Indiana Department of Health

CLINICIAN UPDATES

GUY CROWDER, MD, MPHTM
CHIEF MEDICAL OFFICER

6/27/2025

OUR MISSION:

To promote, protect, and improve the health and safety of all Hoosiers.

OUR VISION:

Every Hoosier reaches optimal health regardless of where they live, learn, work, or play.

Indiana Department of Health

Conflict of Interest Statement

No members of the planning committee and no presenters have a financial interest/arrangement or affiliation that could be perceived as a real or apparent conflict of interest related to the content or supporters of this activity.

Indiana Department of Health

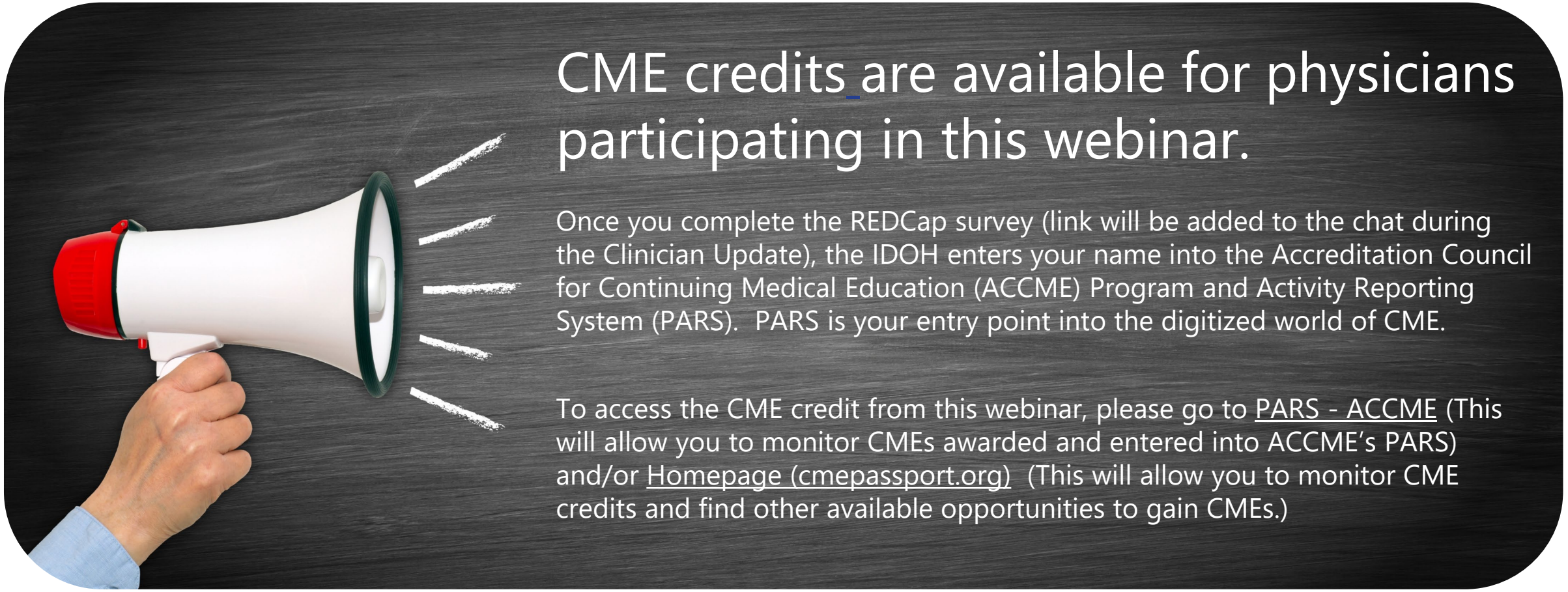
Accreditation Statement

The Indiana Department of Health is accredited by the Indiana State Medical Association to provide continuing medical education for physicians.

Designation Statement

The Indiana Department of Health designates this live activity for a maximum of *1 AMA PRA Category 1 Credit(s)*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

CMEs



Indiana Department of Health

June 2025 Webinar CME Link

Shiga-toxin producing *Escherichia Coli* associated Hemolytic Uremic Syndrome in Indiana

Myda Khalid MD

Associate Professor of Clinical Pediatrics

Division of Pediatric Nephrology and Hypertension

J W Riley Hospital for Children

Indiana University School of Medicine

Riley Children's Health
Indiana University Health

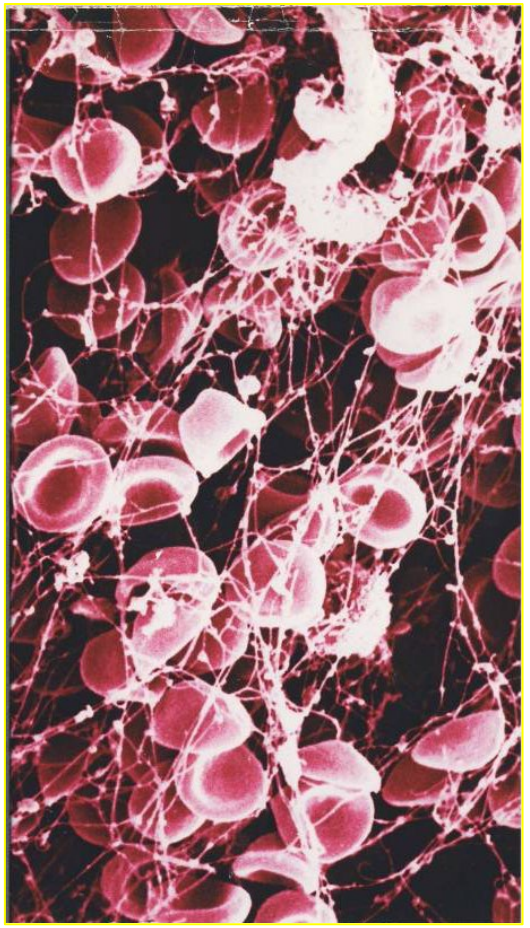
INDIANA UNIVERSITY
SCHOOL OF MEDICINE

Content

1. What is STEC HUS
2. Epidemiology
3. Pathophysiology
4. Typical Course
5. What to do when caring for a child with STEC

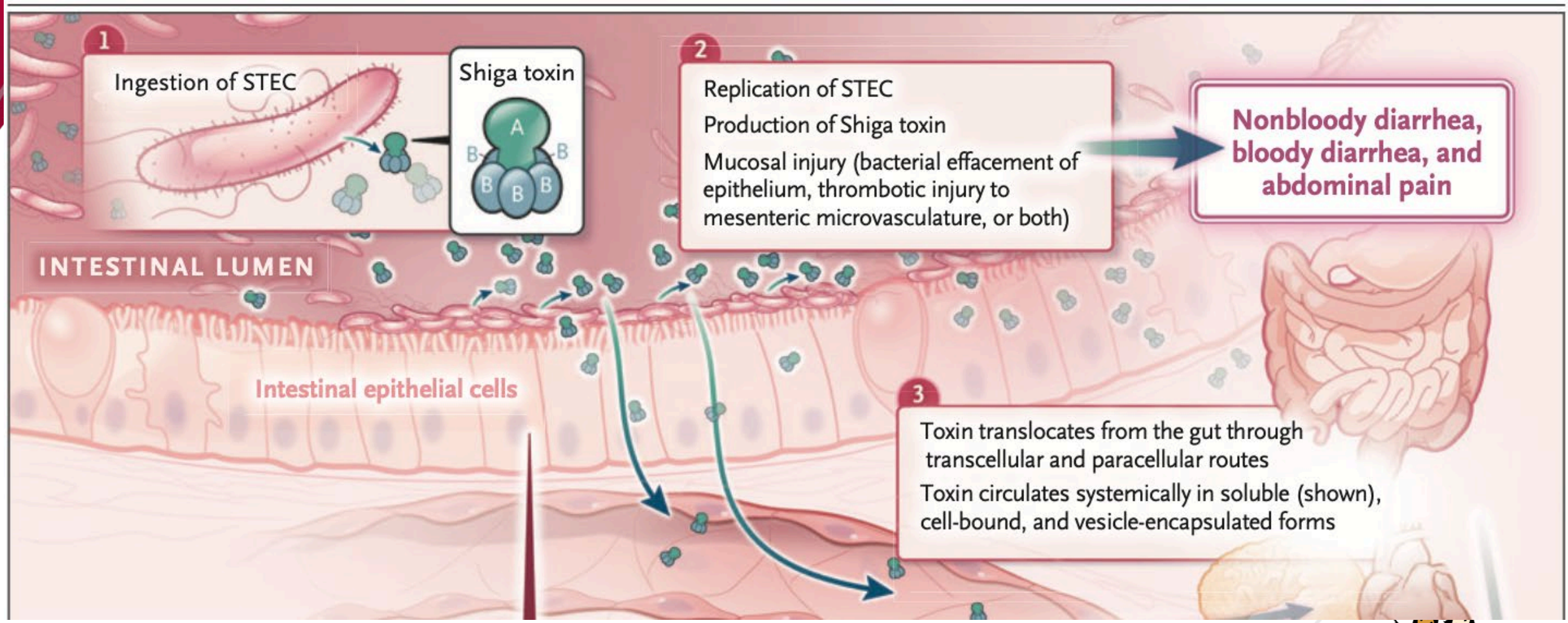
What is STEC HUS?

- Classic triad due to **thrombotic microangiopathy**
  - Hemolytic anemia
  - Uremia/ acute kidney injury
  - Thrombocytopenia
- Occurs after:
  - *Eschericheria Coli* (classically 0157:H7 but newer pathogens are emerging such as 026, 0103, 0111, 0145, 0121)*
  - Shigella
  - *Streptococcus Pneumonae* (different mechanism not Stx associated)

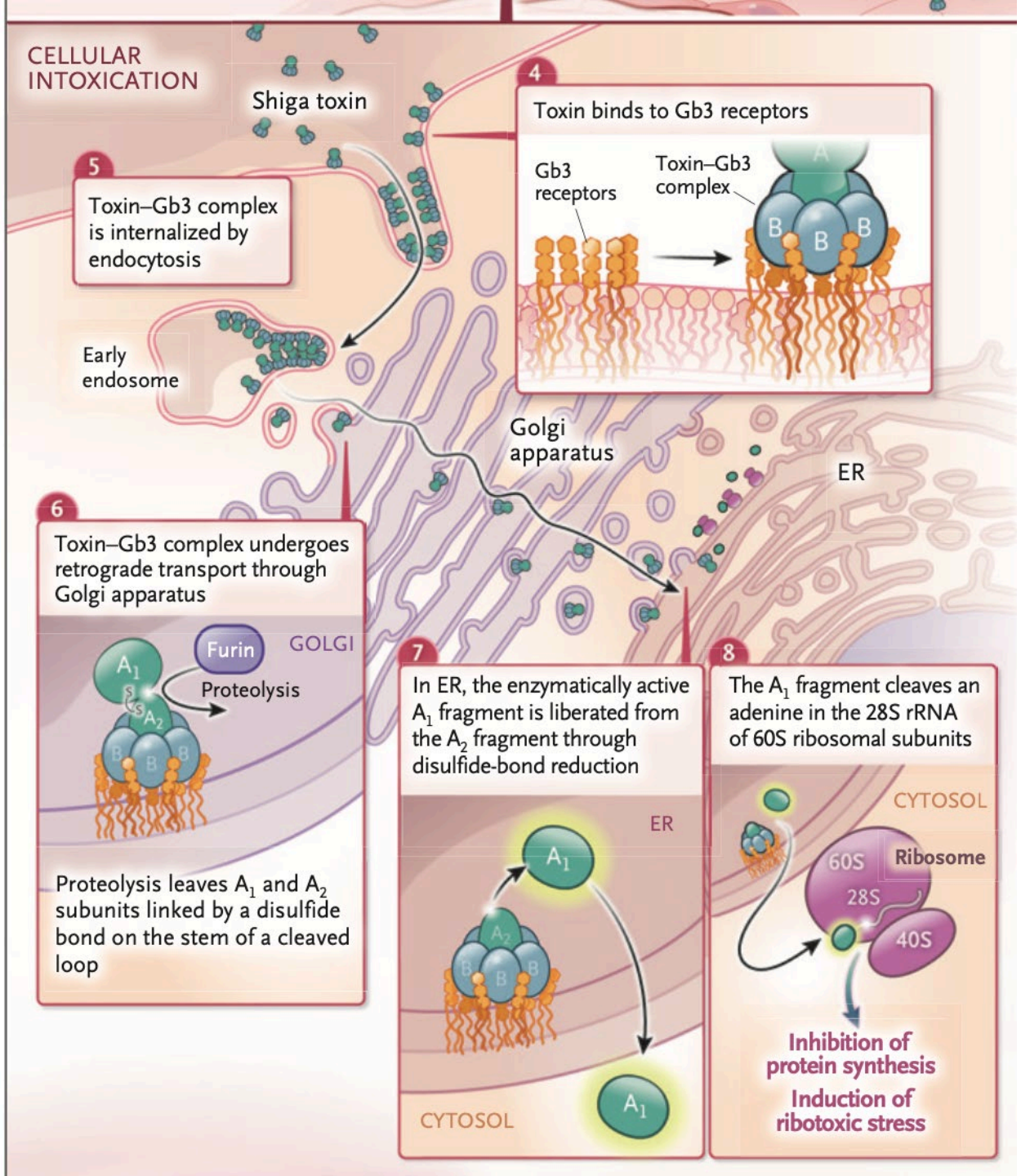


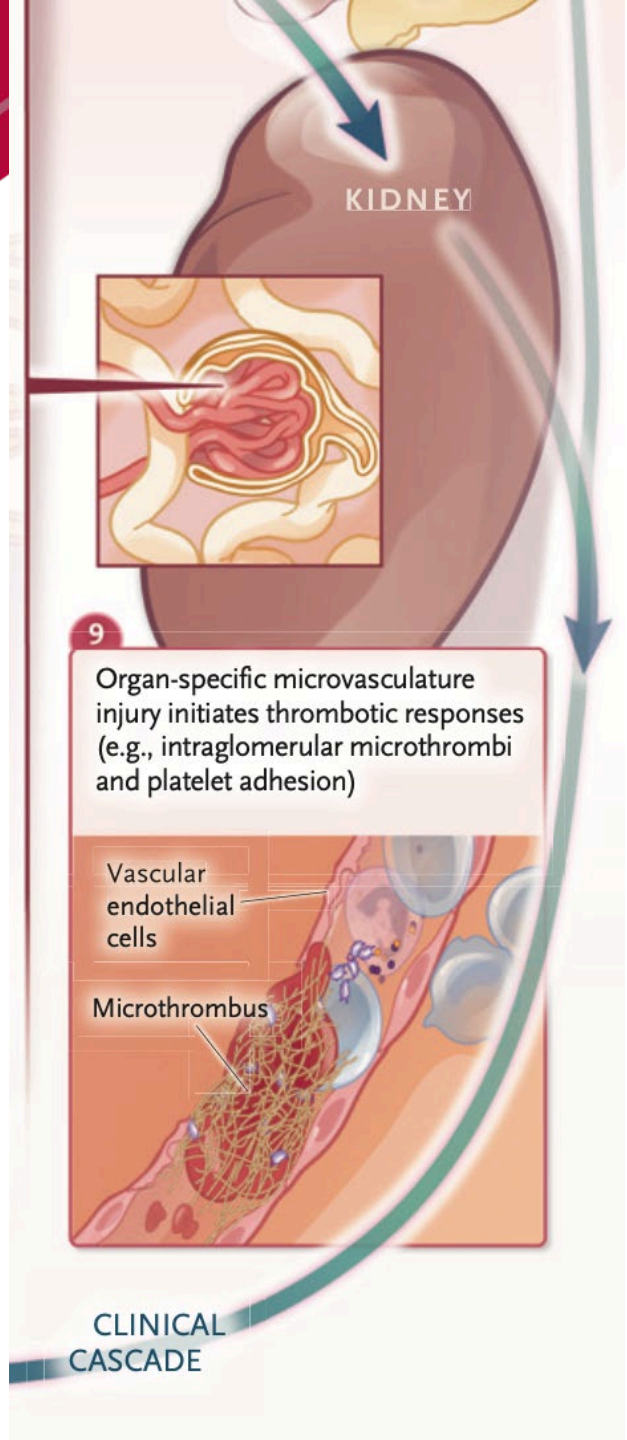
Cover photo of KI 2009, courtesy Sharon Andreoli

*Ardissino et al Journal of Pediatrics June 2021
*https://www.cdc.gov/ecoli/surv2016/index.html



