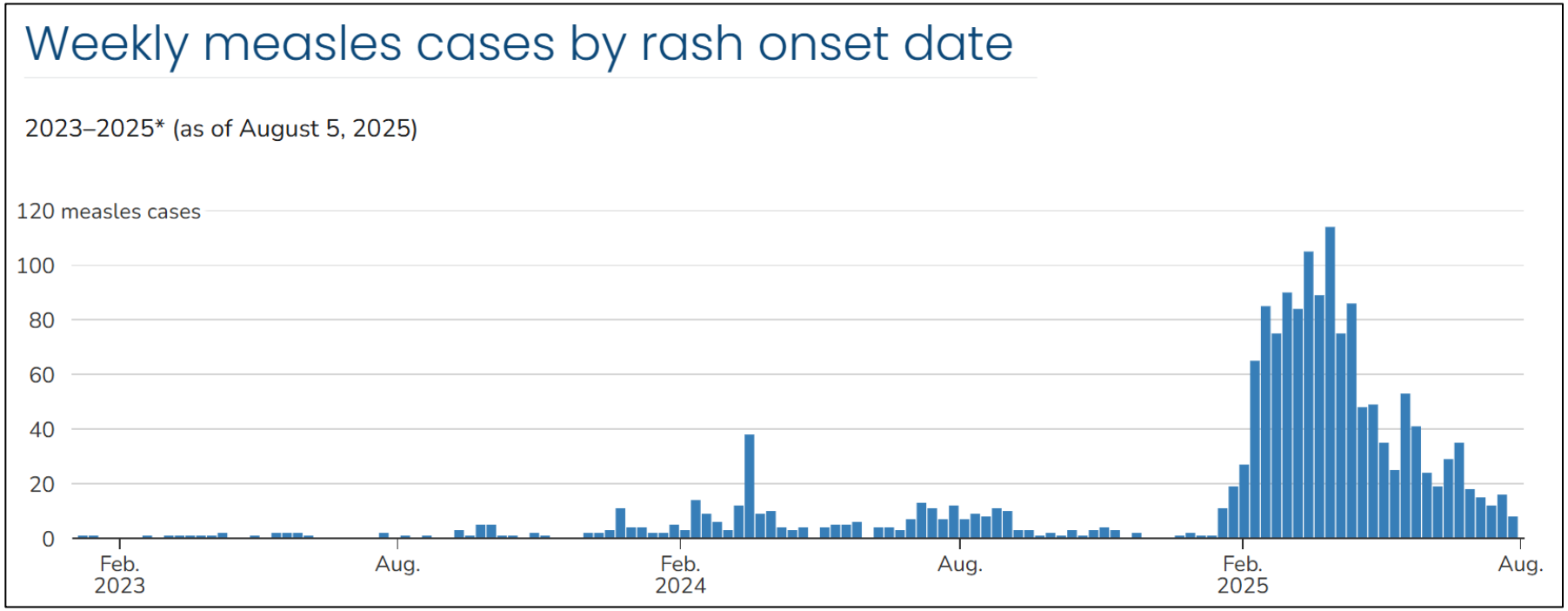


Andersson NW, Bech Svalgaard I, Hoffmann SS, et al. Ann Intern Med. 15 July 2025.

Outbreak Update

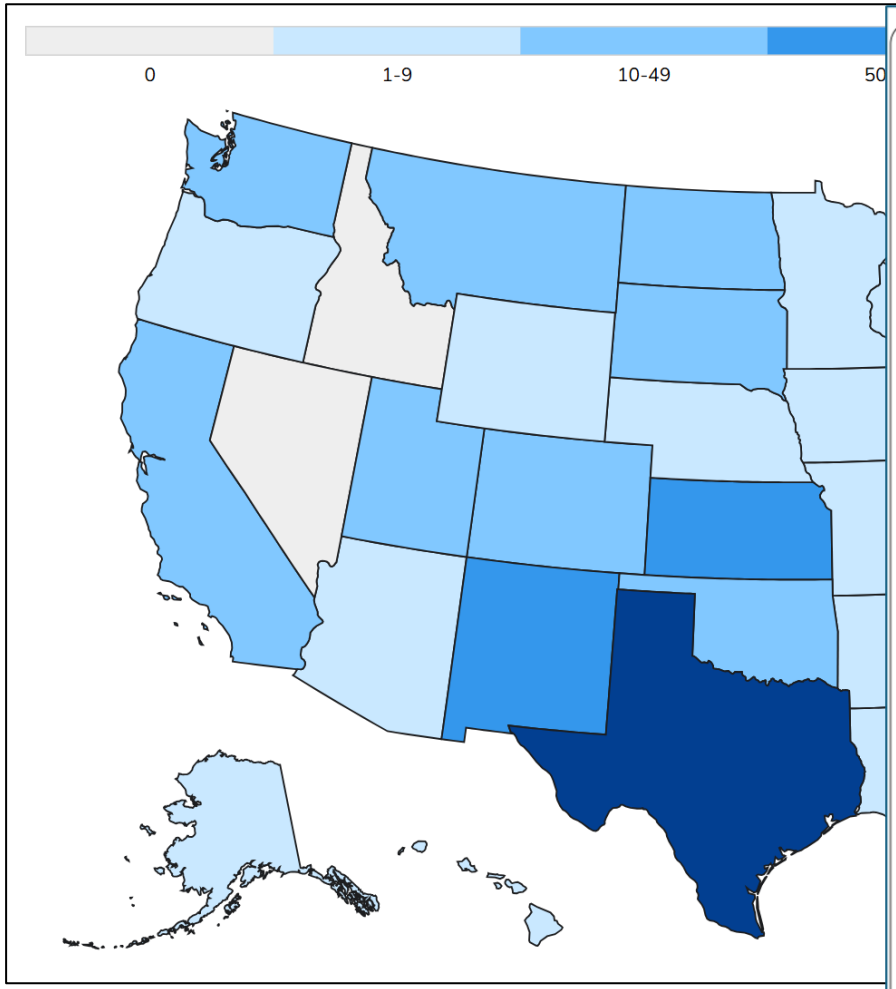
Measles Outbreak

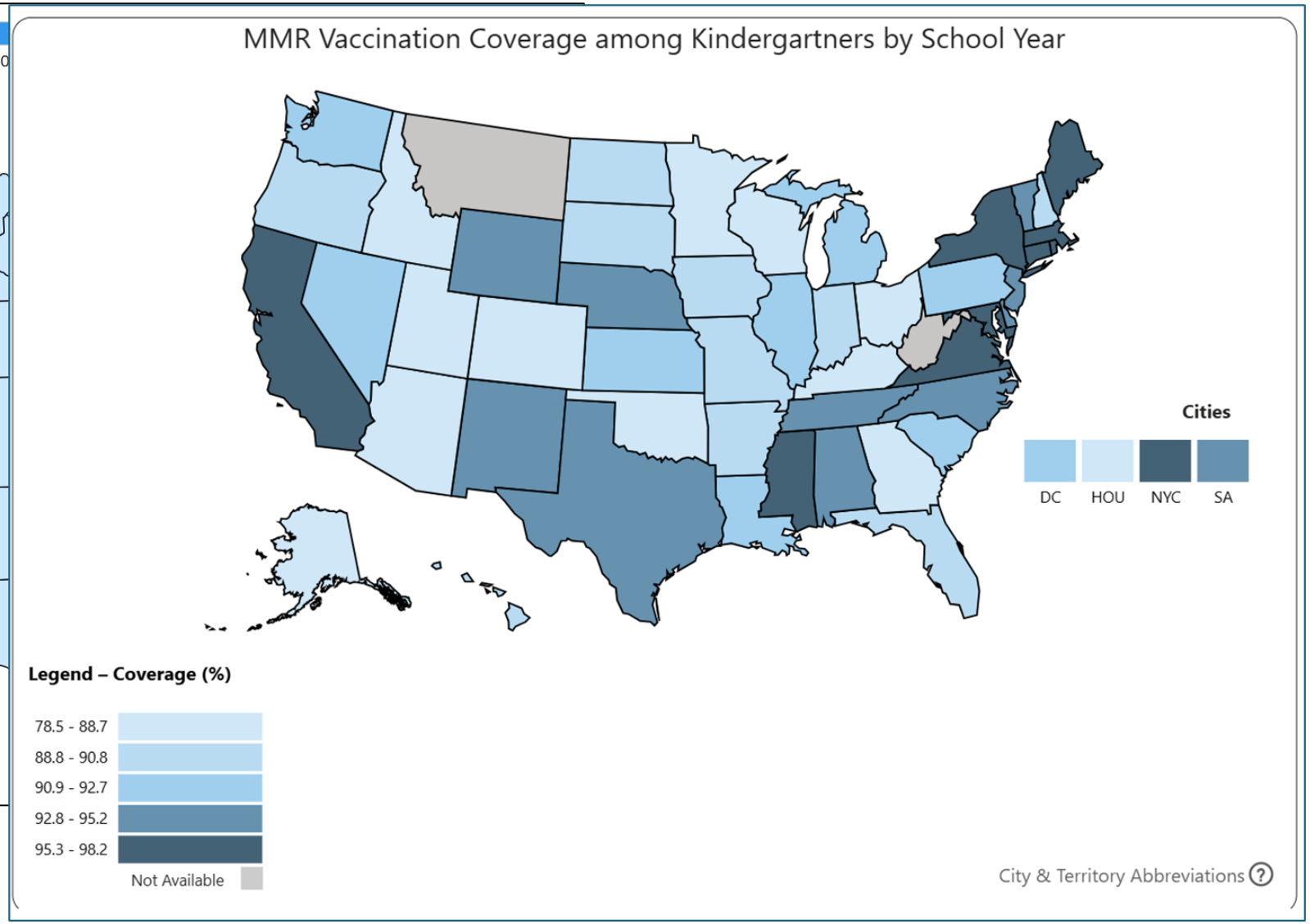
- 1356 cases (8/5/25)
  - Under age 5yrs: 386 (28%)
  - Unvaccinated or unknown: 92%
- Hospitalizations: 171 (13%)
- Deaths: 3



Measles Cases and Outbreaks | Measles (Rubeola) | CDC

Map of measles cases in 2024 & 2025





[Measles Cases and Outbreaks | Measles (Rubeola) | CDC]

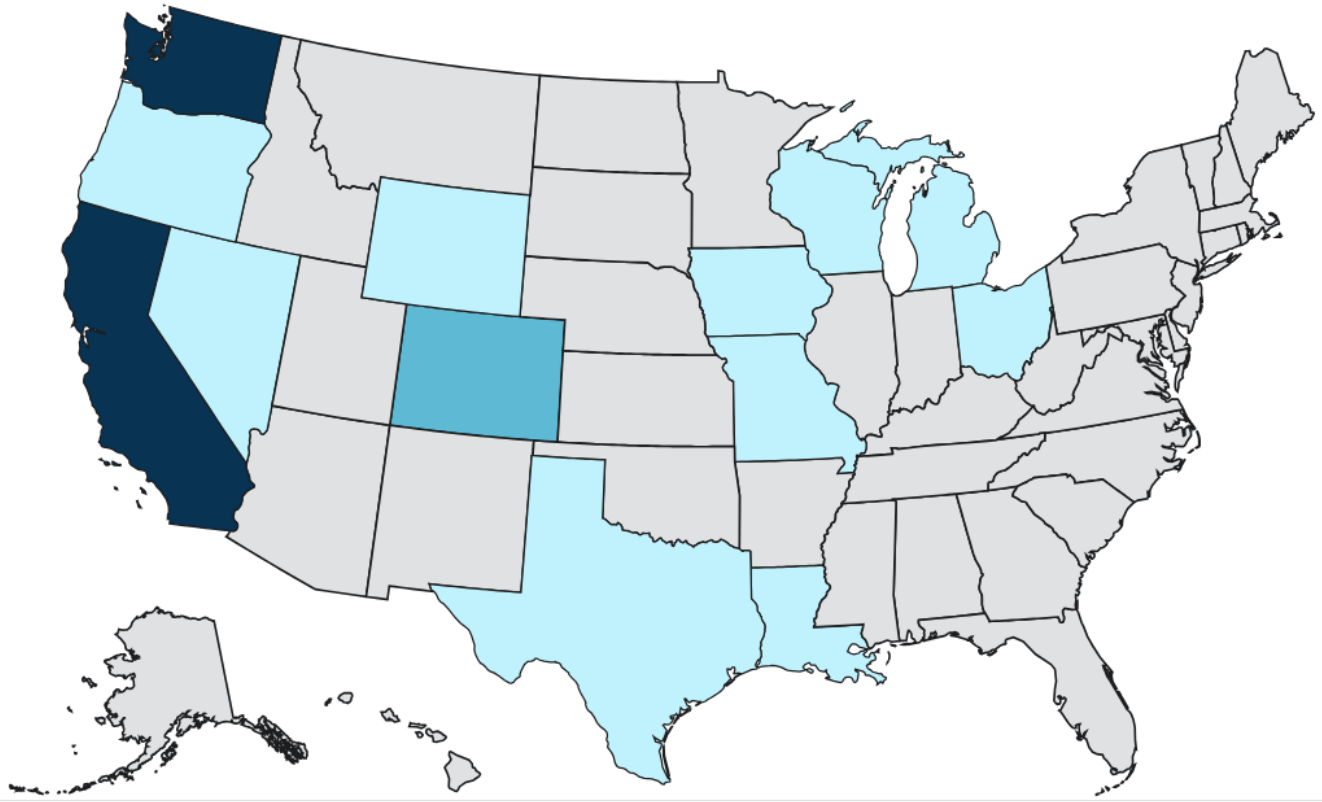
Avian Influenza Cases

National Total Cases: 70

Cases	Exposure Source
41	Dairy Herds (Cattle)*
24	Poultry Farms and Culling Operations*
2	Other Animal Exposure†
3	Exposure Source Unknown‡

NOTE: One additional case was previously detected in a poultry worker in Colorado in 2022. Louisiana reported the first H5 bird flu death in the U.S.