NEJM Nov 2023 Freidman et al

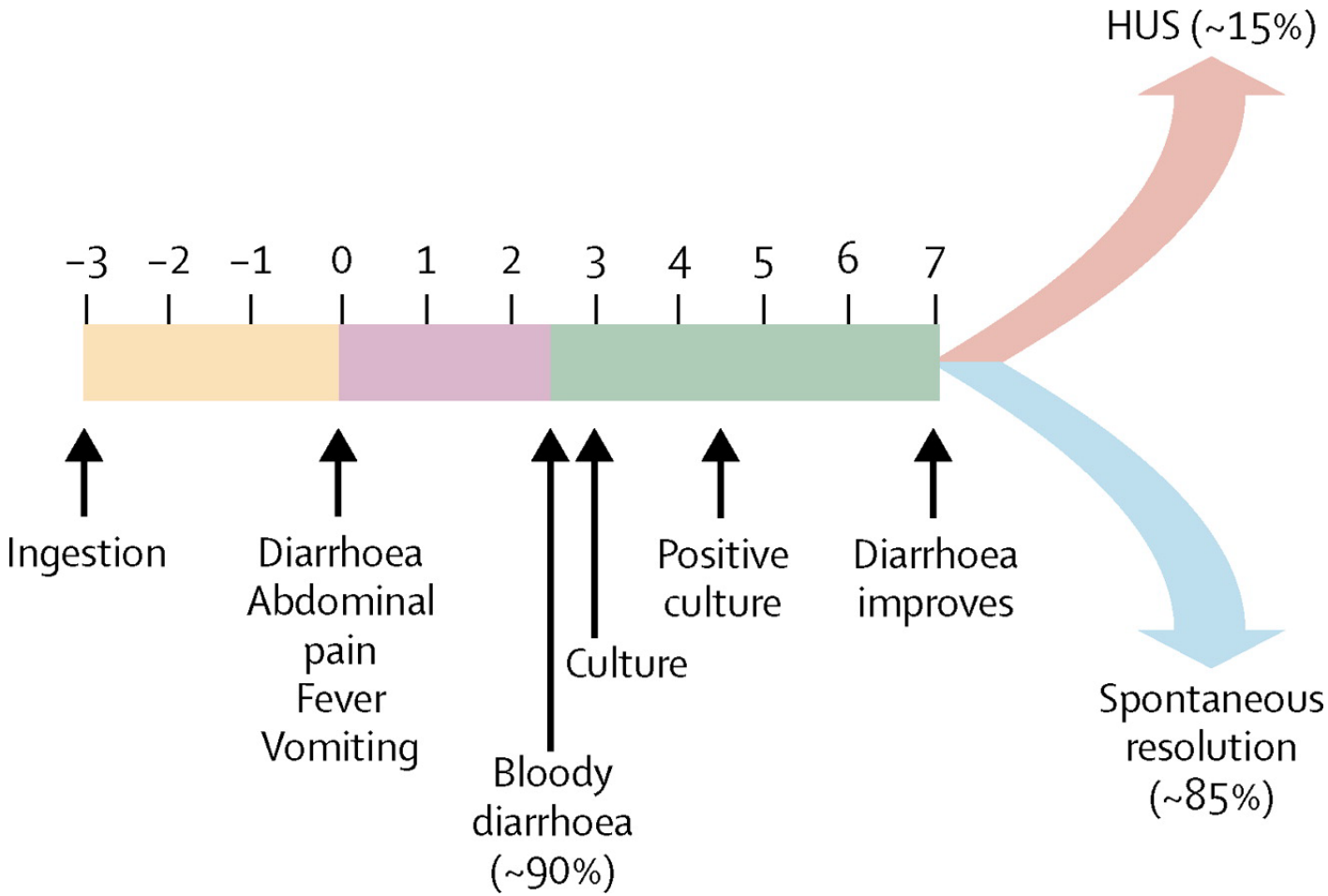

CELLULAR INTOXICATION
Shiga toxin
4
Toxin binds to Gb3 receptors
Gb3 receptors
Toxin–Gb3 complex
A
B
B
B
5
Toxin–Gb3 complex is internalized by endocytosis
Early endosome
Golgi apparatus
ER
6
Toxin–Gb3 complex undergoes retrograde transport through Golgi apparatus
Furin
GOLGI
A1
S
S
A2
Proteolysis
B
B
B
Proteolysis leaves A1 and A2 subunits linked by a disulfide bond on the stem of a cleaved loop
7
In ER, the enzymatically active A1 fragment is liberated from the A2 fragment through disulfide-bond reduction
ER
A1
A2
B
B
B
A1
CYTOSOL
8
The A1 fragment cleaves an adenine in the 28S rRNA of 60S ribosomal subunits
CYTOSOL
60S
Ribosome
28S
40S
Inhibition of protein synthesis
Induction of ribotoxic stress



Clinical cascade

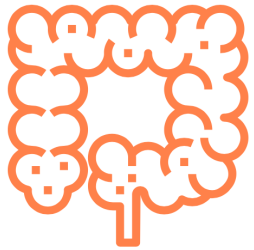
- Thrombocytopenia
- Hemolysis
- End-organ damage
- HUS

Disease course

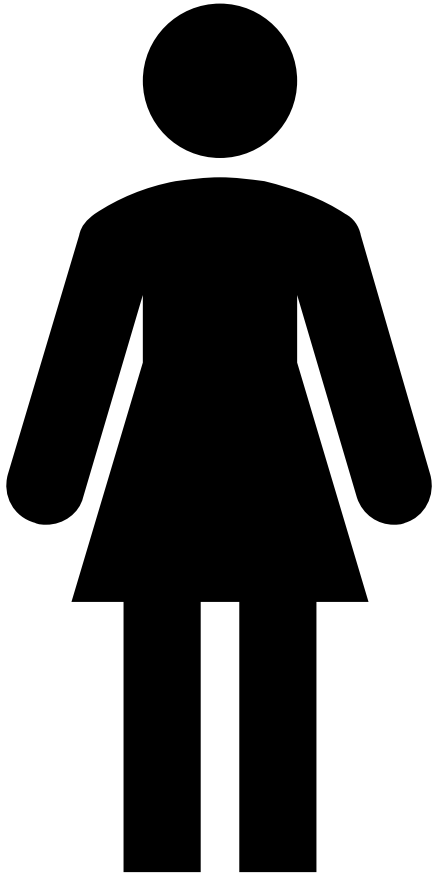


Tarr et al, The Lancet 2005

Injury is due to thrombotic microangiopathy and tiny clots in small blood vessels



Bloody diarrhea
Belly pain

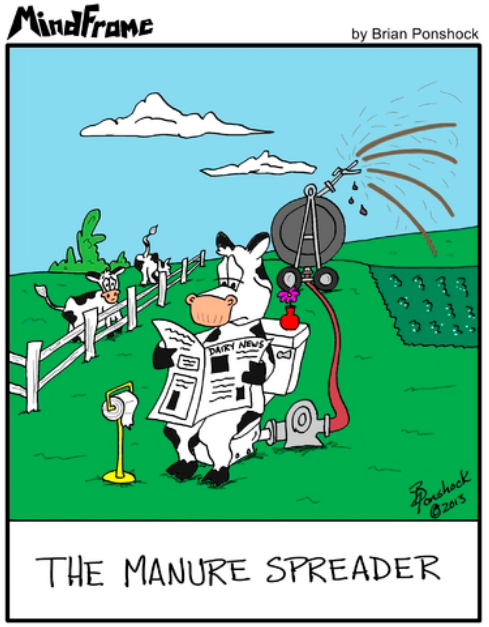


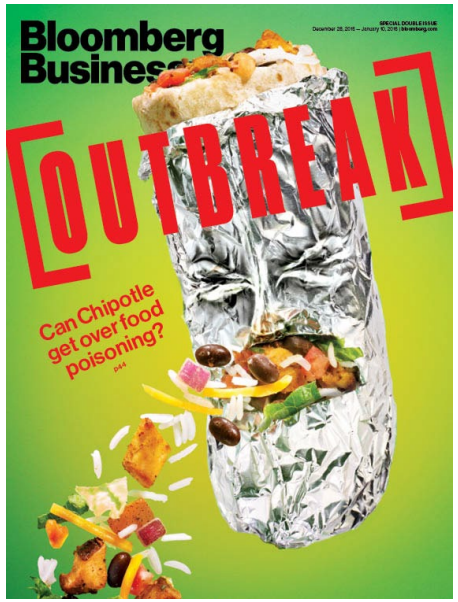
Anemia , low platelets in 100%

AKI in 100%

Dialysis 60%

Transmission of E Coli

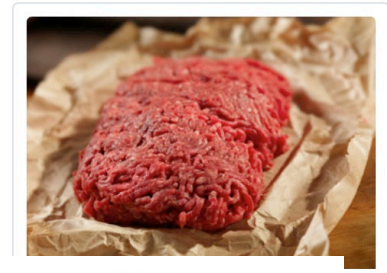




Recent outbreaks of E. coli

https://www.cdc.gov/ecoli/outbreaks.html

- 2021:
  - Unknown food source – E coli O157:H7
- 2020:
  - Unknown food source – E. coli O157:H7
  - Leafy Greens - E. coli O157:H7
  - Clover sprouts – E. coli O1303
- 2019
  - Fresh Express Sunflower Crisp Chopped Salad kits – E. coli O157:H7
  - Romaine Lettuce - E. coli O157:H7
  - Northfolk Bison – E. coli O103 and O121
  - Flour – E. coli O26
  - Ground Beef – E coli O103



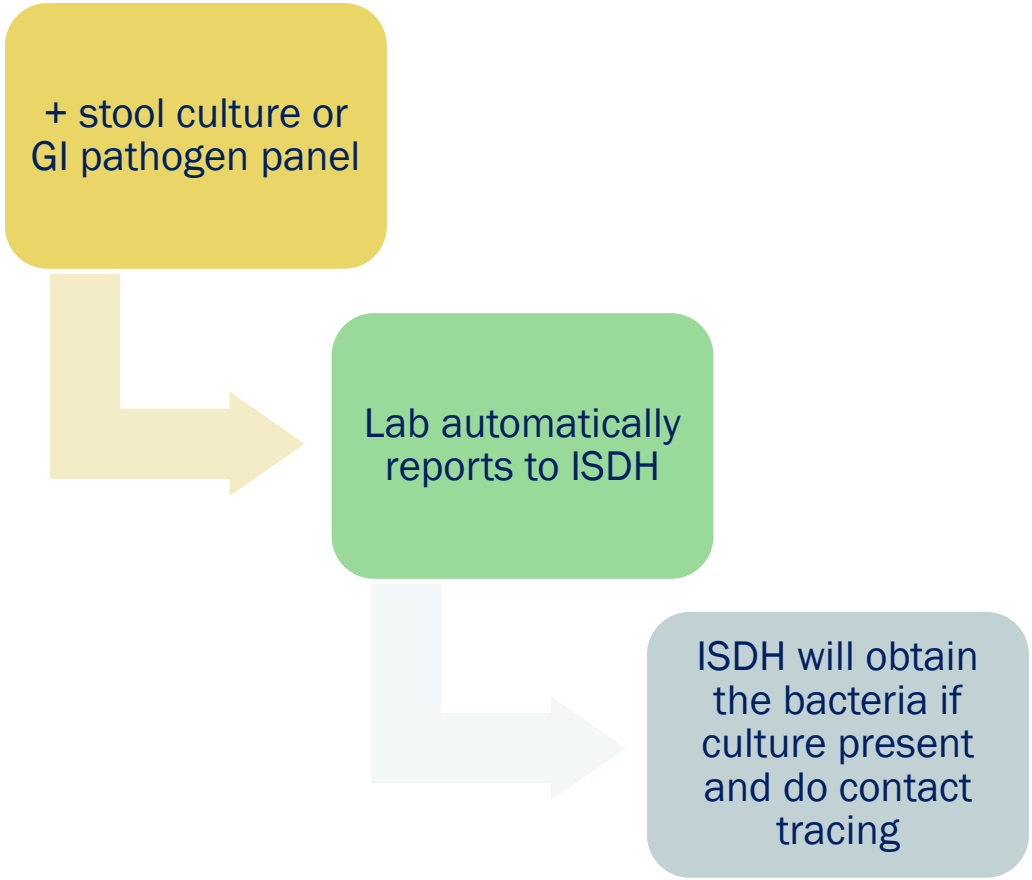
Recent outbreaks of E. coli https://www.cdc.gov/ecoli/outbreaks.html

- 2024
  - Organic carrots
  - Onions in McDonald Burg
  - Organic walnuts
  - Raw cheddar cheese

E. coli Outb

E. coli</
Cheddar Chee

Role of Indiana Department of Health



Areas for improvement:

- Better detection
- Better reporting

Seasonal Variation (n 75) July 2008-April 2020

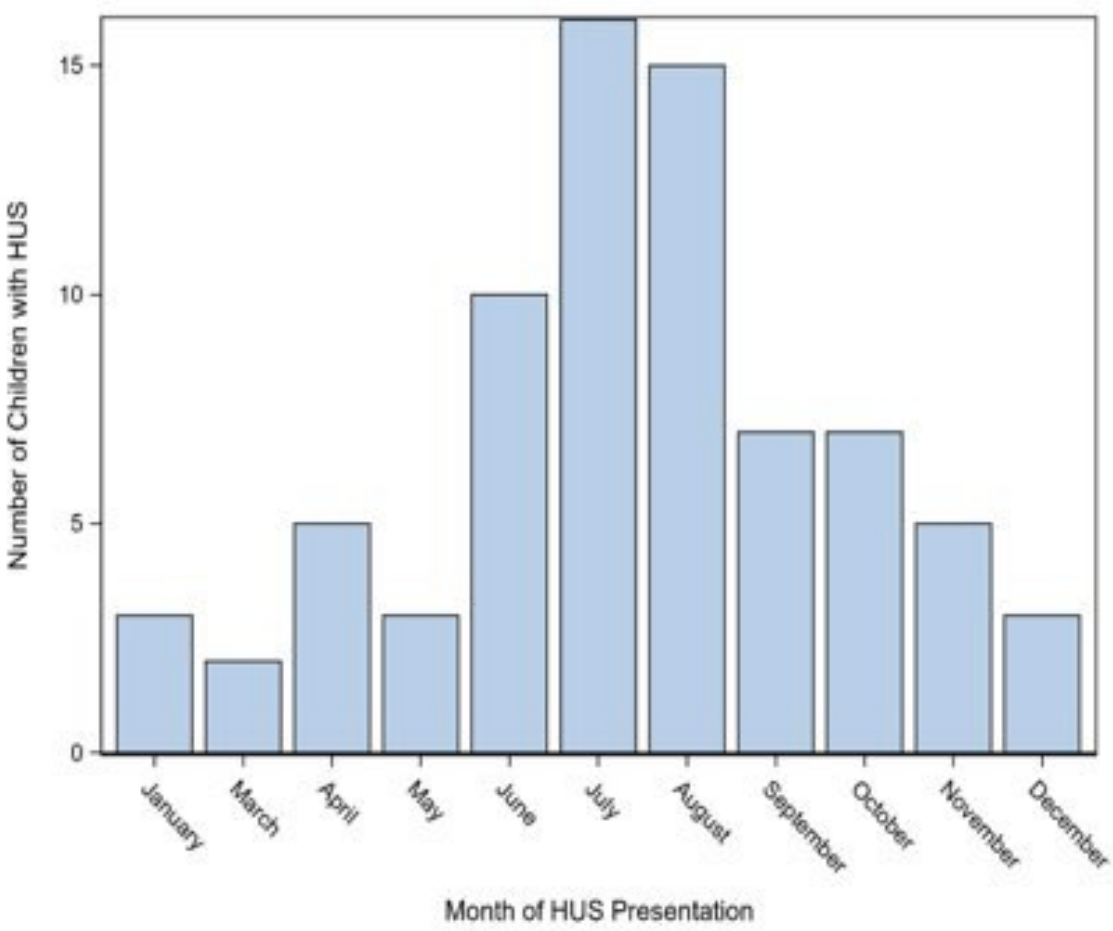
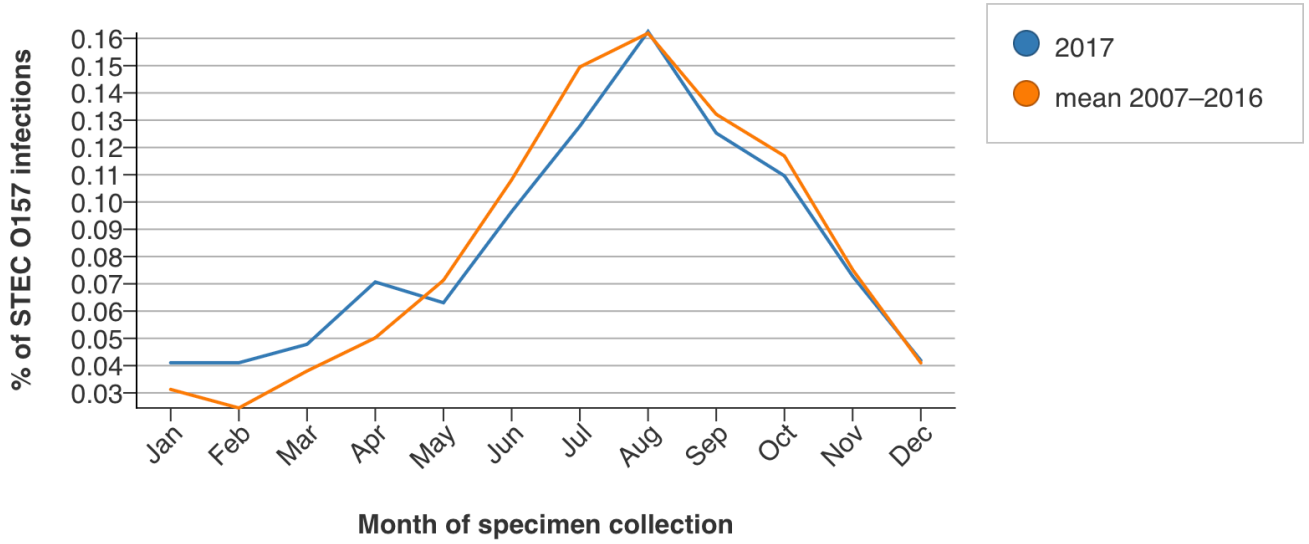