*Exposure Associated with Commercial Agriculture and Related Operations
†Exposure was related to other animals such as backyard flocks, wild birds, or other mammals
‡Exposure source was not able to be identified



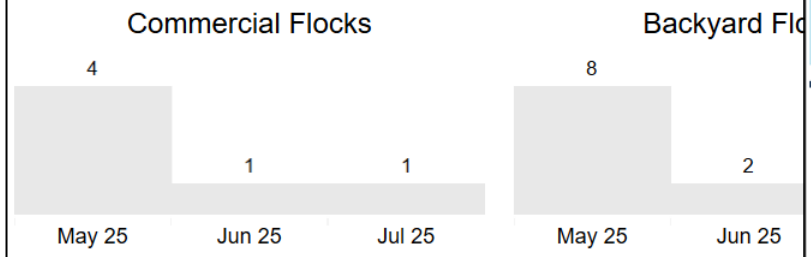
Total cases

0 | 1-5 | 6-10 | >10

H5 Bird Flu: Current Situation | Bird Flu | CDC

Detections by

Bars reflect most recen



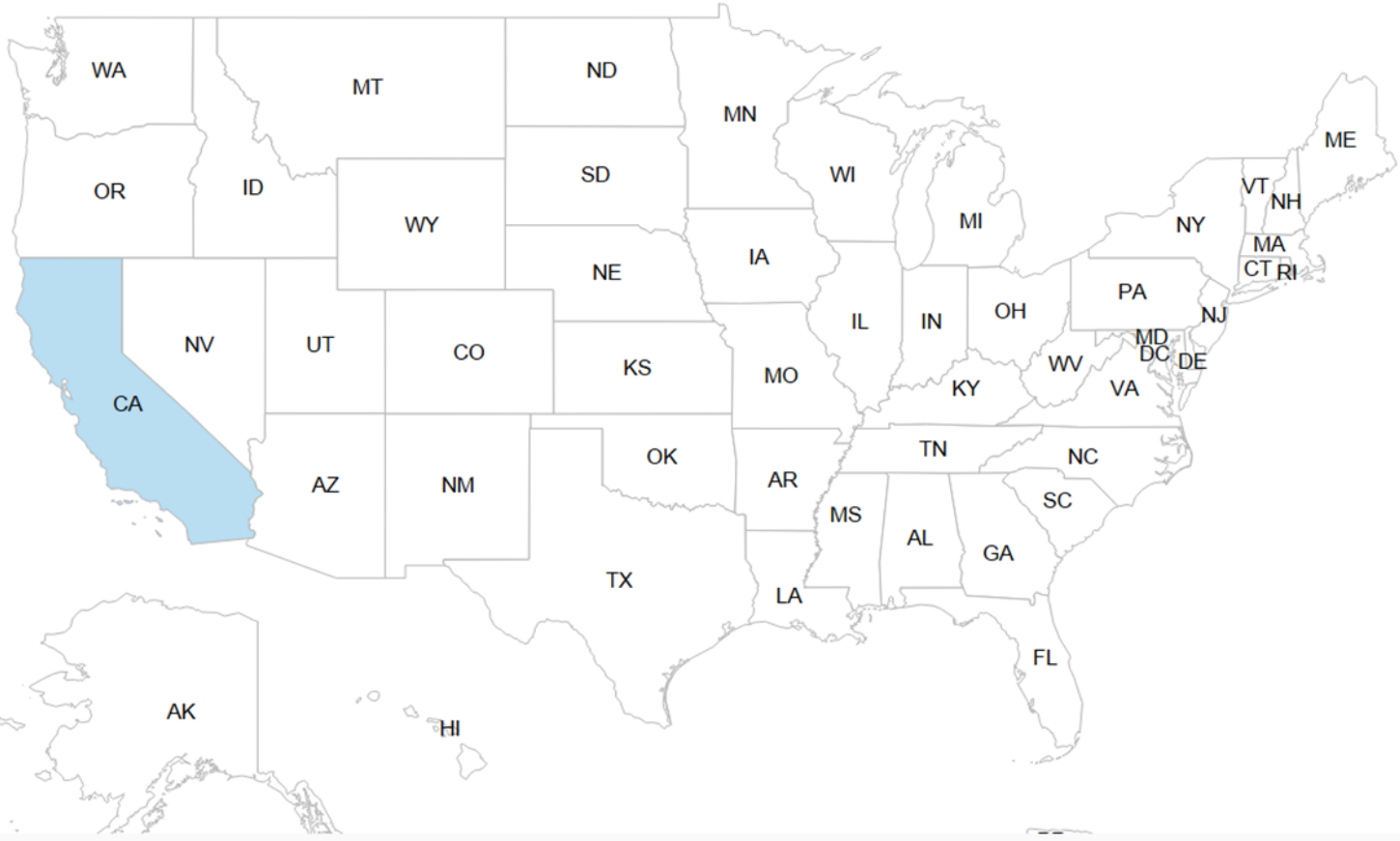
Choose variable: Commercial Flocks

Choose time period: Last 30 Days

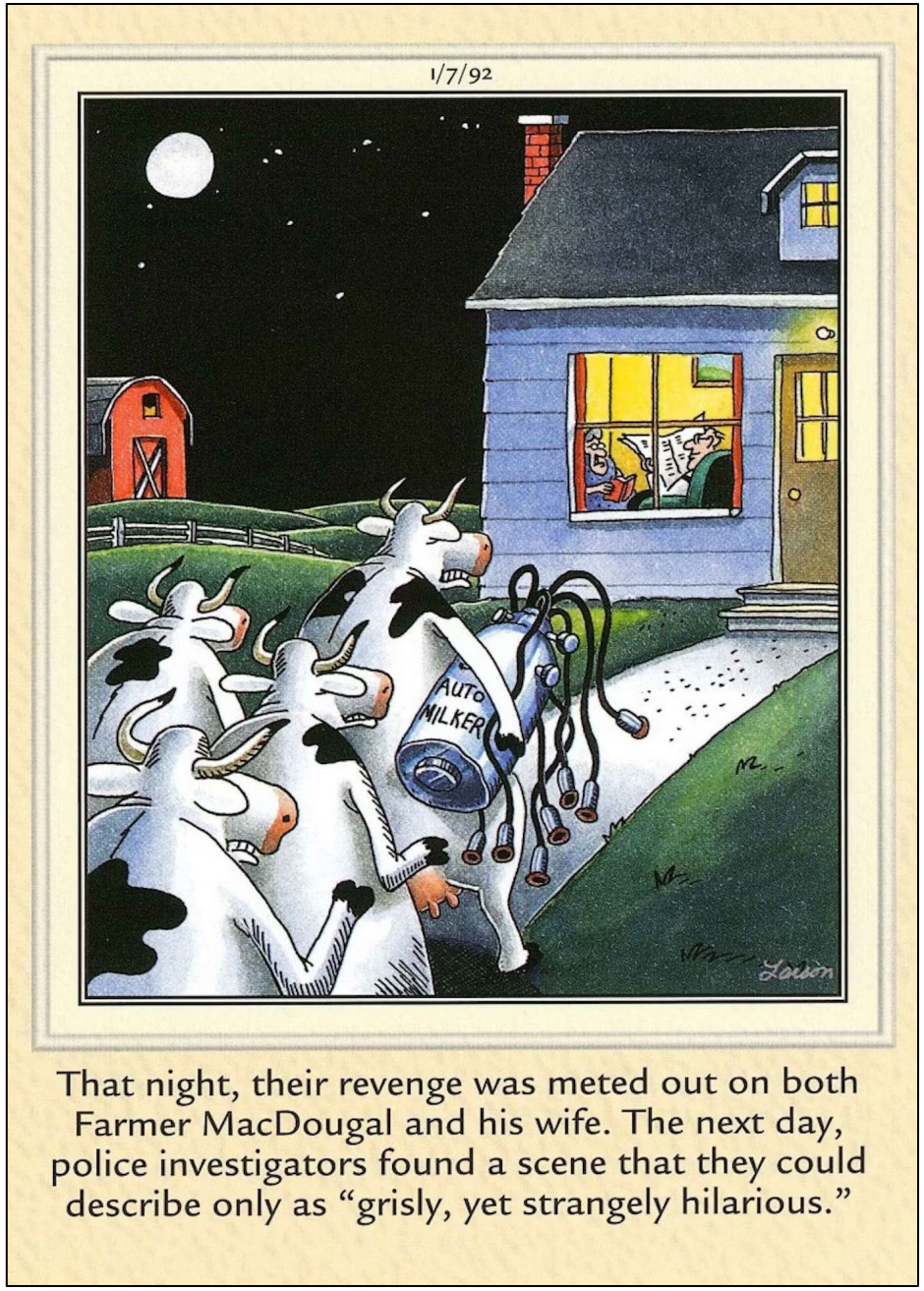
Commercial
by State

In the Last 30 Days, in Cattle, there were:
3 New Confirmed Cases in **1** States

Number of New Confirmed Cases in Cattle by State, Last 30 Days



An Udder Mess...



Raw Milk Outbreak in Florida

- Outbreak of *Campylobacter* and Shiga toxin-producing *E. coli* (STEC) infections from raw milk linked to **Keely Farms Dairy**,
- Located in New Smyrna Beach, FL (Volusia County)
- Sanitation practices in this farm are of concern due to the number of cases.
- There have been 21 cases since January 24, 2025,
  - 6 children < age 10yrs
  - 7 hospitalizations
  - Severe complications with at least 2 cases.

Apex Dental | Unlocking the Health Benefits of Raw Milk

Florida Department of Health Provides Update on Raw Milk | Florida Department of Health

U.S. Centers for Disease Control and Prevention

MMWR

Morbidity and Mortality Weekly Report

Weekly / Vol. 74 / No. 27

July 24, 2025

Outbreak of *Salmonella* Typhimurium Infections Linked to Commercially Distributed Raw Milk — California and Four Other States, September 2023–March 2024

Eva Weinstein, MPH[1]; Katherine Lamba, MPH[1]; Christian Bond[1]; Vi Peralta, MPH[1]; Michael Needham, MPH[1]; Stephen Beam, PhD[2]; Francine Arroyo, MSc[1]; David Kiang, PhD[1]; Yishi Chen, PhD[1]; Seema Shah, MD[3]; Mark E. Beatty, MD[3]; Stephen Klish, MPH[4]; Akiko Kimura, MD[1]

FIGURE. Outbreak of *Salmonella* Typhimurium linked to consumption of raw milk products, by reported* or estimated† illness onset date (N = 171) — California§ and four other states,¶ September 2023–March 2024

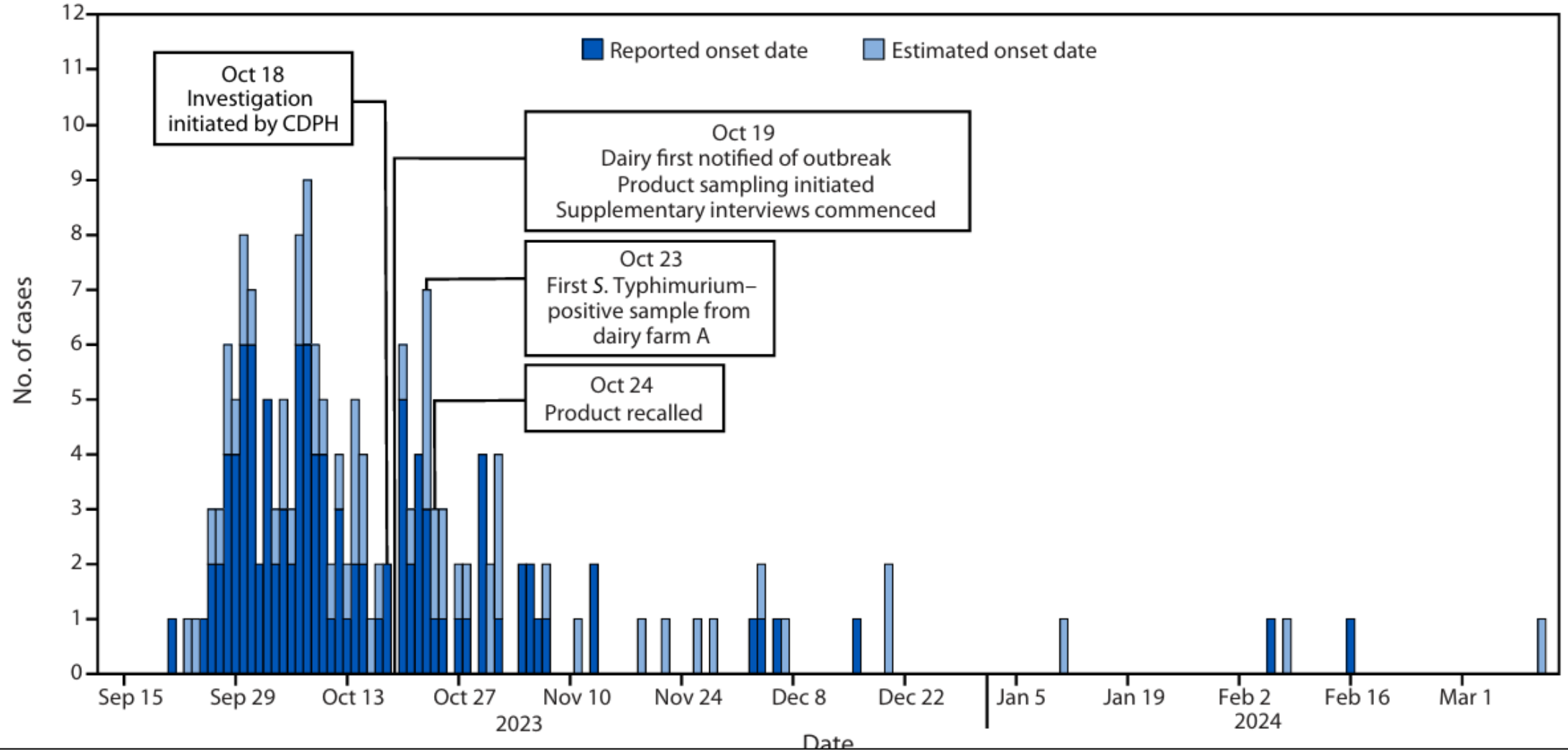


TABLE. Characteristics of patients associated with a *Salmonella* Typhimurium outbreak linked to brand A raw milk — California and four other states,* September 2023–March 2024

Characteristic (no. of cases with available information)	No. (%)†
Case classification (N = 171)	
Confirmed§	159 (93)
Probable¶	12 (7)
State (N = 171)	
California	167 (98)
Other*	4 (2)
Median age (range)	7 yrs (9 mos–87 yrs)
Age group, yrs (N = 171)	
<5	67 (39)
5–12	40 (23)
13–17	13 (8)
18–64	45 (26)
≥65	6 (4)
Male sex	108 (63)
Hispanic or Latino ethnicity (n = 130)	19 (15)
Race (n = 136)	
Asian	10 (7)
Black or African American	5 (4)
White	105 (77)
Other	16 (12)
Hospitalized (n = 162)	
No	140 (86)
Yes	22 (14)
Death	0 (—)
Raw dairy exposure information (n = 91)**	
Any raw milk or heavy cream consumption (n = 91)	72 (79)
Brand (n = 72)	
Brand A	67 (93)
Other	3 (4)
Unknown	2 (3)
Frequency of consumption of brand A dairy products (n = 49)	
Once only	8 (16)
Weekly	17 (35)
Daily	24 (49)
Brand A product type (n = 68)	
Milk only	61 (90)
Heavy cream only	1 (1)
Raw cheese only	1 (1)
More than one product††	5 (7)

S. Typhimurium was detected in **3 of the 40 brand A product samples collected**; isolates were **indistinguishable by WGS from the clinical isolates** collected from patients in the outbreak.