Figure 3. Percentage of STEC O157 infections reported to LEDS, by month of specimen collection, United States, 2017, and mean annual percentage during 2007–2016



https://www.cdc.gov/ecoli/surv2017/index.html

Age distribution

One Health journal Farm animal contact is associated with progression to Hemolytic uremic syndrome in patients with Shiga toxin-producing Escherichia coli — Indiana, 2012–2018. Vachon et al 2020

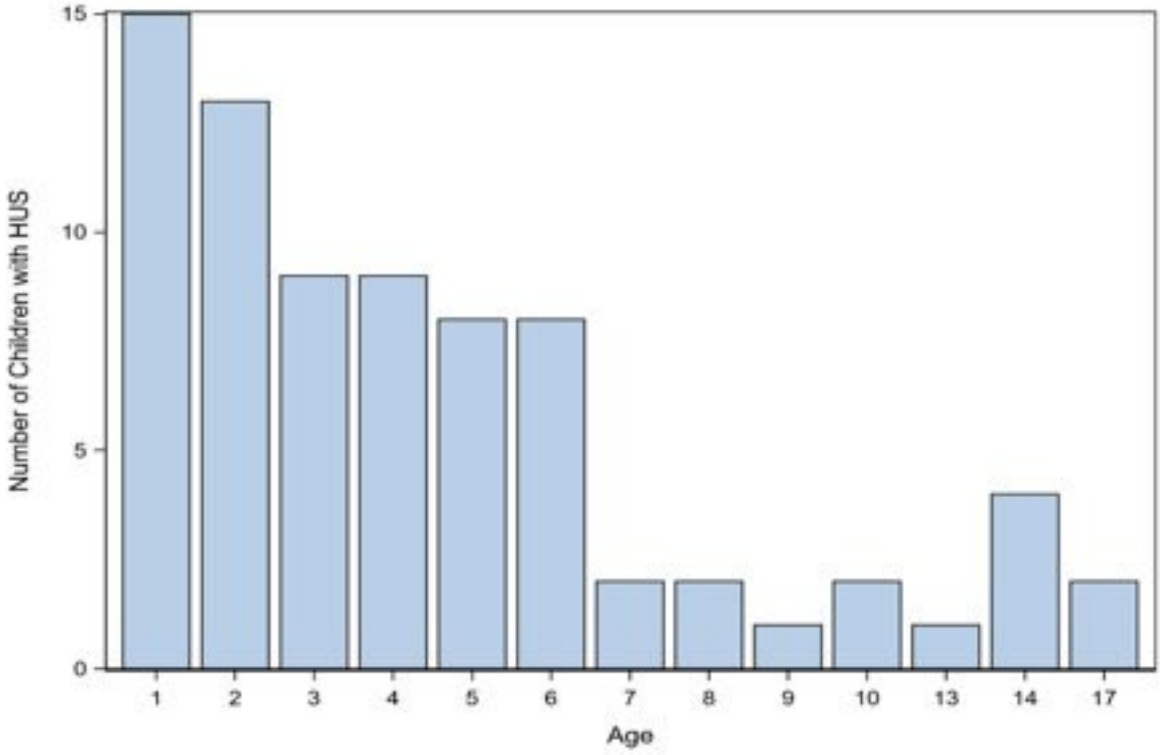


Table 1
Demographic Distribution of Shiga Toxin-Producing *Escherichia coli* (STEC) cases, by Post-diarrheal Hemolytic Uremic Syndrome (HUS) Status — Indiana, 2012–2018.

	STEC Patients			
Characteristic	NO HUS		HUS	
	n	(%)	n	(%)
Age group				
≤5 years	150	(20.3)	26	(56.5)
6–10 years	71	(9.6)	10	(21.7)
11–18 years	112	(15.2)	6	(13.0)
19–59 years	315	(42.7)	2	(4.3)
≥60 years	90	(12.2)	2	(4.3)
Female sex	422	(57.2)	25	(54.3)
Race				
White	477	(64.6)	39	(84.8)
Black or African-American	28	(3.8)	–	
Asian	15	(2.0)	1	(2.2)
Native American or Alaska Native	1	(0.14)	–	
Other	9	(1.2)	–	
Unknown	208	(28.2)	6	(13.0)

Abbreviations: STEC, Shiga toxin-producing *E. coli*; HUS, Hemolytic Uremic Syndrome.

Morbidity and Mortality of STEC-HUS in a Contemporary Group of American Children

Carla M. Nester, Larry A. Greenbaum, Myda Khalid, Stefan G. Kiessling, Kera Luckritz, John D. Mahan, Yosuke Miyashita, Michelle Rheault, Tarak Srivastava, Donald J. Weaver Jr. and Sharon Bartosh

ASN poster 2014

Complications

Complications that occurred ruing the initial hospital admit included:

Disease Complications			
ARDS	2%	Seizure	5%
Laparotomy	1%	Coma	1%
Pericardial effusion	2%	Bowel perforation	1%
Cardiac dysfunction	1%	Symptomatic pancreatitis	16%
Diabetes mellitus	2%	Long term gastrointestinal sequelae	2%
Cerebral vascular event	1%	Neurologic impairment	6%

Mortality

- Ranging from 1% (our study) to traditional figures of 3-5%
- In our study all deaths were in patients admitted to ICU

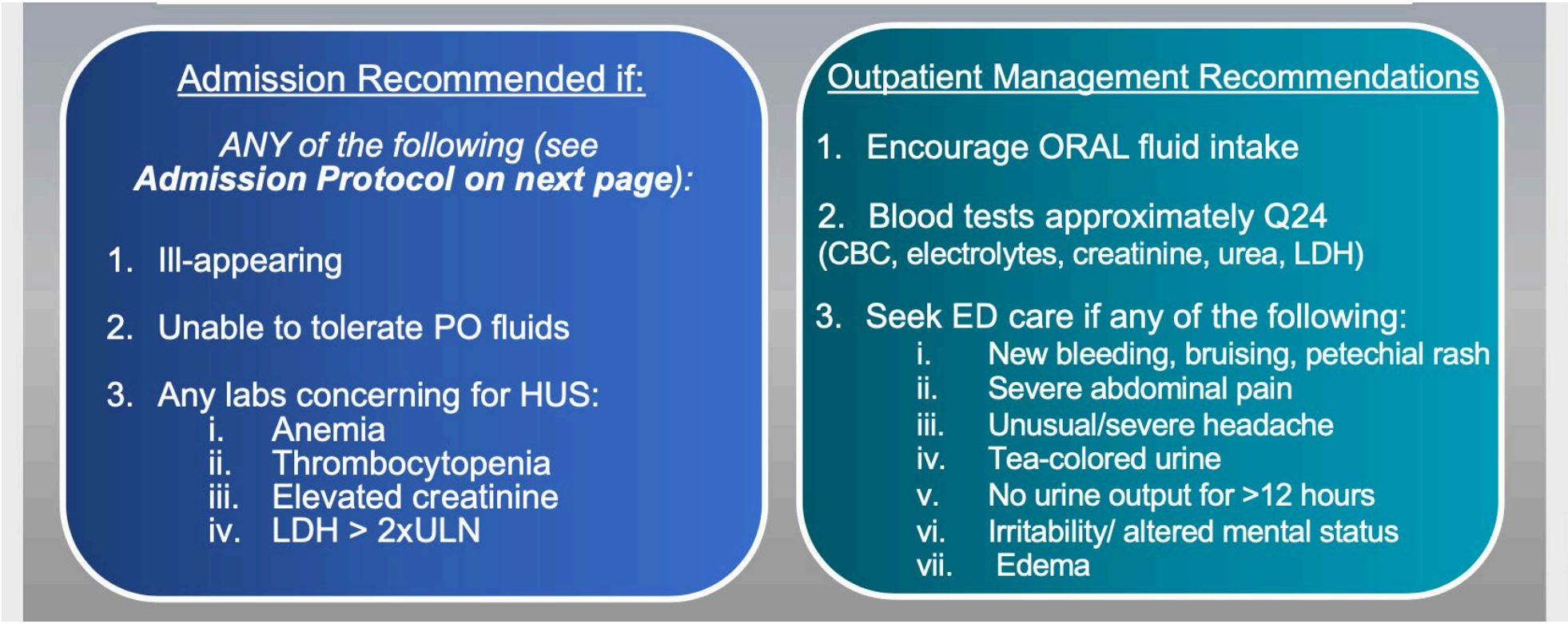
Causes	No. of patients
Central nervous system	7
Gastrointestinal	4
Infectious	3
Renal	2
Hematologic	2
Cardiovascular and respiratory	2

Mody et al “Postdiarrheal HUS in U.S. children: clinical spectrum and predictors of In-Hospital Death” Journal of Pediatrics 2014

In this study mortality was 2.9%

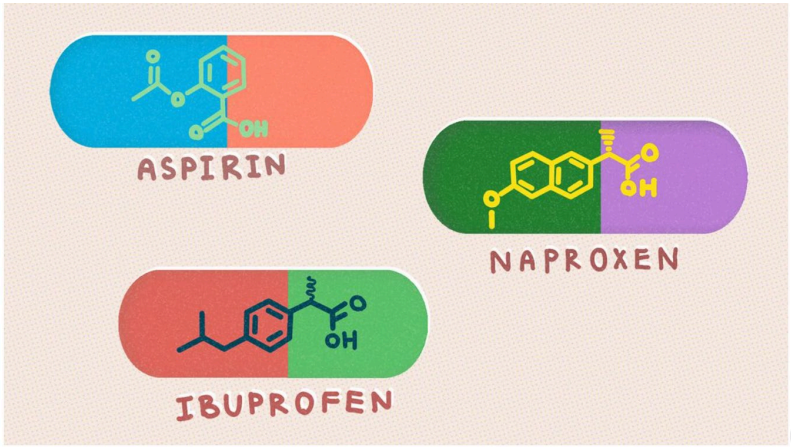
The important role of pediatric providers at onset:

- Extra vigilance for children less than age 5, presenting with acute onset bloody diarrhea during the summer months
- If possible, obtain a rectal swab or stool for culture or GI pathogen panel. IU labs automatically check for presence of Shiga Toxin, that does not need separate entry
- If stool culture or GIPP comes back positive for Shiga-toxin associated E Coli even greater vigilance is required



The important role of pediatric providers at onset:

- What to avoid:
  - Antibiotics
  - Anti-motility agents
  - NSAIDS



Thank you

Nicole Stone and the team at IDOH

Indiana Department of Health

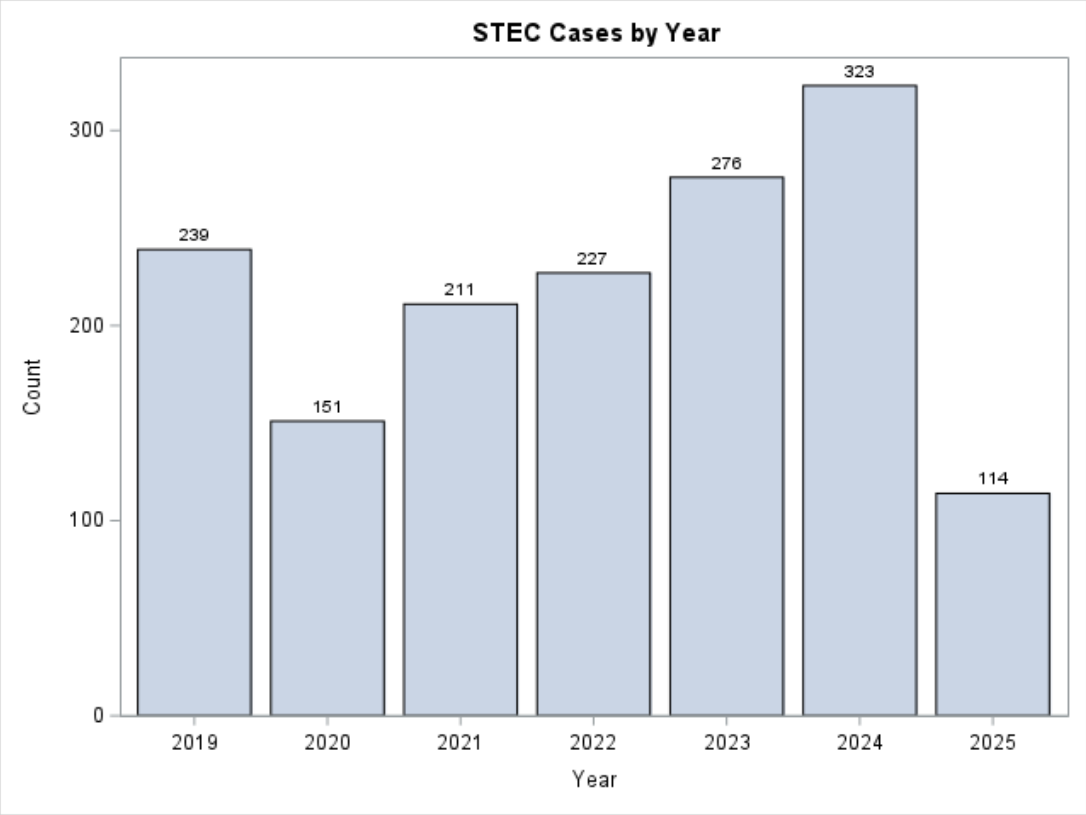
STEC (Shiga-toxin producing E. Coli) AND HUS (Hemolytic Uremic Syndrome)

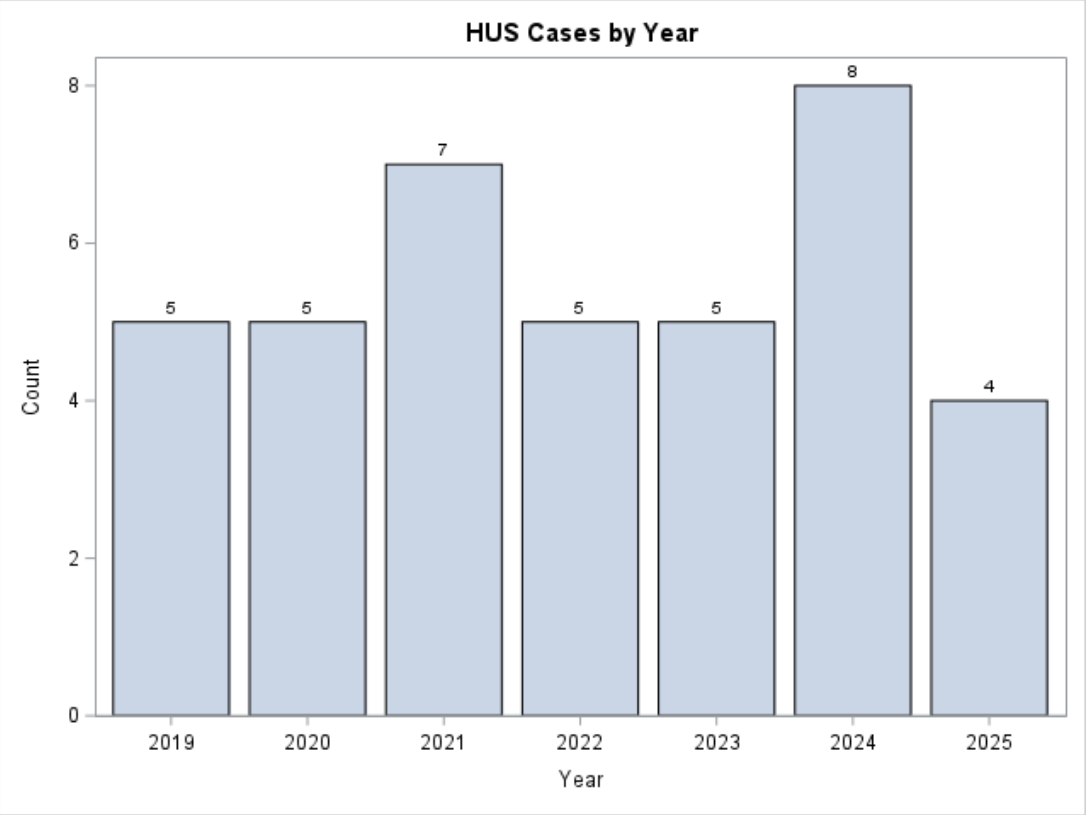
NICOLE STONE, MPH
EPIDEMIOLOGY DIRECTOR

6/27/2025

STEC and HUS Cases in Indiana

*2025 Cases as of 6/14/2025





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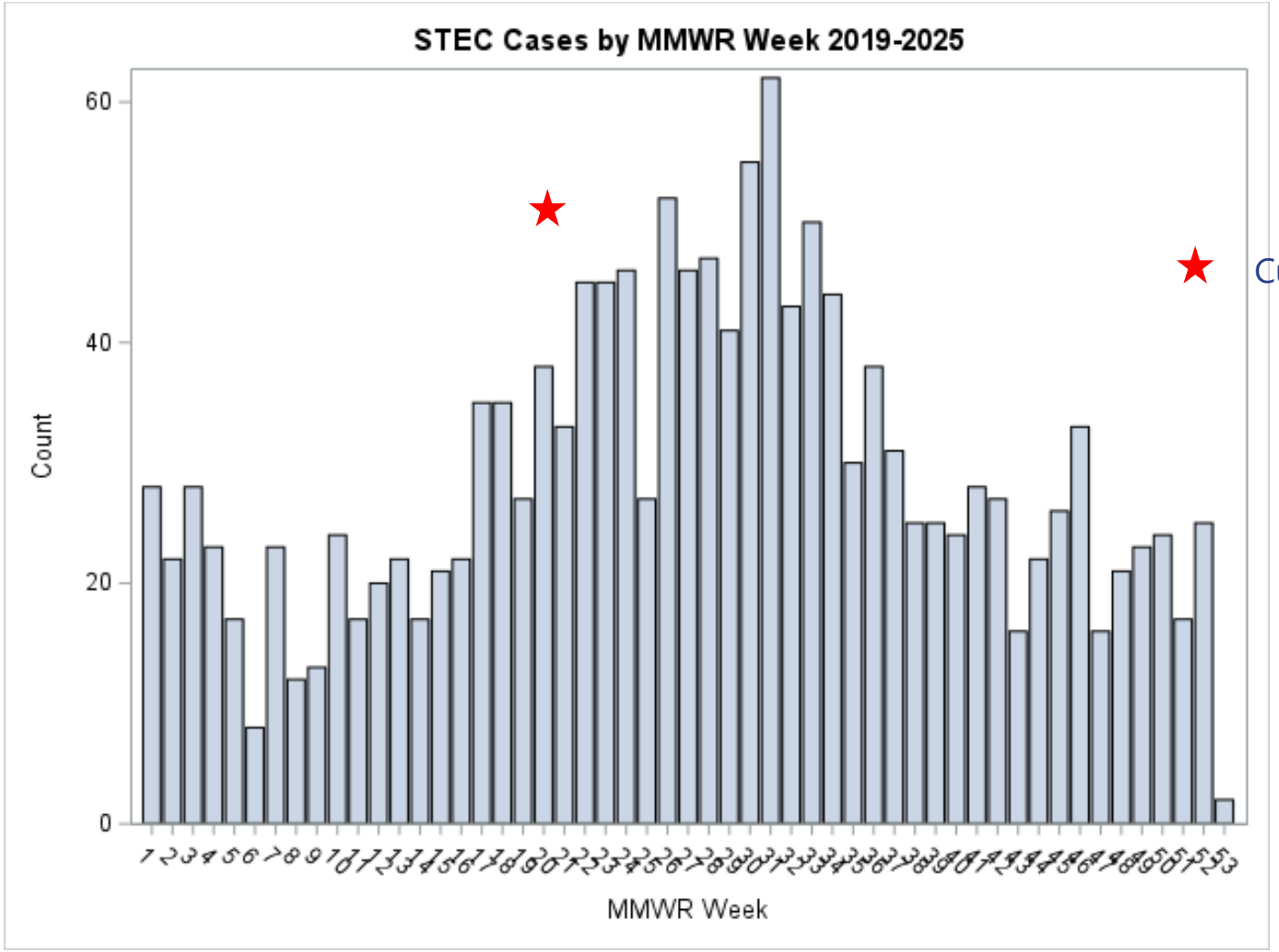
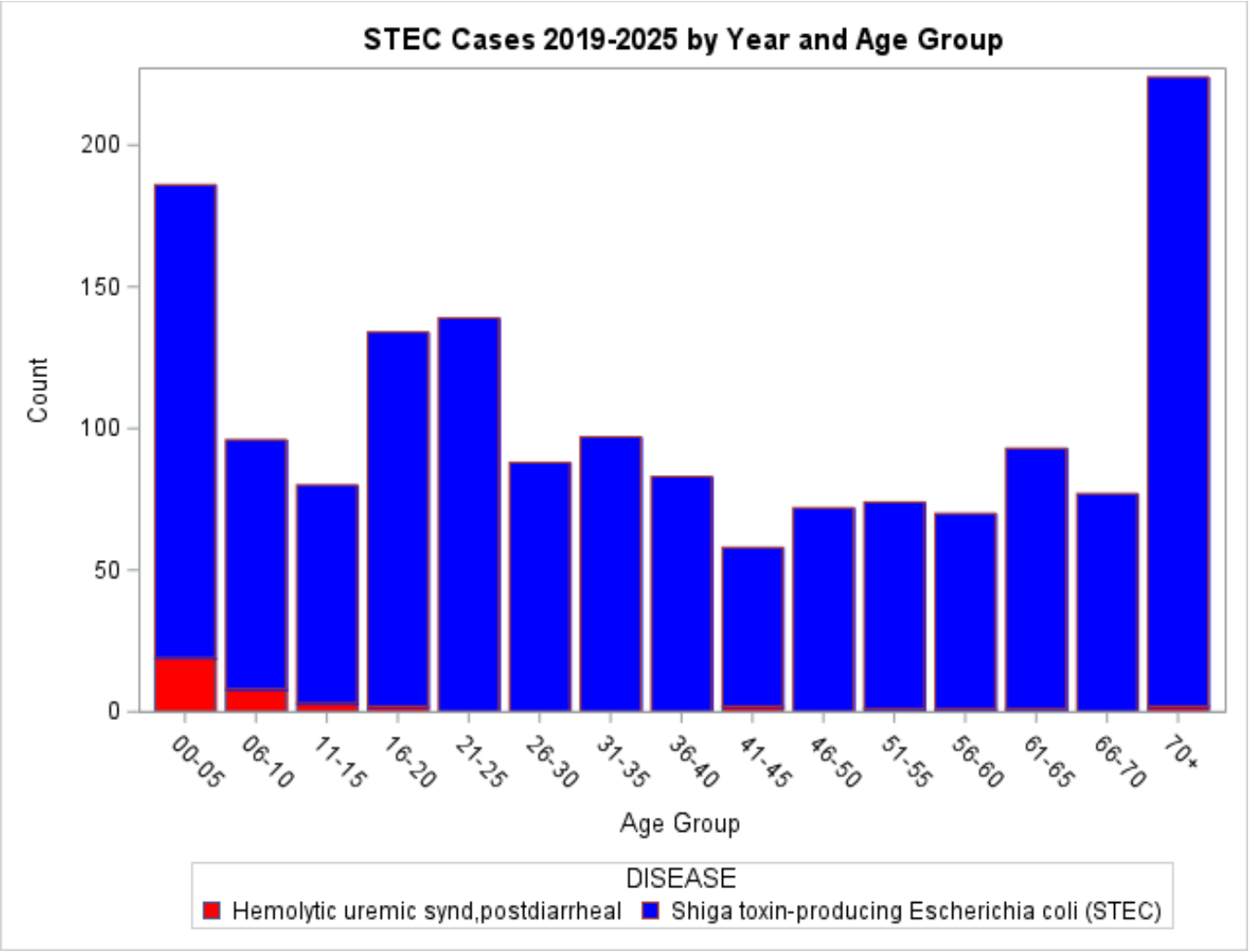
STEC Trends in Indiana



Indiana Department of Health

STEC Trends in Indiana



Indiana Department of Health

Clinical Presentation

- Symptoms of STEC infection can include:
  - Severe abdominal cramps
  - Diarrhea (often bloody)
  - Vomiting
- Incubation period: Typically 3-4 days (range: 2-10 days).
- About 5-10% of STEC cases may develop hemolytic uremic syndrome (HUS), with a higher risk (15%) in children, especially those younger than 5 years old.
- Signs and symptoms of HUS can include:
  - Fatigue, paleness, decreased urination frequency, abdominal pain, and vomiting
  - Anemia, thrombocytopenia, and kidney injury
  - HUS, especially in adults, may mimic thrombotic thrombocytic purpura (TTP), in which blood clots form in small blood vessels throughout the body. TTP can lead to strokes, brain damage and death.

Diagnosis/Treatment

- Testing for STEC is crucial to prevent delays in care and to reduce the risk of HUS.
- Rectal swabbing may be an alternative for faster results in emergent care settings. If this is done a follow-up culture specimen is recommended for additional sequencing.
- If STEC is detected, obtain a complete blood count, serum electrolytes, blood urea, nitrogen, and creatinine to screen for HUS.
- Supportive care is the primary treatment for STEC infections.
  - Rehydration with intravenous fluids, as clinically indicated, is important and early use may decrease the risk of renal failure and/or HUS.
- Antibiotic treatment is not recommended for STEC infections, as it may increase the risk of developing HUS
- Consider consultation with a nephrologist if HUS is suspected.
- Consult the CDC information for clinicians

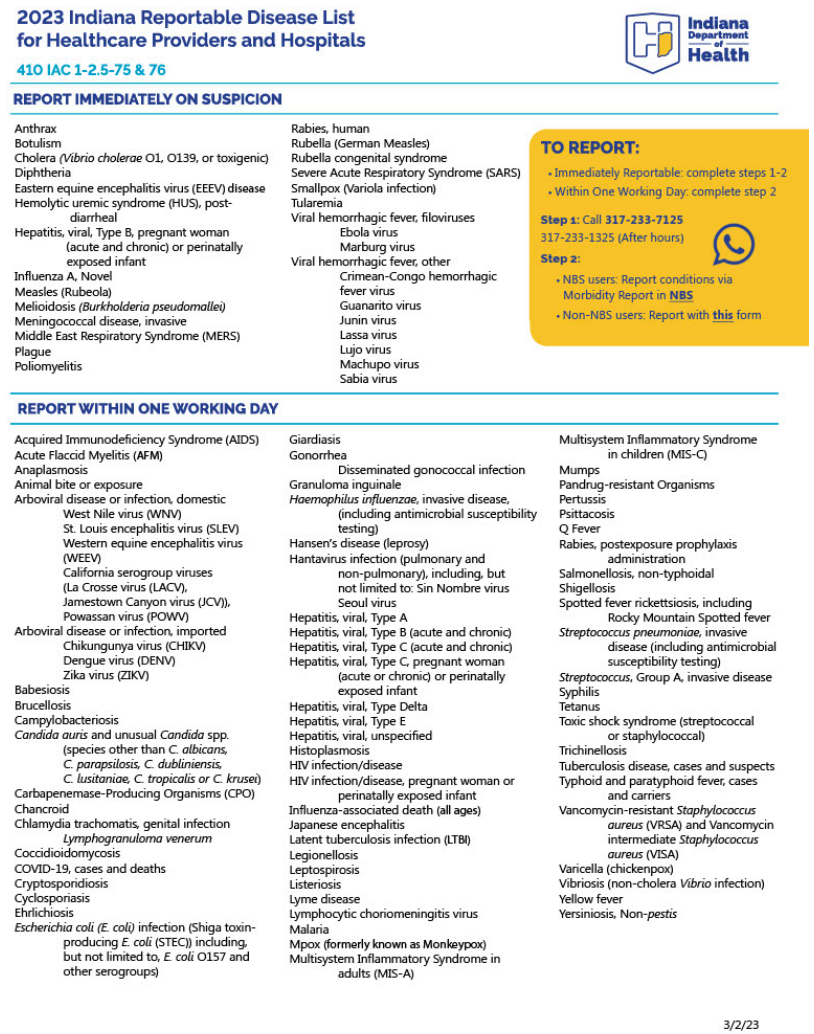
Prevention

- Awareness of symptoms and prompt testing can help prevent complications associated with STEC infections.
- Continue to encourage good hygiene practices with your patients to reduce the risk of *E. coli* infections.
- Stay informed about local health alerts and outbreaks.
- Common, historical STEC related cases and outbreaks include the following:
  - Foodborne: raw/uncooked meat, leafy greens, raw flour (e.g. cookie dough or cake batter), raw (unpasteurized) milk
  - Animal Contact: specifically ruminant animals (e.g. cows, goats, sheep)
  - Person-to-person spread from poor hand washing

General Enteric Disease Reminders

- Increase during summer months – consider testing for enteric pathogens
- Awareness of current food recalls and multi-state outbreaks
- Communicable Disease rule notification and specimen submission: https://www.in.gov/health/idepd/communicable-disease-reporting/

Communicable Disease Reporting



2023 Indiana Reportable Disease List for Healthcare Providers and Hospitals

Indiana Department of Health

410 IAC 1-2.5-75 & 76

REPORT IMMEDIATELY ON SUSPICION

Anthrax
Botulism
Cholera *(Vibrio cholerae* O1, O139, or toxigenic)
Diphtheria
Eastern equine encephalitis virus (EEEV) disease
Hemolytic uremic syndrome (HUS), post-diarrheal
Hepatitis, viral, Type B, pregnant woman (acute and chronic) or perinatally exposed infant
Influenza A, Novel
Measles (Rubeola)
Melioidosis *(Burkholderia pseudomallei)*
Meningococcal disease, invasive
Middle East Respiratory Syndrome (MERS)
Plague
Poliomyelitis
Rabies, human
Rubella (German Measles)
Rubella congenital syndrome
Severe Acute Respiratory Syndrome (SARS)
Smallpox (Variola infection)
Tularemia
Viral hemorrhagic fever, filoviruses
- Ebola virus
- Marburg virus

Viral hemorrhagic fever, other
- Crimean-Congo hemorrhagic fever virus
- Guanarito virus
- Junin virus
- Lassa virus
- Lujo virus
- Machupo virus
- Sabia virus

TO REPORT:

- Immediately Reportable: complete steps 1-2
- Within One Working Day: complete step 2

Step 1: Call **317-233-7125**
317-233-1325 (After hours)

Step 2:

- NBS users: Report conditions via Morbidity Report in **NBS**
- Non-NBS users: Report with **this** form

REPORT WITHIN ONE WORKING DAY

Acquired Immunodeficiency Syndrome (AIDS)
Acute Flaccid Myelitis (AFM)
Anaplasmosis
Animal bite or exposure
Arboviral disease or infection, domestic
- West Nile virus (WNV)
- St. Louis encephalitis virus (SLEV)
- Western equine encephalitis virus (WEEV)
- California serogroup viruses (La Crosse virus (LACV), Jamestown Canyon virus (JCV)), Powassan virus (POWV)

Arboviral disease or infection, imported
- Chikungunya virus (CHIKV)
- Dengue virus (DENV)
- Zika virus (ZIKV)

Babesiosis
Brucellosis
Campylobacteriosis
Candida auris and unusual *Candida* spp. (species other than *C. albicans, C. parapsilosis, C. dubliniensis, C. lusitaniae, C. tropicalis or C. krusei*)
Carbapenemase-Producing Organisms (CPO)
Chancroid
Chlamydia trachomatis, genital infection
- *Lymphogranuloma venerum*

Coccidioidomycosis
COVID-19, cases and deaths
Cryptosporidiosis
Cyclosporiasis
Ehrlichiosis
Escherichia coli (E. coli) infection (Shiga toxin-producing *E. coli* (STEC)) including, but not limited to, *E. coli* O157 and other serogroups)
Giardiasis
Gonorrhea
- Disseminated gonococcal infection

Granuloma inguinale
Haemophilus influenzae, invasive disease, (including antimicrobial susceptibility testing)
Hansen's disease (leprosy)
Hantavirus infection (pulmonary and non-pulmonary), including, but not limited to: Sin Nombre virus
- Seoul virus