Foodborne illness outbreaks linked to unpasteurised milk and relationship to changes in state laws – United States, 1998–2018

- Analyzed the Foodborne Disease Outbreak Surveillance System
- Compared outbreak numbers grouped by legality of selling unpasteurized milk based on 2019 state laws.
- Outbreaks linked to unpasteurized milk, 2013–2018
  - 75 outbreaks
  - 675 illnesses
  - 48% of illnesses occurred in children
- 58 (78%) of single state outbreaks occurred in states where the sale of unpasteurized milk was allowed.

Koski L et al (2022). Epidemiology and Infection 150, e183,1–13.

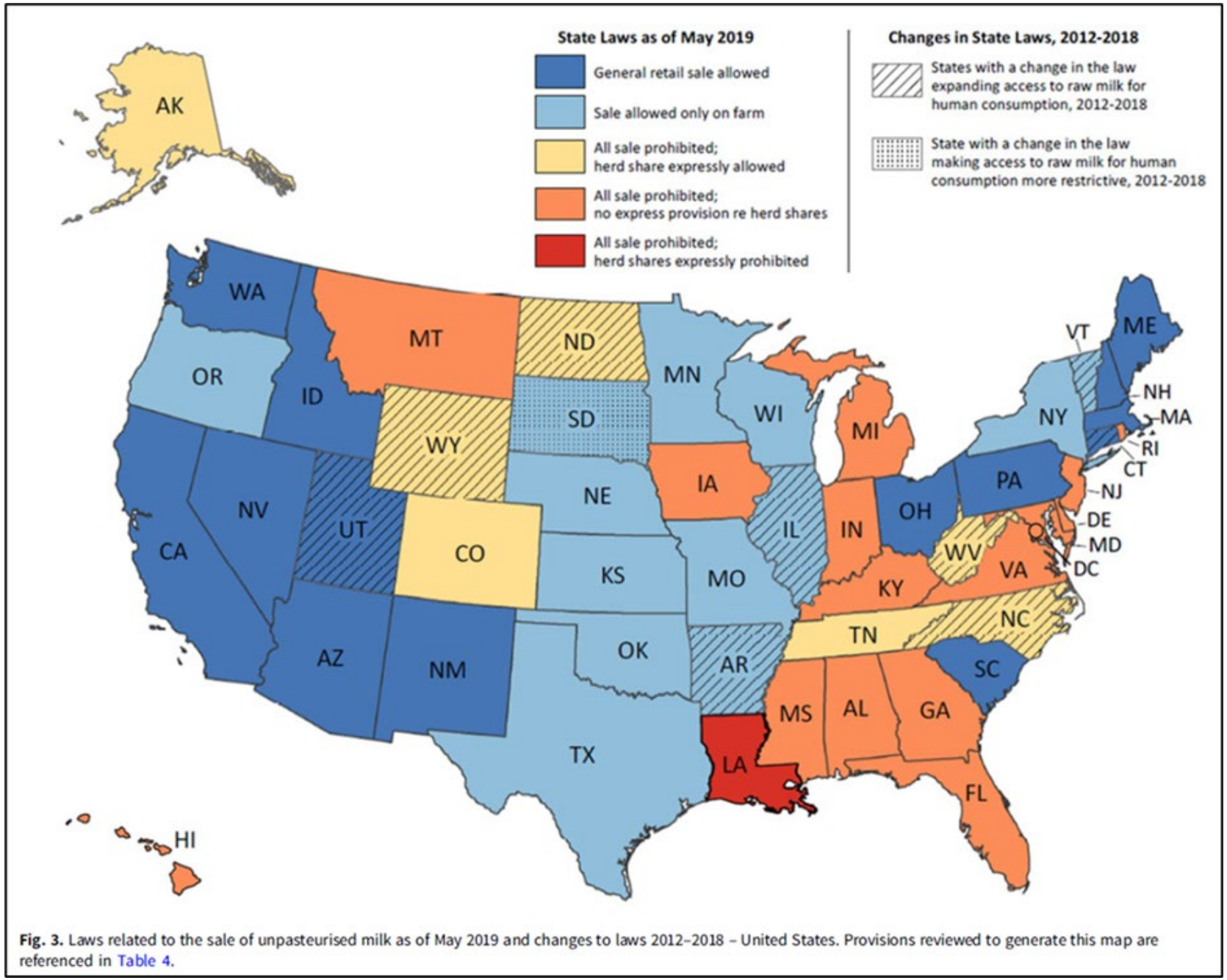


Fig. 3. Laws related to the sale of unpasteurised milk as of May 2019 and changes to laws 2012–2018 – United States. Provisions reviewed to generate this map are referenced in Table 4.

Koski L et al (2022). Epidemiology and Infection 150, e183,1–13.

Table 2. The annual mean and Bayesian negative binomial model estimated change in the mean number of outbreaks and outbreak-associated illnesses linked to unpasteurised milk by 7-year periods – FDOSS, United States, 1998–2018

	No. of outbreaks per year		No. of outbreak-associated illnesses per year	
Time period	Mean	Model estimated change in mean compared to 1998–2004 (95% CI)	Mean	Model estimated change in mean compared to 1998–2004 (95% CI)
1998–2004	4	Ref	103	Ref
2005–2011	12.1	+6.2 (+4.0 to +9.0)	142	+16.5 (−71.5 to +81.6)
2012–2018	12.7	+8.3 (+5.5 to +11.6)	133	+21.3 (−112 to +158)