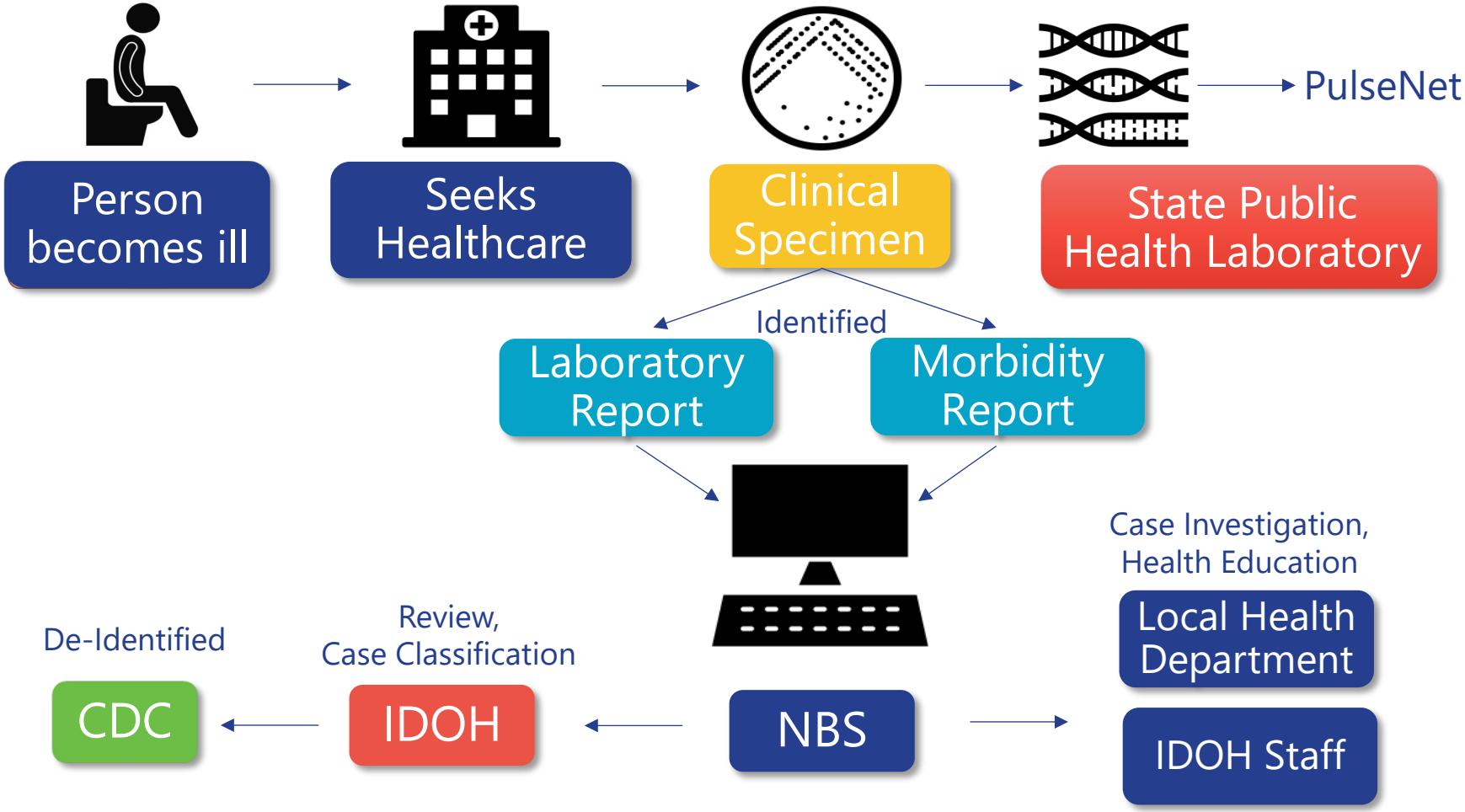
Hepatitis, viral, Type A
Hepatitis, viral, Type B (acute and chronic)
Hepatitis, viral, Type C (acute and chronic)
Hepatitis, viral, Type C, pregnant woman (acute or chronic) or perinatally exposed infant
Hepatitis, viral, Type Delta
Hepatitis, viral, Type E
Hepatitis, viral, unspecified
Histoplasmosis
HIV infection/disease
HIV infection/disease, pregnant woman or perinatally exposed infant
Influenza-associated death (all ages)
Japanese encephalitis
Latent tuberculosis infection (LTBI)
Legionellosis
Leptospirosis
Listeriosis
Lyme disease
Lymphocytic choriomeningitis virus
Malaria
Mpox (formerly known as Monkeypox)
Multisystem Inflammatory Syndrome in adults (MIS-A)
Multisystem Inflammatory Syndrome in children (MIS-C)
Mumps
Pandrug-resistant Organisms
Pertussis
Psittacosis
Q Fever
Rabies, postexposure prophylaxis administration
Salmonellosis, non-typhoidal
Shigellosis
Spotted fever rickettsiosis, including Rocky Mountain Spotted fever
Streptococcus pneumoniae, invasive disease (including antimicrobial susceptibility testing)
Streptococcus, Group A, invasive disease
Syphilis
Tetanus
Toxic shock syndrome (streptococcal or staphylococcal)
Trichinellosis
Tuberculosis disease, cases and suspects
Typhoid and paratyphoid fever, cases and carriers
Vancomycin-resistant *Staphylococcus aureus* (VRSA) and Vancomycin intermediate *Staphylococcus aureus* (VISA)
Varicella (chickenpox)
Vibriosis (non-cholera *Vibrio* infection)
Yellow fever
Yersiniosis, Non-*pestis*

3/2/23

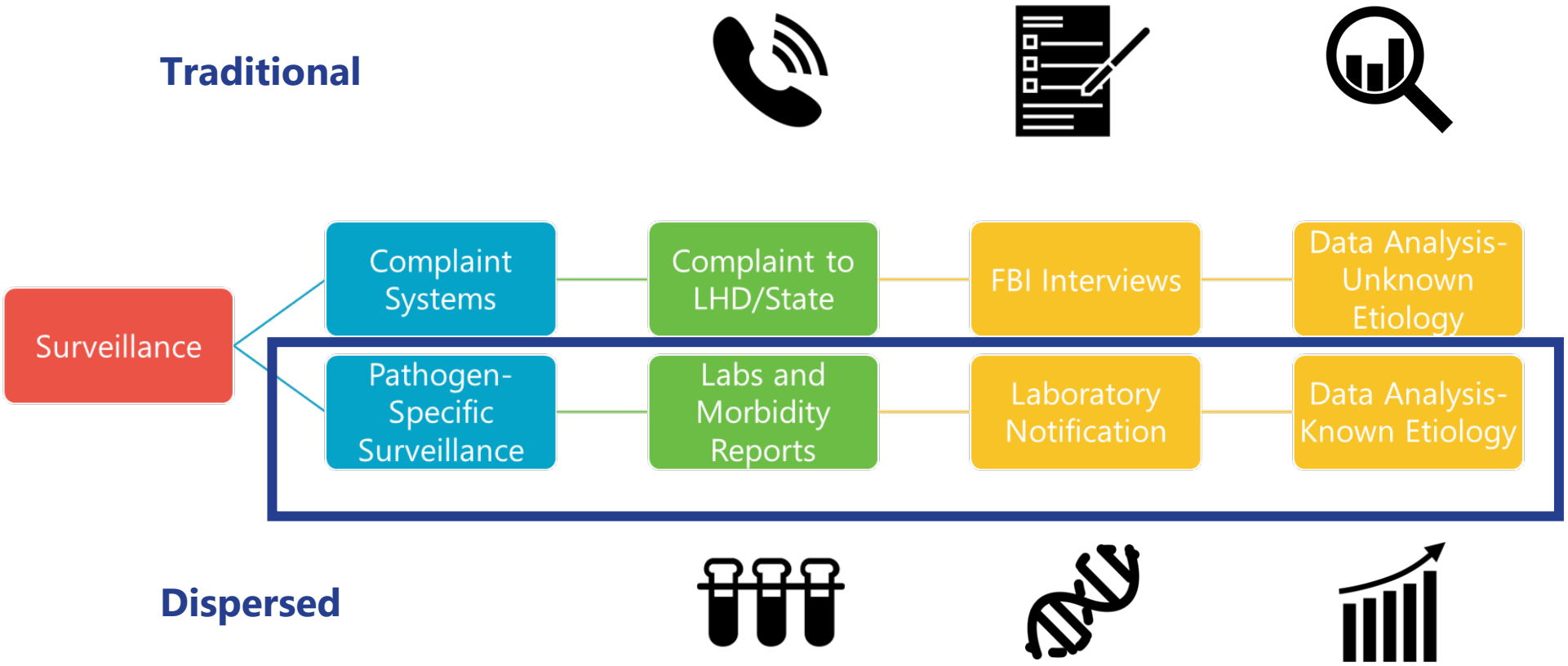
Indiana Department of Health

https://www.in.gov/health/idepd/files/nbs-surveillance/Indiana-Reportable-Disease-List_2025.pdf

Flow of Enteric Disease Surveillance Information



Foodborne Disease Surveillance



Questions?

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Indiana Department of Health

WATER SAFETY AND DROWNING PREVENTION

ALLIE HOUSTON
PREVENTION PROGRAMS DIRECTOR

6/27/2025

Facts about drowning

- Drowning is a leading cause of unintentional injury-related death in children ages 14 years and younger
- Nearly half of drowning deaths are among infants and toddlers
- Infants (0 to 12 months) are most likely to drown in bathtubs
- Most drowning deaths among children ages 1 through 4 years occur in residential swimming pools
- The likelihood of drowning in open water sites (such as lakes, rivers and oceans) increases with age

Source: Centers for Disease Control and Prevention, 2024

Facts about drowning

- Two-thirds of drowning deaths occur between May and August
- Boys account for three out of four child drowning deaths
- Most children who drowned in swimming pools:
  - Were last seen in the home
  - Had been missing for fewer than five minutes
  - Were in the care of one or both parents

Indiana Department of Health

Source: Centers for Disease Control and Prevention, 2024

Drowning and near drowning

For every child who fatally drowns, **five more** children are treated in the emergency department.

Drowning:
Death from suffocation by submersion in water

Near drowning:
Survival, at least temporarily, after submersion in water

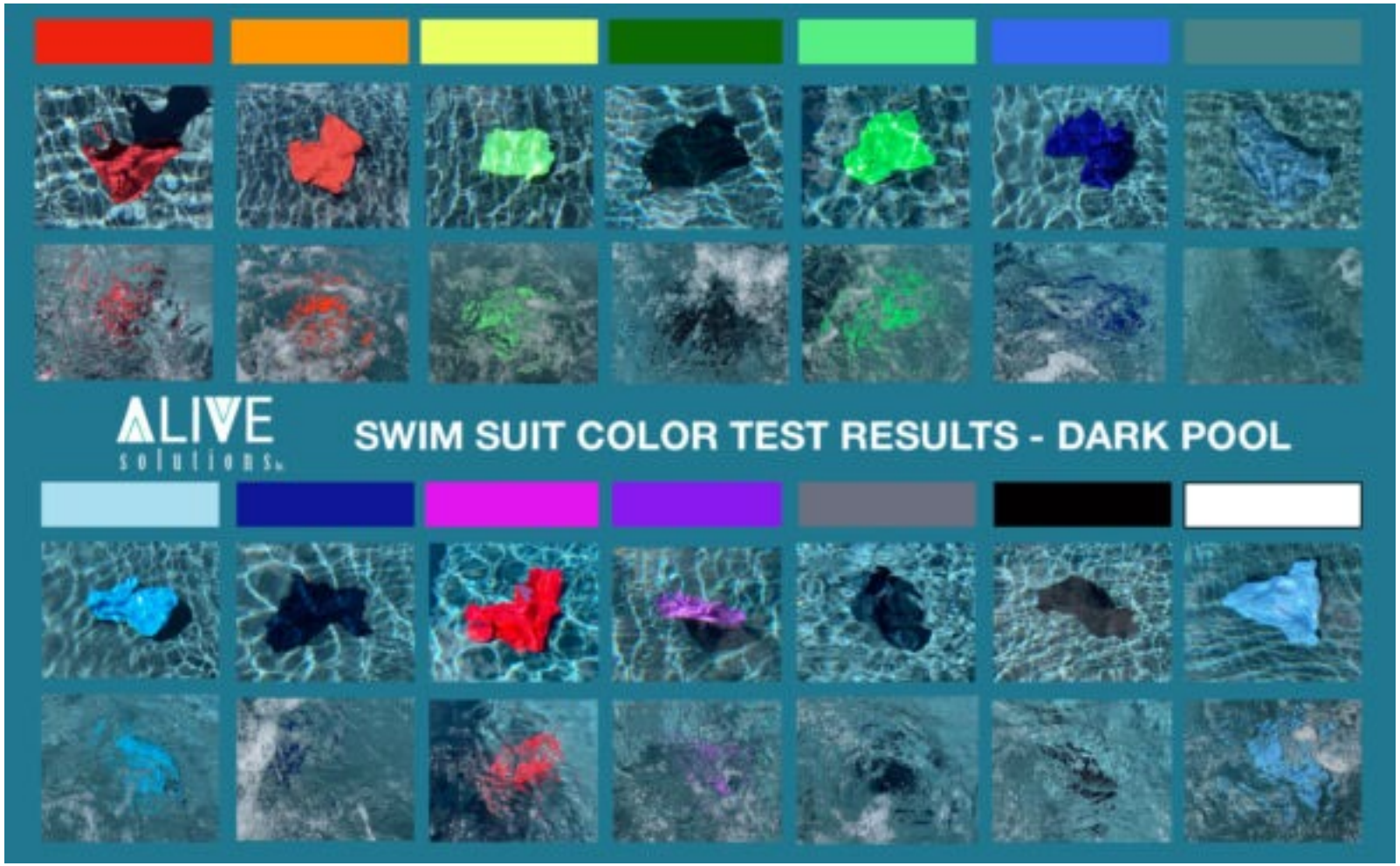
Indiana Department of Health

Source: Indiana Hospital Association, 2022

Pool hazards

- Blue bathing suits can make it difficult to see someone in the water if the bottom of the pool is painted blue
- Deck surfaces and the ground around the pool area can get slippery and be risky if people are running or playing
- Diving boards carry the risk of swimmers hitting their heads on the bottom or sides of the pool if they dive incorrectly
  - Make sure that water is at least 9 feet deep when diving
- Pool chemicals need to be properly stored and kept out of reach of children
  - Chemicals can react with other chemicals if not stored properly

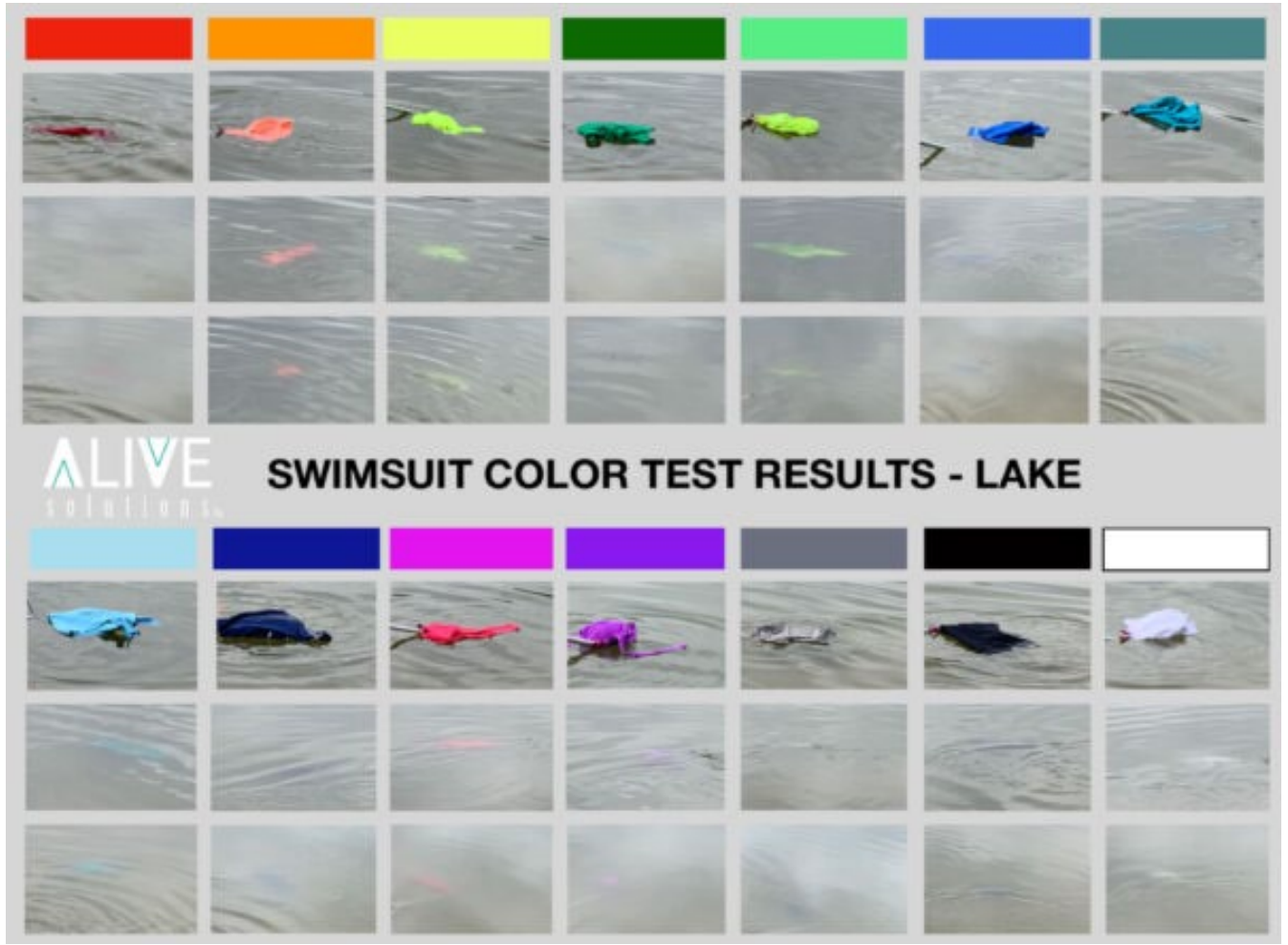
Swimsuit color test in a dark pool



Indiana Department of Health

Source: Alive Solutions, 2023

Swimsuit color test in a lake



Scan the QR code to learn more!