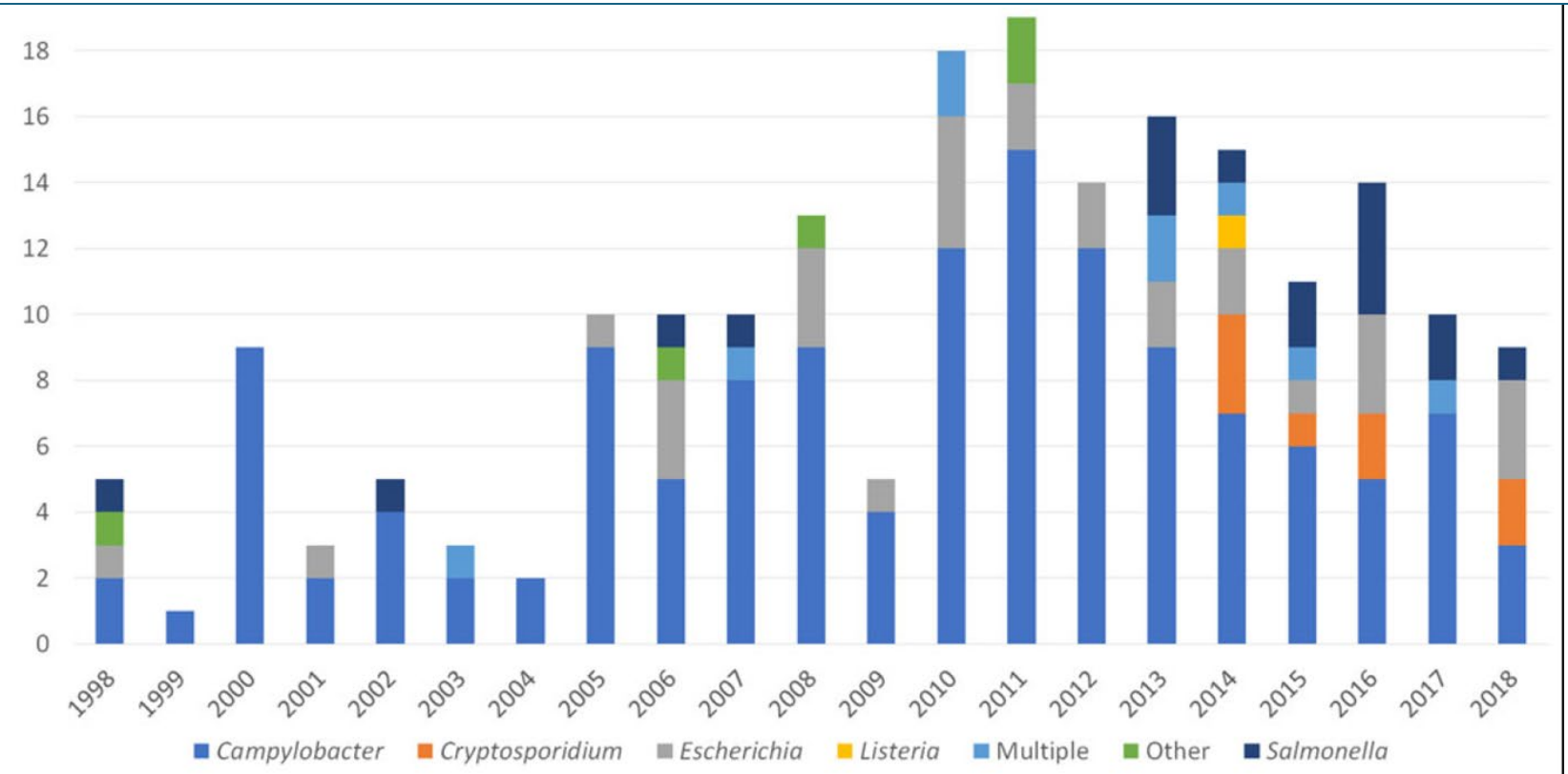


Fig. 2. Unpasteurised milk-associated outbreaks, by year and enteric pathogen – FDOSS, United States, 1998–2018.

Koski L et al (2022). Epidemiology and Infection 150, e183,1–13.

Table 5. The number of jurisdictions, outbreaks, outbreak associated-illnesses, and the IRRs of expected number of outbreaks and illnesses, by legal status for unpasteurised milk sale, FDOSS, United States, 2013–2018

		Outbreaks Models			Outbreak-Associated Illnesses Models		
Models for legality of sales and types of sales	No. (%) of jurisdictions	No. (%) of outbreaks[a]	IRR (95% CI)[b]	*P*-value[b]	No. (%) of illnesses	IRR (95% CI)[b]	*P*-value[b]
Models for all jurisdictions ($n = 51$)							
Sale allowed[c,d]	27 (53)	58 (78)	3.2[e] (1.4–7.6)	0.006	514 (76)	2.9[e] (0.8–10.0)	0.086
Sale prohibited	24 (47)	16 (22)	Ref	–	159 (24)	Ref	
Models for jurisdictions that allowed sales ($n = 27$)							
Retail sale allowed	14 (52)	46 (79)	3.6[e] (1.3–9.6)	0.012	398 (77)	3.2[e] (0.8–13.3)	0.102
Sale on farm only	13 (48)	12 (21)	Ref		116 (23)	Ref	
Models for jurisdictions that prohibited sales ($n = 23$)[f]							
Herd shares allowed	7 (30)	8 (50)	2.3[g] (0.9–6.0)	0.084	115 (72)	6.0[e] (0.7–51.1)	0.098
No express reference to herd shares	16 (70)	8 (50)	Ref		44 (28)	Ref	

Koski L et al (2022). Epidemiology and Infection 150, e183,1–13.

Some talking points on raw milk

www.cdc.gov

- **Are there any benefits to drinking raw milk?**
  - No. As a science-based regulatory agency, the FDA looks to the scientific literature for information on benefits and risks associated with raw milk.
- **Does pasteurization affect the nutrient content of milk?**
  - Research shows no meaningful difference between the nutrient content of pasteurized and unpasteurized milk.
- **Does pasteurizing milk alter it in a fashion that can cause allergic reactions?**
  - No. The milk proteins which cause allergic reactions in dairy-sensitive people are present in both raw milk and pasteurized milk.
- **Does consuming raw milk cure some illnesses and allergies?**
  - There is no scientific evidence to demonstrate that raw milk has any effect on illness or allergies.

Raw Milk Questions & Answers | FDA

Hand Hygiene as a Foundation for Infection Prevention

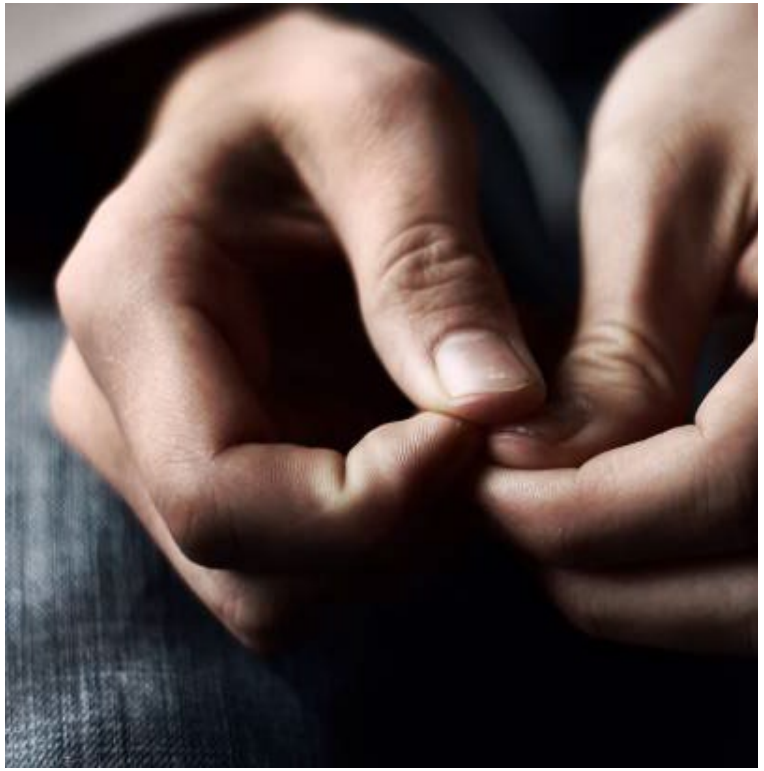
Disclosure: *I have no actual or potential conflicts of interest to disclose*

#1 Goal for Hand Hygiene

Just Do IT!

Why Is This So Hard?

- Fingernails
- Gloves
- Monitoring Compliance



Fingernails

- **Hand hygiene begins with the healthy hands** of healthcare personnel being free from pathogenic transient or resident flora, redness, cracks, or wounds, and having short, natural fingernails.

- Nails of healthcare workers can serve as a **reservoir for microbial organisms**, both pathogenic and non-pathogenic, and that the greatest burden tends to be the sub-ungual region.

- **Outbreaks have occurred with artificial nails** (Gram negative and yeast harbored more frequently)
  - Candida in post spine surgery patients
  - Serratia in hemodialysis and post-cardiovascular surgery
  - Pseudomonas and ESBL Klebsiella in neonatal intensive care units

Fingernail Characteristics

Nail length

- Increased bacterial carriage with longer lengths
- Increased rates of glove perforation with nail length increasing

Polish

- Chipped nail polish or ≥ 4 days old associated with higher bacterial burden than natural nails
- Natural fingernails and those with standard fingernail polish were shown in a single study to be more amenable to cleaning with alcohol based hand rubs than gel or shellac fingernails (Hewlett 2018) but this is not well studied

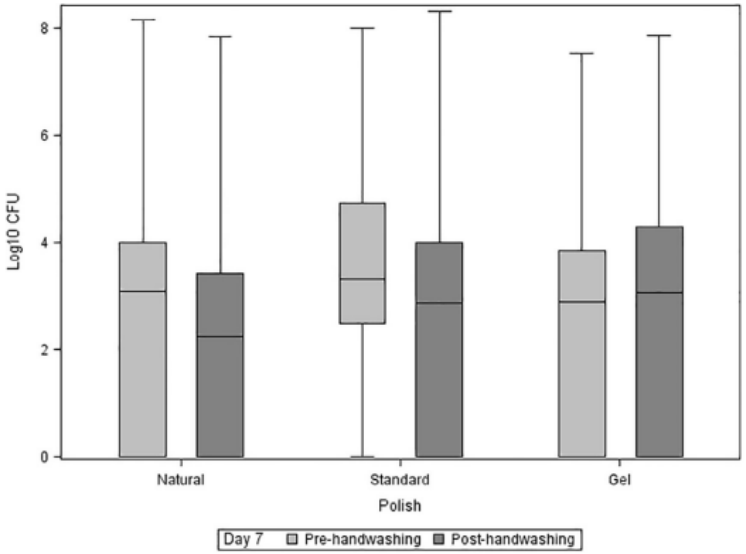


Fig 2. Side-by-side boxplot comparison of bacterial growth by nail type, pre- and posthand hygiene. The box and whiskers denote median, interquartile range, and minimum and maximum. *CFU*, colony forming units.

Fingernail Recommendations

Table 1. Summary of Recommendations to Prevent Healthcare-Associated Infections through Hand Hygiene

Essential Practices
1. **Promote the maintenance of healthy hand skin and fingernails.**[10,57,58,154] (Quality of Evidence: HIGH)
a. Promote the preferential use of ABHS in most clinical situations[10,64] (Quality of evidence: HIGH)
b. Perform hand hygiene as indicated by the CDC or the WHO Five Moments. (Quality of evidence: HIGH)
c. Include fingernail care in facility-specific policies related to hand hygiene.[56,152] (Quality of evidence: HIGH) • HCP should maintain short, natural fingernails. • Nails should not extend past the fingertip. • HCP who provide direct or indirect care in high-risk areas (eg, ICU, perioperative) should not wear artificial fingernail extenders. • Prohibitions against fingernail polish (standard or gel shellac) are at the discretion of the infection prevention program, except among scrubbed individuals who interact with the sterile field during surgical procedures; these individuals should not wear fingernail polish or gel shellac.

Issue: Strict fingernail policies without clear rationale can hinder healthcare personnel from embracing hand hygiene as a foundational infection prevention strategy.

Advantages of Glove Use

- **Personal protective equipment**
- **Reduced hand contamination** with contact precautions
  - Gloved hands with lower microbial load than bare hands
  - Gloves reducing fomite-to-fingerpad and fingerpad-to-fomite transfer (Greene C, AJIC, 2015)

Table 2

Overall mean percentage TEs, SDs, minimum/maximum TE, and *P* value results for overall mean TE comparisons (assumes no difference across fomite material types)

Direction of transfer	n	Overall mean % TE ± SD	Min-Max	Comparing % TE by direction (*P*)*	Comparisons with skin-skin (*P*)†
Fingerpad					
Fomite to fingerpad	60	24.12‡ (14.81)	3.70-69.47	<.0001	.0651
Fingerpad to fomite	59	5.60§ (6.46)	0.0-34.47		<.0001
Latex glove					
Fomite to fingerpad	60	10.63‡ (11.52)	0.0-45.09	<.0001	<.0001
Fingerpad to fomite	57	2.96§ (6.94)	0.0-36.81		<.0001
Skin-skin					
Fingerpad to fingerpad	6	32.53 (12.07)	17.32-43.26		

Max, maximum; *Min*, minimum; *TE*, transfer efficiency.

*Unpaired *t* test *P* values from comparing the fomite-to-fingerpad vs fingerpad-to-fomite overall mean percentage TEs for the fingerpad and for latex gloves.

†Holm-Šídák test *P* values from comparing the mean skin-skin percentage TE with each of the overall mean fomite-to-fingerpad and fingerpad-to-fomite percent TEs generated with and without glove use.

‡Unpaired *t* test of fingerpad vs glove overall mean fomite-to-fingerpad TEs: $P < .0001$.

§Unpaired *t* test of fingerpad vs glove overall mean fingerpad-to-fomite TEs: *P* value = .036.

Disadvantages of Glove Use

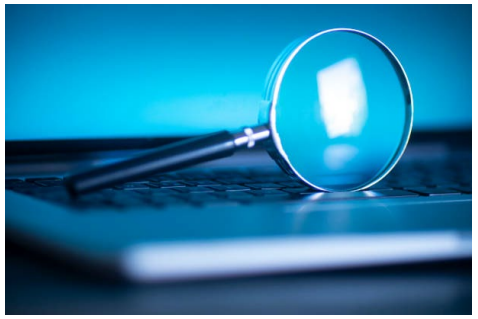
- Increased **environmental contamination from inappropriate glove use**, during tasks when there is no risk of exposure to infectious matter, or failures to change gloves at appropriate moments during care.
- Increased **hand contamination from gloves** that are too large and from doffing processes.
- Increased risk of **occupational irritant** or allergic dermatitis with extended use of gloves.

Appropriate Glove Use Recommendation

4.	**Ensure appropriate glove use to reduce hand and environmental contamination.**[130–132,138] (Quality of evidence: HIGH)
a.	Use gloves for all contact with the patient and environment as indicated by standard and contact precautions during care of individuals with organisms confirmed to be less susceptible to biocides (eg, *C. difficile*, norovirus).[10]
b.	Educate HCP about the potential for self-contamination and environmental contamination when gloves are worn. (Quality of evidence: HIGH)
c.	Clean hands immediately following glove removal. If handwashing is indicated and sinks are not immediately available, use ABHS and then wash hands as soon as possible.
d.	Educate and confirm the ability of HCP to doff gloves in a manner that avoids contamination. (Quality of evidence: HIGH)

Issue: Gloves are most often used as personal protective equipment to protect the wearer and when used for extended durations leads to increased environmental surface contamination and decreased hand hygiene.

Hand Hygiene Monitoring



- Goal = **timely, meaningful, and actionable feedback** to guide healthcare personnel improvement.
- Unlikely that a single data-collection method will fulfill all hand hygiene program needs
- Measurement method should be executed in a manner that **enhances a culture of safety, results in credible and actionable data, and improves performance toward facility-specific goals.**
- Individuals who conduct hand hygiene observations should be recognized as valued team members and patient safety advocates.