Indiana Department of Health

Source: Alive Solutions, 2023

Drowning risk factors

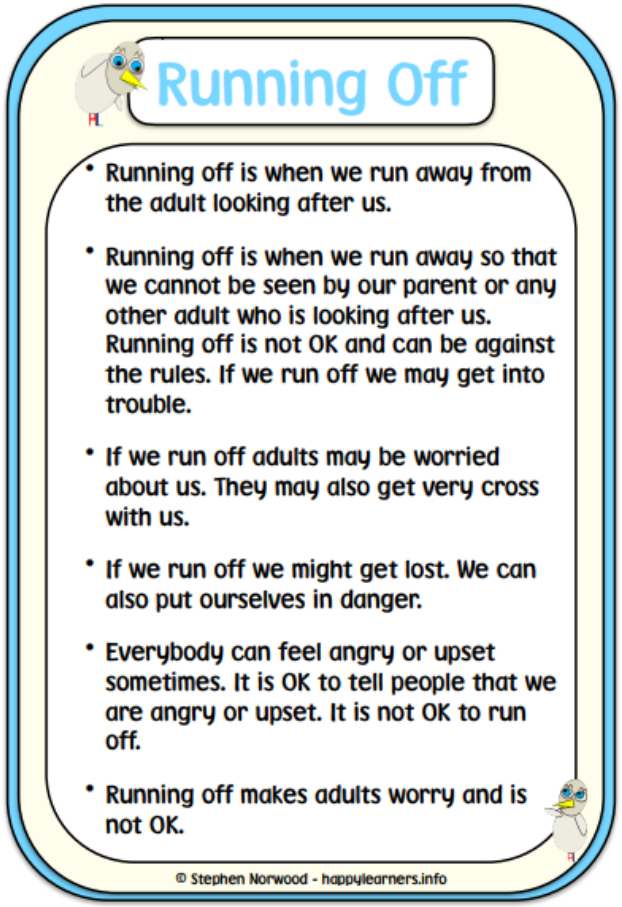
- There are existing conditions that can put people at a greater risk for drowning:
  - Seizure disorders
  - Heart conditions
  - Asthma and other respiratory conditions
  - Physical disabilities
- Active supervision and knowledge of water safety are vital to keeping children safe

Drowning and autism

- Children with autism are 160 times more likely to experience fatal and near-fatal drowning events, compared to children without autism
- For children with autism who are younger than 14 years, 91% of deaths are due to drowning
- Drowning accounts for 70% of eloping or wandering-related fatalities
- Find swim lessons that accommodate children with special needs
- Social stories about wandering and water safety can be used as a teaching resource for children with autism

Source: Autism Society, 2024

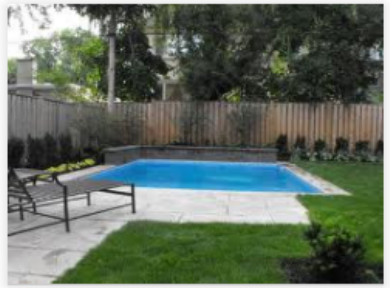
Social story examples



JUL
25

At the backyard swimming pool

It is summer. Sometimes it is very hot outside. I have a pool in my backyard. It might be a good idea to go swimming in the pool. I have to ask my mom and dad to go in the pool. It is not a good idea to go in the pool when no one is with me. The swimming pool has a lot of water in it. It might be deep. If I stand on the floor of the pool, the water might cover my head too. I cannot breathe under water the same way as I do when I am out of the water. It is important for me to listen to my parents when I go swimming at the pool. They will tell me the safety rules. I will try to remember them.



Rule Number 1 at all swimming pools is No Running. I have to walk slowly and carefully around the pool because water can make the floor slippery. If my mom and dad let me jump in, first I have to make sure that no one else is swimming in the spot where I want to jump in. That will make sure that I don't hurt another person or myself while I am having fun swimming.

Indiana Department of Health

Image Source: And Next Comes L, 2024

Children with autism and water

- Children with autism are typically drawn to water due to sensory reasons that include:
  - Fulfilling their sensory needs (visual, texture, or scent)
  - Trying to comfort themselves with water if they are experiencing sensory overload
- Communication can be difficult for children with autism, so when they experience feelings that they cannot express, they find their own solutions, which could cause them to elope towards water

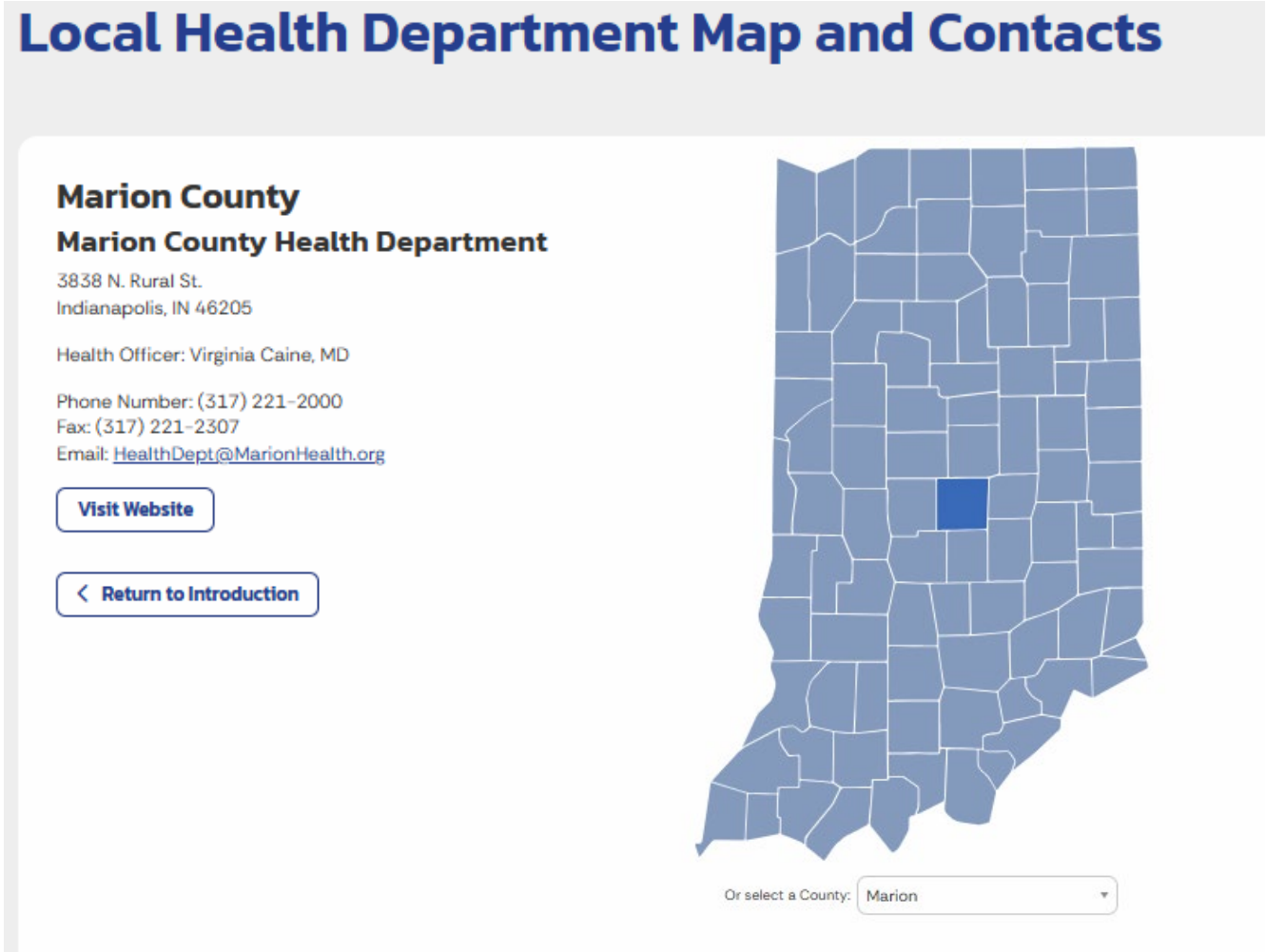
Barriers to water safety

- Common barriers faced by families include:
  - Not being able to afford swim lessons
  - Lack of transportation to attend swim lessons
  - Cultural or religious circumstances
  - Communities not having access to a public pool to host lessons
  - Caregivers' work schedules
  - Not realizing the risks of drowning
  - Changing/locker room is an intimidating environment for children
- How do we make swim lessons more accessible and address these barriers?

Available resources

Connect with local health departments through Health First Indiana

- Local health departments' contact information can be found at: https://www.in.gov/health/lhd/local-health-department-map/
- Local health departments can serve as a hub for information and provide resources to local families
- All 92 counties have opted in to Health First Indiana and will address core public health services and implement strategies to improve health outcomes in communities



Indiana Department of Health

Consumer Product Safety Commission

- Grants are available for organizations to implement water safety in communities
  - There is a grant available for ensuring pool drains are safe to prevent entrapment
- Subscribe to receive recall emails to stay up to date with products that are not safe
- Other available online resources include:
  - Educational materials on water safety
  - Injury statistics and reports
  - Laws, statutes, and regulations
  - Current news releases

National Drowning Prevention Alliance

- The National Drowning Prevention Alliance has toolkits available with free resources
  - Toolkits include:
    - Social media profile frames
    - Media and press guide
    - On-hold messaging recordings
    - Printable posters and activity sheets
    - Public service announcements
    - Local proclamation templates
    - Blogs
    - Social media content

Pool Safely

- Pool Safely is a national organization that provides water safety resources to families
- Check out their resources to:
  - Learn how to keep children safe around pools
  - Watch water safety videos
  - Learn safety tips directed toward parents and grandparents
  - Find educational materials and grant opportunities

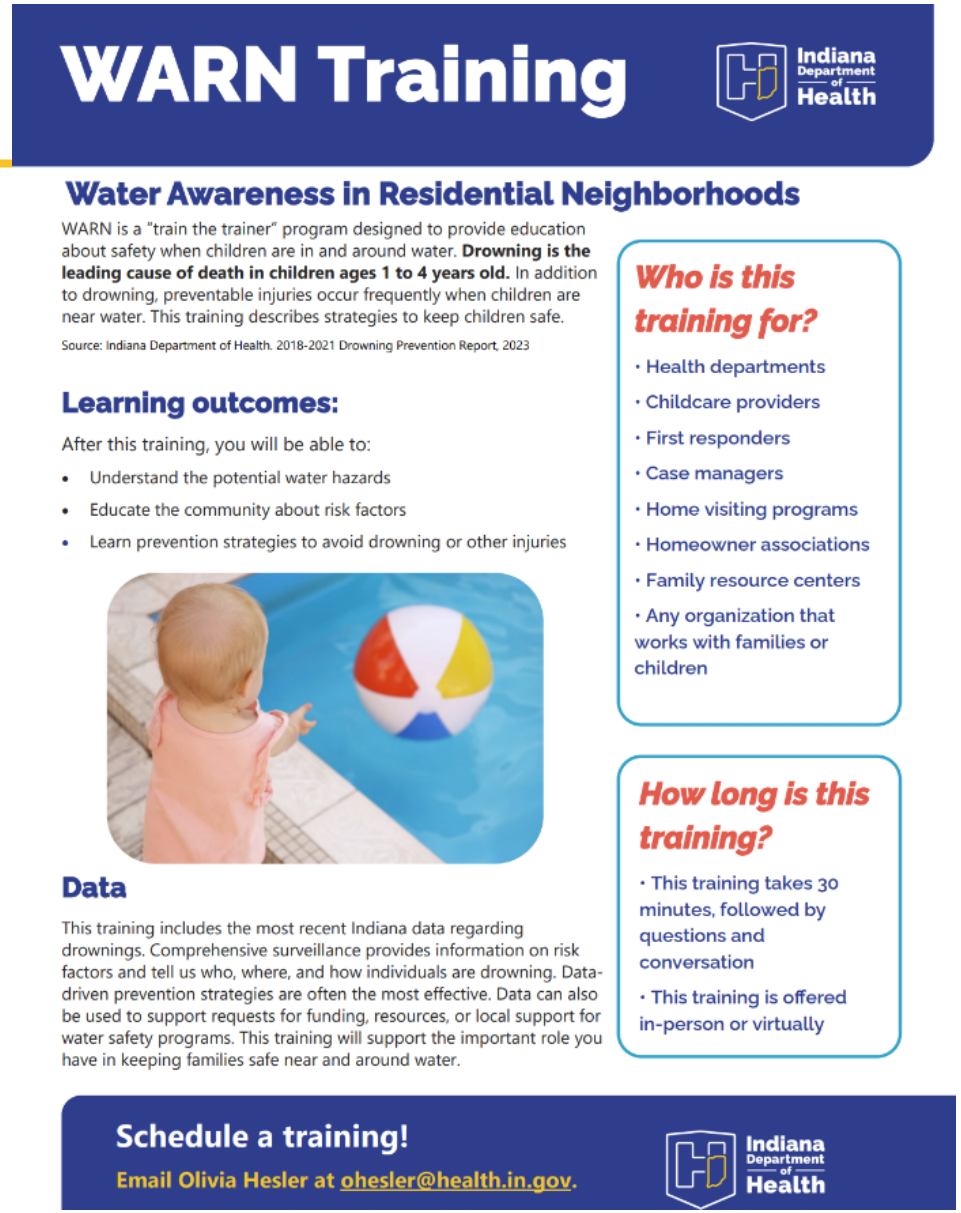
WARN Training

The Division of Family Health Data and Fatality Prevention offers a free training for local partners to learn more about how to promote water safety in their communities.

- This training is typically 30 minutes with time for conversation and questions at the end.
- Certificates are sent to all participants for proof of completion following all trainings.

Interested in being trained in WARN?

Email Olivia Hesler at ohesler@health.in.gov!



Indiana Department of Health

Questions?