Hand Hygiene Monitoring Types

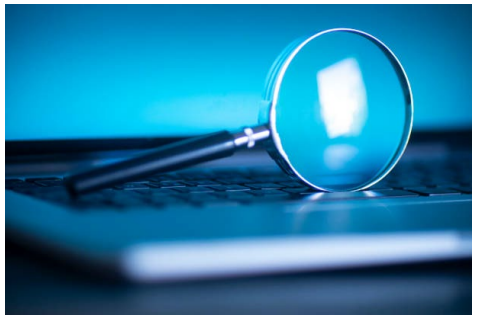


Table 5. Type and Timing of Feedback by Hand Hygiene Measurement Method

Measurement Method	Type of Feedback	Timing of Feedback
Direct overt observations	Individualized	Immediate
Direct covert observations	Individualized	End of observation period
	Aggregate	Regular reports of adherence (eg, weekly)
Automated hand-hygiene monitoring systems (AHHMSs)	Individualized	Immediate (ie, real-time reminders)
	Aggregate	Continuously updated real-time reports
		Regular reports of adherence (eg, weekly)
Remote video observations	Individualized	End of shift
	Aggregate	Regular reports of adherence (eg, weekly)
Patient as observer	Individualized	Regular reports of adherence (eg, weekly)
	Aggregate	Regular reports of adherence (eg, weekly)
Indirect methods	Aggregate	Regular reports of usage or events (eg, monthly, quarterly)

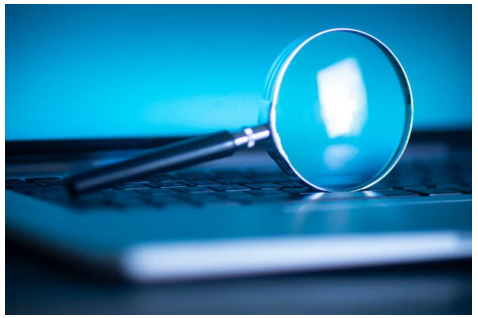
Table 6. Metrics for Reporting Adherence to Hand Hygiene

Measurement	Numerator	Denominator	Stratification	Metric
Direct covert observations[a]	No. of adherent hand hygiene opportunities performed	No. of total opportunities	Unit HCP role	(Adherent HHOs)/(Total HHOs) ×100
AHHMS	Approximate no. of hand hygiene actions detected by sensors	Approximate no. of hand hygiene opportunities detected by sensors	Unit HCP role Individual	(Approximate hand hygiene actions)/(approximate HHOs) ×100[a]
Patient as observer	No. of patient reporting adherence	Total number of observations submitted by patients	Service area and/or HCP role	(No. reporting adherence observations)/(Total observations) ×100
Product volume	Volume of hand hygiene product used (eg, alcohol-based hand rub or liquid soap) for a specified period in a specified area	1,000 patient days during specified period in specified area, or number of patient visits for outpatient areas or emergency departments[185]	Unit Service area No stratification (ie, facility-wide)	Volume (mL) per 1,000 patient days or per patient visit
Audits of hand hygiene supplies	No. of hand hygiene stations with defects (eg, lack of adequate supplies or not functioning as intended)	No. of hand hygiene stations assessed	Unit Service area	(No. of hand hygiene stations without defects)/(No. of hand hygiene stations assessed) ×100

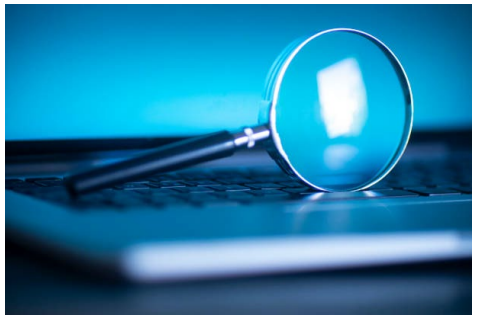
[a]Direct overt observation should not be used to calculate adherence.

Table 4. Methods to Measure Hand Hygiene

Method	Use	Strength	Weaknesses	Considerations
Direct overt observation[29,153]	Gold standard for evaluation of technique Monitoring prevalence of hand conditions, adherence to facility or unit specific policies Inclusion in prevention bundle checklists can ensure appropriate hand hygiene prior to high-risk procedures (eg, central-line insertion)	Immediate feedback with correction of lapses Those completing prevention bundle checklists are empowered to speak up for patient safety. Can be used as a form of engagement among peers	High risk for bias due to the Hawthorne effect, should not be used to determine rates of adherence during routine care	As part of competency-based training a systematic approach may be used to ensure ongoing, regular assessments of knowledge and skill among all HCP.
Direct covert observation[14,16,17,19,25,47]	Establishment of performance baseline Gauge progress towards facility established goals Evaluation of technique	Barriers and facilitators to hand hygiene can be identified	High risk for observation bias Observations potentially obstructed by physical barriers (eg, curtains) Time and labor intensive Those observed may be skeptical of data Feedback may be delayed or fail to penetrate to those observed Potential for patient harm if lapses not immediately corrected	Facilities should engage in strategies to reduce observer bias. Observers should have clear directions about how to address noncompliance.
Automated hand-hygiene monitoring systems (AHHMSs)	Supplements direct observation Establishment of performance baseline Gauge progress toward facility-established goals Provides trends in hand hygiene performance	More complete data regarding compliance due to continuous monitoring of all shifts and days of week HCP-specific adherence rates can be monitored using some systems Systems may provide real-time reminders to ensure adherence	Unable to evaluate technique Wearable devices may hinder HCP acceptance or completeness of analysis due to noncompliance with wearable use Recording errors may lead to HCP lack of confidence in data, variability in reliability of data between systems and in different physical settings Resource investment is significant and typically recurrent via annual client subscription	Rigorous evaluation is needed to ensure validity. Collaboration with and empowerment of HCP may lead to better acceptance. Will not eliminate need for observation or improvement campaigns but may allow for more targeted interventions
Remote video observation[30,37]	Establishment of performance baseline Gauge progress toward facility-established goals Validate opportunities to determine denominators if not captured by an AHHMS Allows for review of unusual circumstances and validation of other monitoring systems	The absence of a human observer may reduce the Hawthorne effect. Potential for provision of immediate and end-of-shift feedback to individuals and unit managers	Visualization is restricted to camera views	Initial financial burden may be prohibitive. State and local laws and union expectations may complicate implementation. Patient privacy issues must be addressed in policies prior to implementation.
Patient-as-observer[38]	May be appropriate in settings that are challenged with resources for observation such as outpatient settings (eg, emergency department)	Engages and empowers patients to remain aware of and comment on HCP hand hygiene behaviors. May improve patient satisfaction Cost effective	Information is limited to moments included in a single patient contact.	Useful for continuous quality improvement through sharing of patient feedback with HCP
Indirect measures	Event counts Product usage	Allows for assessment of effectively placed dispensers Volume usage may provide trends.	May not correlate with other measurement methods Does not differentiate between roles of HCP versus or healthcare facility visitors	Should not be used as the sole method of measurement
Audits of accessibility and functionality of supplies[43]	Assure infrastructure that supports adherence	Provides assurance of functionality and availability of hand hygiene supplies	Infrastructure may not be amenable to change if restricted by administrative code (eg, building code)	Regular assessment can be performed during routine environment of care rounds.



Hand Hygiene Monitoring Recommendations



★	6. **Monitor adherence to hand hygiene.** (Quality of evidence: HIGH)
	a. Use multiple methods to measure adherence to hand hygiene.
	b. Consider advantages and limitations of each type of monitoring.
★	7. **Provide timely and meaningful feedback to enhance a culture of safety.**[50–52] (Quality of evidence: MODERATE)
	a. Provide feedback in multiple formats (eg, verbal, written) and on multiple occasions (eg, real-time, weekly).[50]
	b. Consider debriefing unit managers as soon as possible after each direct covert observation session. This can be conducted in a manner that preserves the observer's confidentiality.
	c. Provide meaningful data with clear targets linked to actions that improve adherence.[50]

Issue: Monitoring is necessary to gauge performance, inspire improvement and report to external agencies but often does not accurately reflect reality or inspire improvement in hand hygiene behaviors.

References

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