CONTACT:

Allie Houston
Prevention Programs Director

Family Health Data and Fatality Prevention

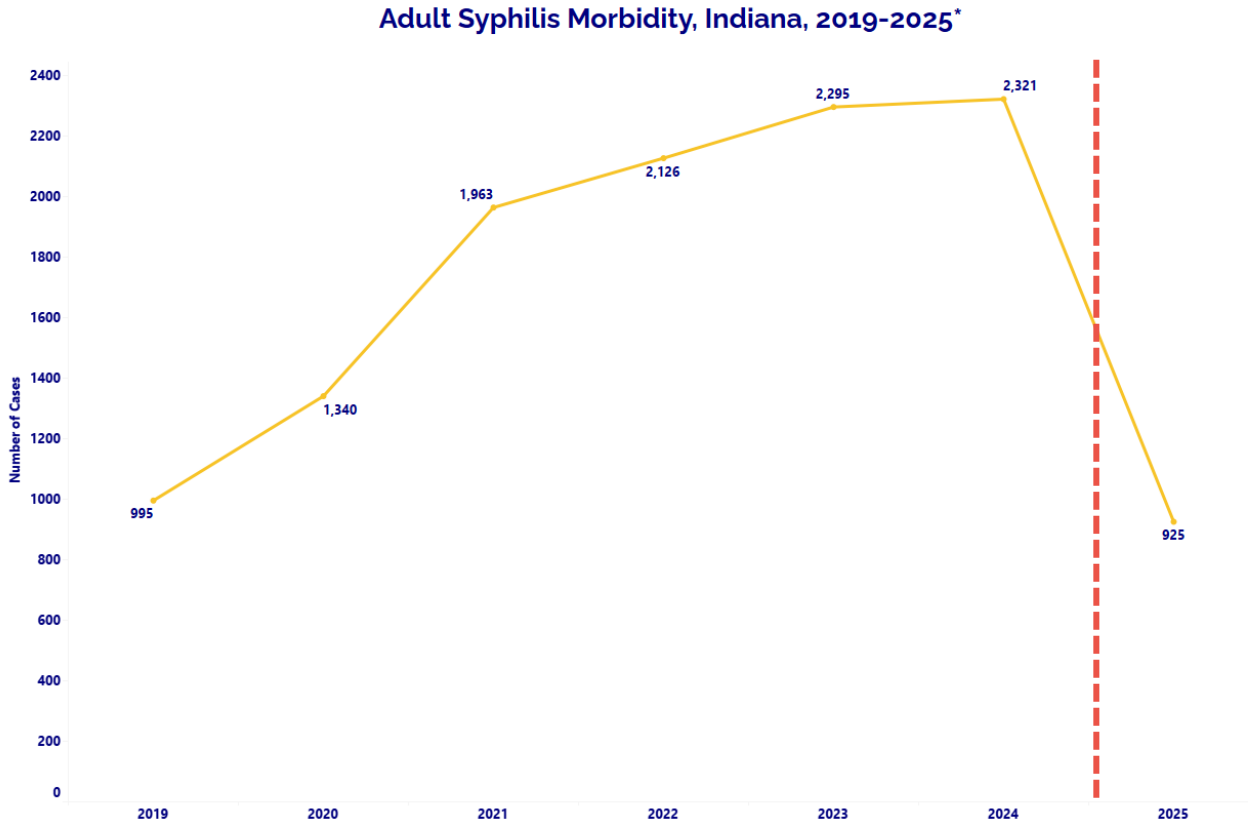
AHouston@health.in.gov

Syphilis

Indiana Department of Health

Adult Syphilis Morbidity

- Rates of adult syphilis have been on the rise since 2014 in Indiana, reaching 33.9 (per 100,000) in 2023.
  - **There have been 925 cases of adult syphilis reported in 2025*, down 6.6% compared to this time last year.**

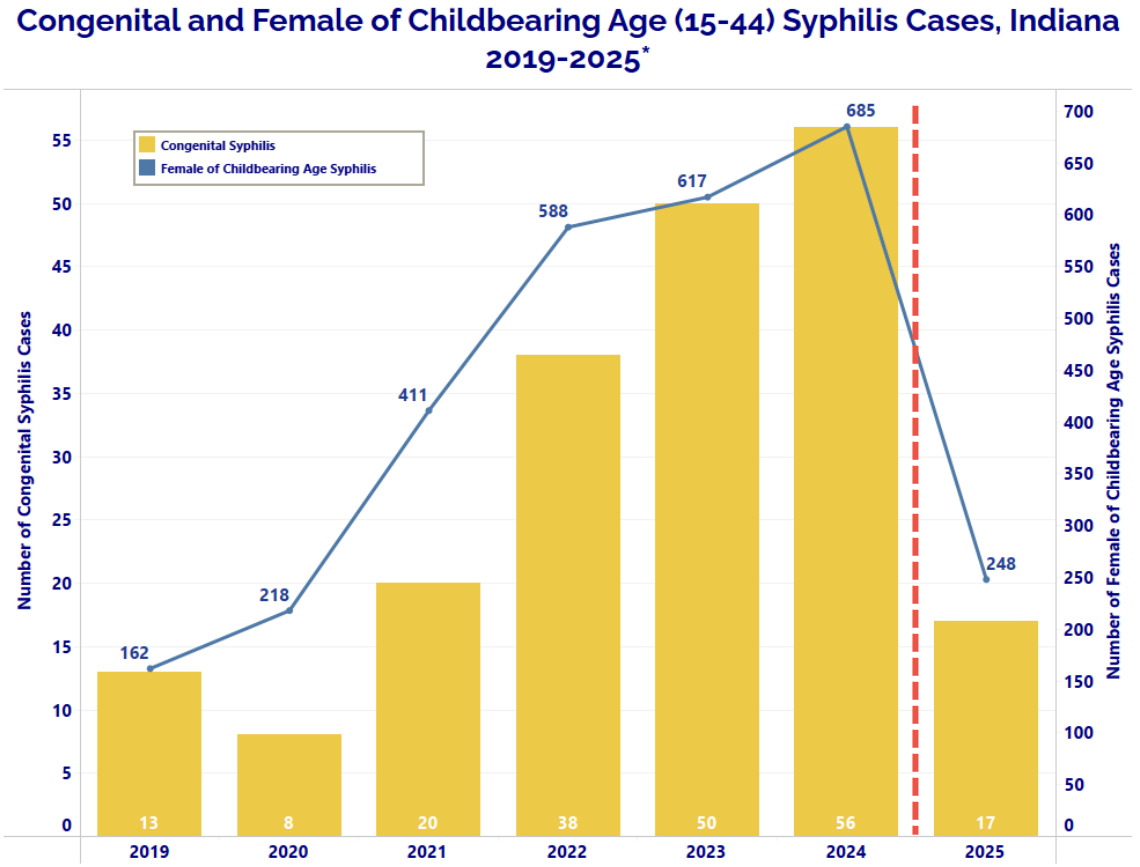


Indiana Department of Health

*2024 and 2025 STI data are preliminary and as of 06/10/2025.

Congenital & Female of Childbearing Age Syphilis Morbidity

- From 2019-2023 there was a 285% increase in congenital syphilis (CS) cases reported.
  - **There have been 17 cases of CS reported in 2025*, down 32.0% compared to this time last year.**
- Of the 17 CS cases reported this year, there have been no still births
- From 2019-2023 there was a 281% increase in syphilis cases among females of childbearing age (15-44 years old).
  - **There have been 248 cases of adult syphilis among females of childbearing age in 2025*, down 9.2% compared to this time last year.**



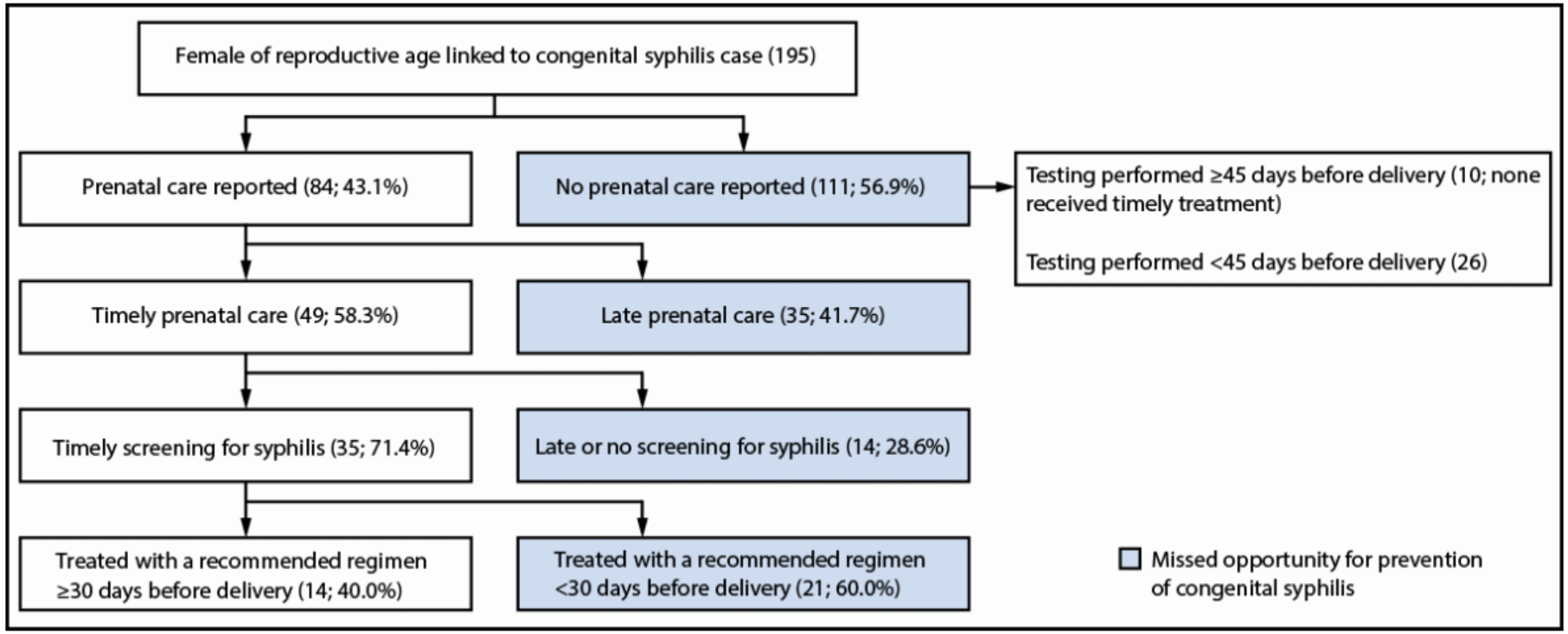
*2024 and 2025 STI data are preliminary and as of 06/10/2025.

IDOH Syphilis Task Force Update, Training Opportunity

- New ASTHO (Association of State and Territorial Health Officials) Resource: **Syphilis Testing in Correctional Facilities Reduces Infection Rates** (link)
- "In 2011, correctional facilities accounted for about 6% of reported syphilis cases nationwide. Increased testing for syphilis in correctional facilities is proven to significantly reduce infection rates. In addition, according to a systematic review investigating STI prevalence and management in correctional settings, facilities that implemented opt-out screening improved syphilis case detection and treatment rates compared to opt-in screening."

Missed Opportunities MMWR 6/2025

FIGURE 2. Cascading framework of missed opportunities for congenital syphilis prevention — Clark County, Nevada, 2017–2022*,†,§



* Timely is defined as ≥45 days before delivery for prenatal care and screening and ≥30 days before delivery for initiation of appropriate treatment.

† Testing among females with no prenatal care reported included 26 females who received testing <45 days before delivery, but before health care encounter for delivery.

§ Females of reproductive age are those aged 15–44 years.

Indiana Department of Health

https://www.cdc.gov/mmwr/volumes/74/wr/mm7420a3.htm?s_cid=mm7420a3_w

Recommendations Reminder

- Perform syphilis testing on all patients upon finding a positive pregnancy test
- Test all pregnant women **three times** during pregnancy (at initial prenatal visit, again at 28-32 weeks of gestation, and then at delivery)
- Meet people where they are with syphilis testing and treatment **outside of settings** in which pregnant women are typically encountered
  - This could include emergency departments, urgent cares, primary care visits, jail/prison intake, local health departments, community programs, and other addiction services
- Perform screening and treatment of **all** sexually active women and their partners for syphilis in counties with high syphilis rates
- Perform screening and appropriate treatment for those with other risk factors for syphilis
- Treat all pregnant women who are infected with syphilis immediately upon diagnosis, according to their clinical stage of infection. Treatment must be with penicillin G benzathine (Bicillin LA).

Congenital Syphilis is Preventable

Toolkit can be found here: https://www.in.gov/health/audiences/clinicians/clinical-guidelines-and-references/congenital-syphilis-clinician-toolkit/

Includes:

- Dashboards (adult and congenital syphilis)
- Case definitions
- Treatment algorithm
- Clinical staging
- Treatment information

Indiana Department of Health

Infectious Diseases of Public Health Importance

Indiana Department of Health

National Respiratory Snapshot

Overall respiratory illness activity in **the United States**

Very Low

What it is: A measure of how frequently a wide variety of respiratory symptoms and conditions are diagnosed by emergency department doctors, ranging from the common cold to COVID-19, flu, and RSV.

Why it matters: Summarizes the total impact of respiratory illnesses, regardless of which diseases are causing people to get sick.

Emergency department visits in **the United States**

COVID-19	Flu	RSV
Very Low Increasing ↗	Very Low Decreasing ↘	Very Low Decreasing ↘

Nationally,

Respiratory Illness

causing people to seek healthcare is

Indiana Department of Health

https://www.cdc.gov/respiratory-viruses/data/index.html

Current Measles Trends – U.S.

- As of June 24, a total of **1,227** measles cases were reported by 37 jurisdictions in 2025
  - This includes 23 outbreaks that account for 89% of cases (1,088 of 1,227)
- **Age breakdown of cases**
  - Under 5 years: 355 (29%)
  - 5-19 years: 455 (37%)
  - 20+ years: 404 (33%)
  - Age unknown: 13 (1%)
- **Vaccination status**
  - Unvaccinated or Unknown: 95%
  - One MMR dose: 2%
  - Two MMR doses: 3%
- **Hospitalization** – 12%
- **Deaths** - 3

Measles in Indiana

Outbreak officially declared over May 29th, no cases in IN currently

Indiana Measles Resources and Information

The Indiana Department of Health is investigating an outbreak of measles and working with local health officials to help stop the spread of infection. The current reported cases are connected to each other but at this time there are no known links to outbreaks in other states.

2025 Measles Outbreak Cases

County	Cases
Allen	8

This table will be updated weekly by 2 p.m. Friday. Data are provisional and subject to change.

Measles is caused by a highly contagious virus that spreads easily from person to person. It is an airborne disease, meaning it spreads through the air when an infected person breathes, coughs, sneezes, or talks. The virus can stay alive in the air and on surfaces for up to two hours. If one person has it, up to 9 out of 10 people nearby will become infected if they are not protected. Two doses of MMR (measles, mumps, rubella) vaccine are highly effective at preventing measles.

Indiana Department of Health

https://www.in.gov/health/idepd/diseases-and-conditions-resource-page/measles/

Measles Testing Guidance for Clinicians

Measles testing should be performed for patients who:

- Meet the clinical case definition for measles (generalized maculopapular rash; and fever ≥101˚F; and cough, coryza, or conjunctivitis) AND
- Within the 21 days prior to symptom onset, had an elevated risk of exposure to measles including:
  - Had a known exposure to measles, or
  - Traveled internationally or to an area with known measles cases, or
  - Had contact with someone with a febrile rash illness, particularly if those individuals had traveled internationally or to an area with known measles cases

Testing Guidance Reminder

To avoid false positive results, testing is **discouraged** for patients with clinical presentation inconsistent with measles and no known increased risk of exposure to measles

Testing is also **discouraged** if the patient was recently vaccinated and has *NO* epidemiologic risk factors

Measles Vaccination Recommendations

Children

- First dose at 12-15 months, second dose 4-6 years (minimum 28-day interval between each dose)

Adults

- Born before 1957: Immunity is assumed to be present from natural infection
- Born 1957-1968: A single dose recommended if no documentation of live vaccine administration or not contraindicated, or check a titer
- Born after 1968:
  - If received two documented doses of MMR, no additional doses needed
  - If no documentation: Provide additional dose if not medically contraindicated or check a titer. In some cases, a second dose may be needed.

Centers for Disease Control and Prevention (CDC) recommends that healthcare workers have two documented doses of MMR.

CDC Summer Travel Guidance for Measles

CDC recommends vaccination against measles at least **2 weeks** before international travel for those without evidence of immunity

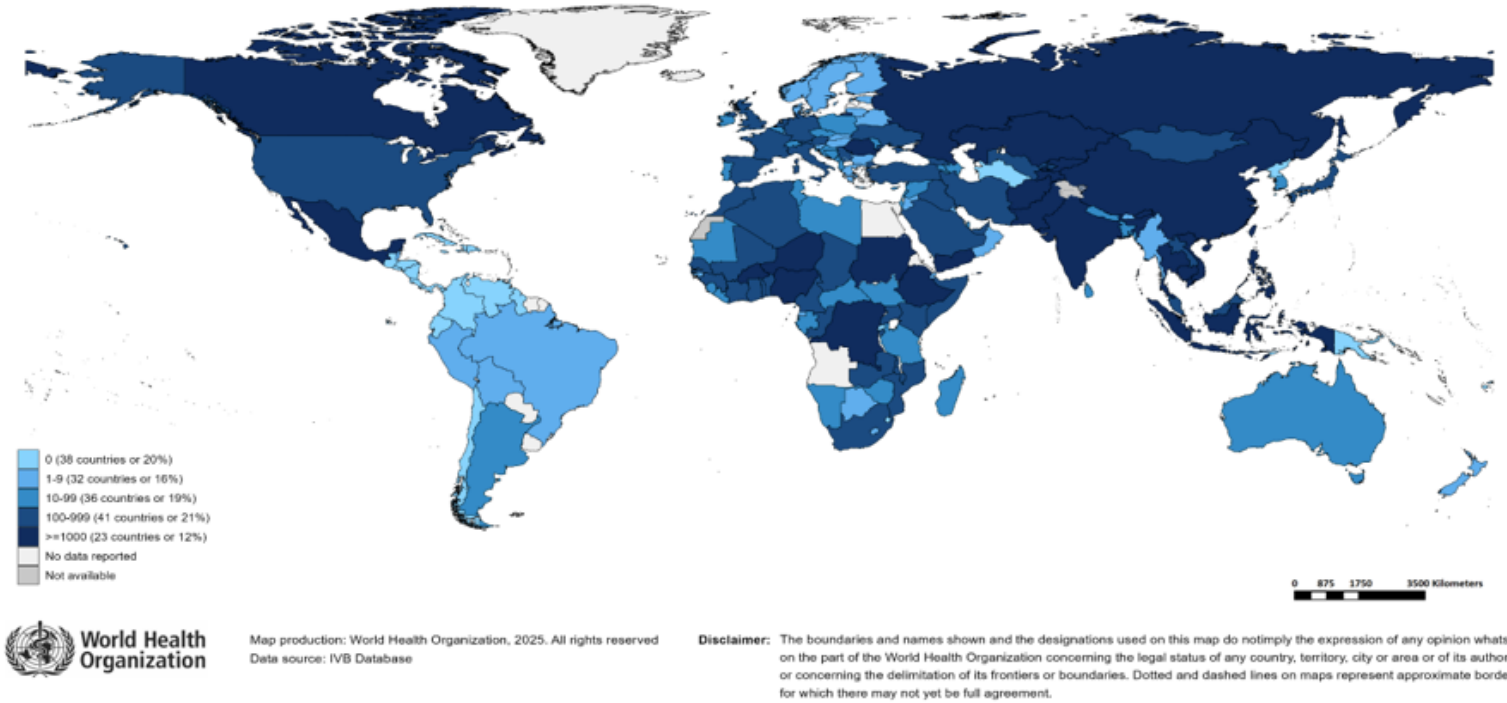
- If time allows before departure and the patient is over 12 months of age, the second dose should be administered at least 28 days after the first dose
- Verify if patient may need yellow fever vaccine before giving MMR due to spacing considerations with live-attenuated viral vaccines

Indiana Department of Health

Plan for Travel | Measles (Rubeola) | CDC

Global Trends per WHO as of 6/2025

Number of Reported Measles Cases (Last 6 months)



World Health Organization

Map production: World Health Organization, 2025. All rights reserved
Data source: IVB Database

Disclaimer: The boundaries and names shown and the designations used on this map do notimply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

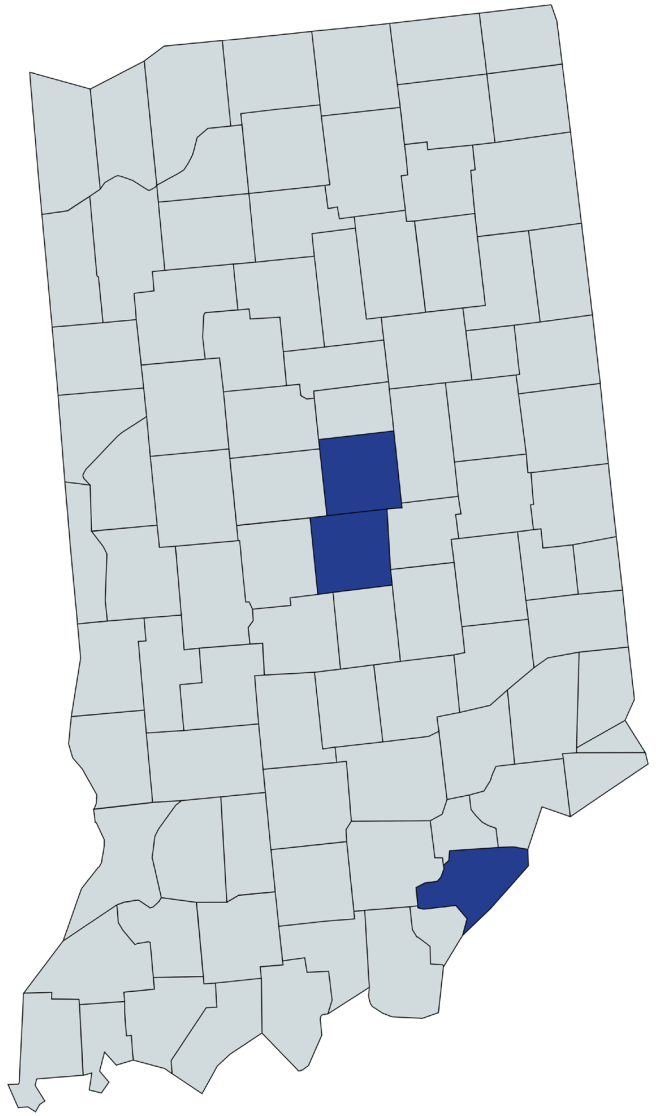
Country	Cases*
Yemen	15,344
India**	9,677
Pakistan	8,946
Kyrgyzstan	7,307
Afghanistan	7,252
Ethiopia	6,184
Romania	5,414
Nigeria	2,730
Indonesia	2,569
Russian Federation	2,226

IHAN and FAQ for Clinicians

- See the following link for the recent Indiana Health Alert Network (IHAN) about measles
  - https://www.in.gov/health/files/Measles-IHAN-April-2025.pdf
- See the following link for frequently asked questions:
  - https://www.in.gov/health/idepd/files/Measles-FAQs-for-Healthcare-Providers_March2025.pdf

West Nile Virus (WNV)

- WNV has been detected in mosquito samples in three counties:
  - Clark (collected and tested by IDOH)
  - Marion and Hamilton (collected and tested locally)
- WNV risk increases throughout the summer as more birds and mosquitoes become infected
- Hoosiers will continue to be at risk for WNV until the first hard freeze
- To monitor IDOH WNV surveillance, visit our Mosquito-Borne Illness Dashboard
- To learn more about WNV, including diagnosis and signs and symptoms, visit our West Nile Virus page



Indiana Department of Health

Other Public Health Updates

Indiana Department of Health

Infant Mortality

HISTORIC DECREASE IN INFANT MORTALITY RATE

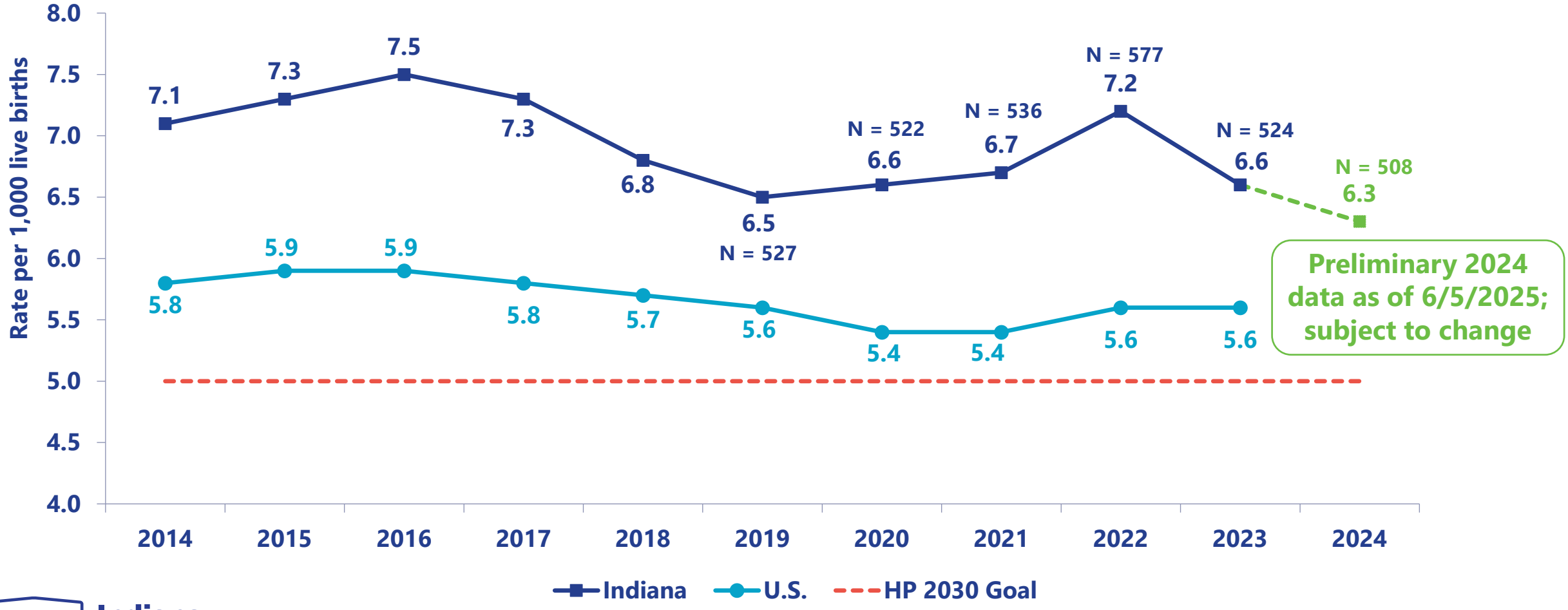
- Provisional data from the Indiana Department of Health (IDOH) show the 2024 infant mortality rate (IMR) in Indiana is **6.3 deaths** per 1,000 live births, a decrease from 6.6 in 2023.
- If this IMR remains the same when finalized, it would be the lowest rate of infant deaths in Indiana since 1900.
- The previous lowest rate for infant mortality was 6.5 deaths per 1,000 births in 2019.

THANK YOU FOR ALL YOUR HARD WORK!

Scan to read the press release:

Indiana Department of Health

Infant mortality rates (IMRs)
2014-Preliminary 2024



Indiana Department of Health

Source: Indiana Department of Health, Family Health Data and Fatality Prevention Division [April 29, 2025]
United States Original Source: Centers for Disease Control and Prevention National Center for Health Statistics
Indiana Original Source: Indiana Department of Health, Vital Records, ODA

Indiana Youth Tobacco Use Lowest In Decades

- E-cigarette use among high school youth has dropped to 5%
  - Lowest level since data collection began in 2012
  - Down from a peak of 18.5% in 2018 – while cigarette smoking has reached a record low since data collection began in 2000, falling from 31.6%.
- Despite this progress, concerns remain as flavored tobacco products, frequent e-cigarette use, and the rising popularity of oral nicotine pouches indicate ongoing risks for nicotine addiction
- Additionally, many Indiana youth who have never used tobacco products are still susceptible to future use, reinforcing the importance of continued prevention efforts

Scan to read the press release:

Indiana Department of Health

FDA Recall

Product: Nipro MedicaLyte Liquid Bicarbonate Concentrate

Unique Device Identifier (UDI)/Model: 00817411022824

Reason: Nipro stated that they received reports of concerning visual irregularities in some product jugs. Returned units were sent to a third-party laboratory for analysis, where bacterial and fungal particles were identified. Nipro has received reports of one serious injury and one death.

Background: Dialysate is part of a hemodialysis system that removes waste, toxins, and excess fluids from the body in patients with kidney failure. If the contaminated product is used, the hemodialysis machine will need to be disinfected following the manufacturer's recommendations.

Indiana Department of Health

How do I recognize a UDI on a label?

Source: FDA

FDA Recall

Manufacturer Recommendations:

- Do not use any MedicaLyte Liquid Bicarbonate Concentrate
- Stop dispensing and distributing product and quarantine all lots
- Isolate identified devices in possession.
- If the affected lots were further distributed, please forward the notification and report the consignees

Contact Information:

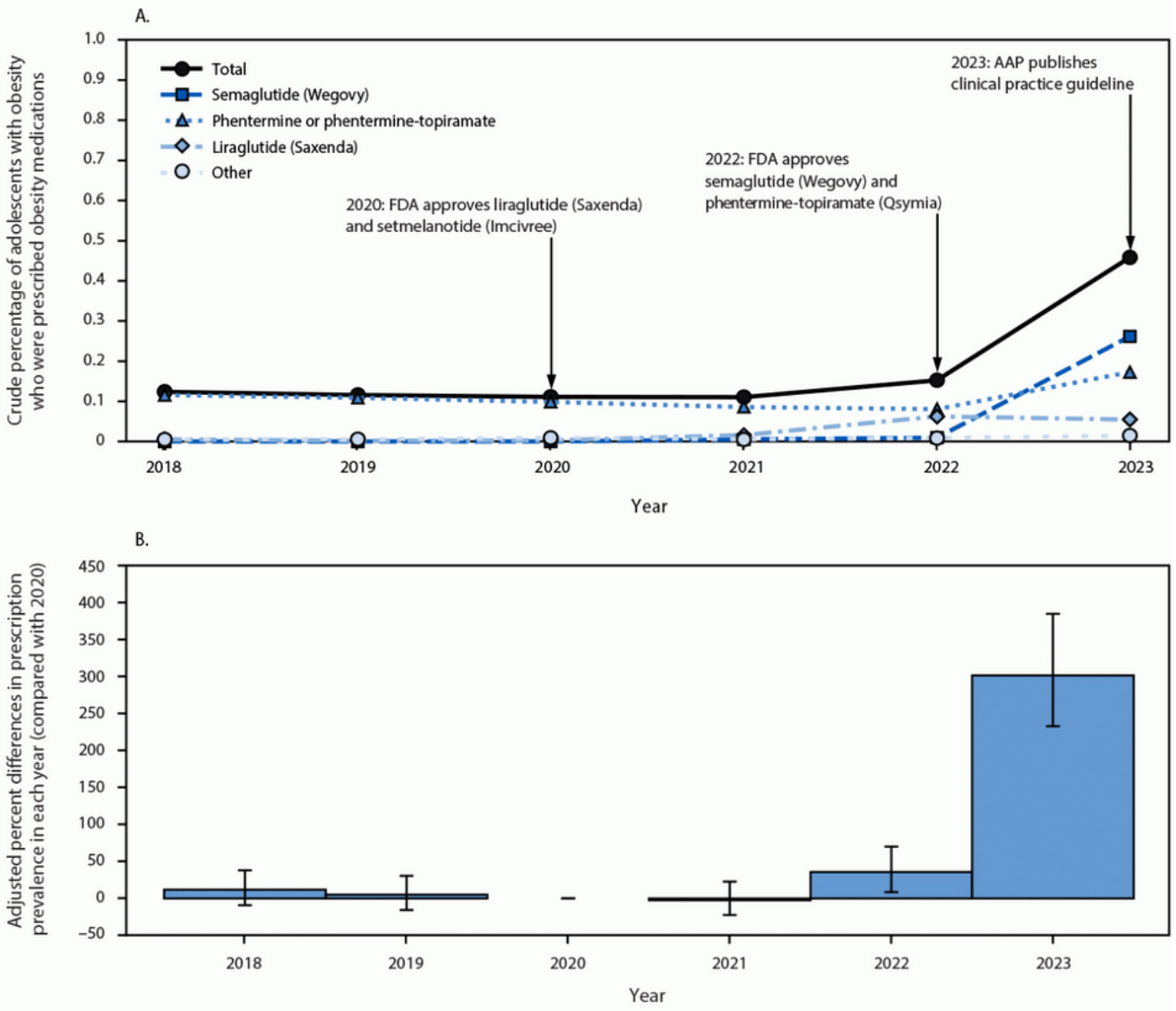
- Customers in the U.S. with adverse reactions, quality problems, or questions about this recall should contact Nipro at Nipro4621@sedgwick.com or 1-877-546-0126.
- Health care professionals and consumers may report adverse reactions or quality problems to MedWatch's Online Voluntary Reporting Form.
- Contact Indiana Department of Health by emailing Trent Gulley (tgulley@health.in.gov) and Haley Beeman (hbeeman@health.in.gov).

Indiana Department of Health

Obesity Medication MMWR

- 2018-2023
- Fewer than 1% of all adolescents with obesity prescribed obesity medication
  - **However, there was a relative increase of approximately 300% in 2023**
- Prescribing prevalence higher among girls, white adolescents, those aged 15-17 years, and adolescents with severe obesity
- Study included only medications FDA approved for obesity in this age group

FIGURE 1. Crude percentages (A) and adjusted percent differences in prevalence compared with 2020 (B)* of adolescents aged 12–17 years with obesity who received an obesity medication prescription† — IQVIA Ambulatory Electronic Medical Records, United States, 2018–2023§



Indiana Department of Health

https://www.cdc.gov/mmwr/volumes/74/wr/mm7420a1.htm?s_cid=mm7420a1_w

Culinary Medicine Post-Conference Workshop

Friday, July 11, 2025 | 3:00 PM – 7:00 PM (EDT)

Overview:

Workshop will provide an introduction to the field of culinary medicine, strategies and resources for integrating into clinical or community-based practice, and time for hands-on cooking (plus eating and networking)

Questions?

Contact:

- Christina Badaracco (christina@rewire-health.com) for content questions.
- Paul Bierman (pbierman@sneb.org) for registration/logistical questions.

Learning Objectives:

- Demonstrate proficiency in preparing three healthful recipes, applying culinary techniques that emphasize nutrition and flavor, while fostering confidence in cooking for diverse audiences.
- Plan high-impact culinary medicine experiences tailored to various community needs.
- Identify effective teaching strategies and engagement techniques that encourage active participation and learning.

Indiana Department of Health

To register: https://snebconference.org/culinary-medicine-workshop/

Ways to connect with us

- Access our webpage with resources for clinicians
- Please let us know what topics you'd like us to cover: Email Gcrowder@health.in.gov or Ehawkins@health.in.gov

Questions?

CONTACT:

Guy Crowder, MD, MPHTM
Chief Medical Officer
GCrowder@health.in.gov

Next call: Noon, July 25