The presentation will begin shortly.

You may not have sound at the moment, but will have sound once the presentation begins.

Thank you for your patience.

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Questions?

Email questions to:
indianatrauma@isdh.in.gov

OR

Utilize chatbox underneath the video.

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Injury Prevention Advisory Council (IPAC) and Indiana Violent Death Reporting System (INVDRS) Meeting

Friday, November 15, 2019

Indiana State Department of Health

Round Robin and Introductions

- Name
- Position
- Organization/ Association
- Updates
- Current Projects and Programs
- Upcoming events

@INDTrauma #SafetyIN

Email questions to: **indianatrauma@isdh.in.gov**

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Invite New Members

Please forward my contact information to colleagues interested in violence & injury prevention!

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Email questions to: **indianatrauma@isdh.in.gov**

Resource Guide App

- UPDATED!
- Free download for iOS & Android
  - phone & tablet capabilities
- Available in Apple & Google Play stores

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Email questions to: **indianatrauma@isdh.in.gov**

ISDH Updates

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Email questions to: **indianatrauma@isdh.in.gov**

Upcoming Events

- Labor of Love Summit
  - December 11

- MIPA Summit in Minnesota
  - January 30-31

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Email questions to: **indianatrauma@isdh.in.gov**

ISTCC/ITN Meeting Dates

- Indiana State Trauma Care Committee, Indiana Government Center, 10 am EST
  - December 13th
- Indiana Trauma Network, Indiana Government Center, 12:30 pm EST
  - December 13th

IPAC/INVDRS Meeting Dates

- Stay tuned for 2020 dates!
- Feedback survey will be sent out after today's meeting

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Email questions to: **indianatrauma@isdh.in.gov**

Using Death Investigation Sheets to Improve Data Collection for Overdose and Violent Deaths

Division of Trauma and Injury Prevention

Indiana State Department of Health

Surveillance of Violence and Overdose

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Overview of INVDRS and SUDORS

- Indiana Violent Death Reporting System (INVDRS) established in 2014
- One of 32 states
- Now includes all 50 states + DC and Puerto Rico

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Overview of INVDRS and SUDORS

- 2016: CDC expanded use of NVDRS for opioid overdose
  - State Unintentional Drug Overdose Reporting System (SUDORS)
  - Uses same variables as NVDRS + overdose-specific module

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Overview of INVDRS and SUDORS

- Link data from vital records, coroner reports, and law enforcement reports to create a single incident
  - Each incident can have multiple victims
- Abstractors: code circumstances and situations
- Toxicology submitted for

  ALL deaths – not just overdoses

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What is Surveillance?

- Public health strategy that focuses on:
  - Fast over complex
  - Generates good questions over final answers
  - Detects locality
  - Data that leads to action for resources, outcomes, etc.

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Data from Indiana

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Demographics Collected

- Age
- Sex
- Race and ethnicity
- County and city of residence
- County and city of injury
- Occupation
- Education
- Marital Status

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Figure 1. Trends in Suicide Rates: United States and Indiana, 2015-2018

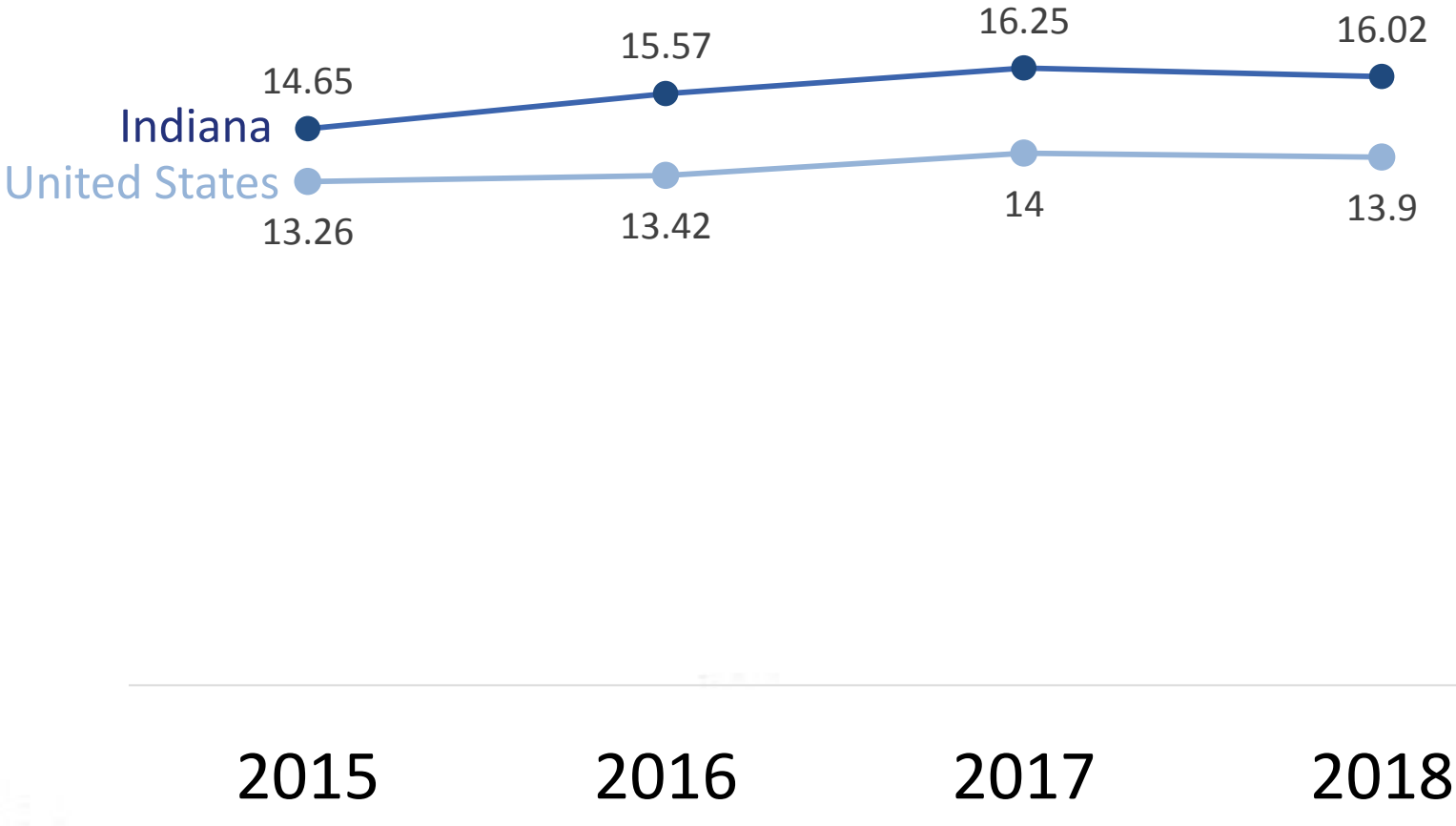


Figure 2. Trends in Homicide Rates: United States and Indiana, 2015-2018

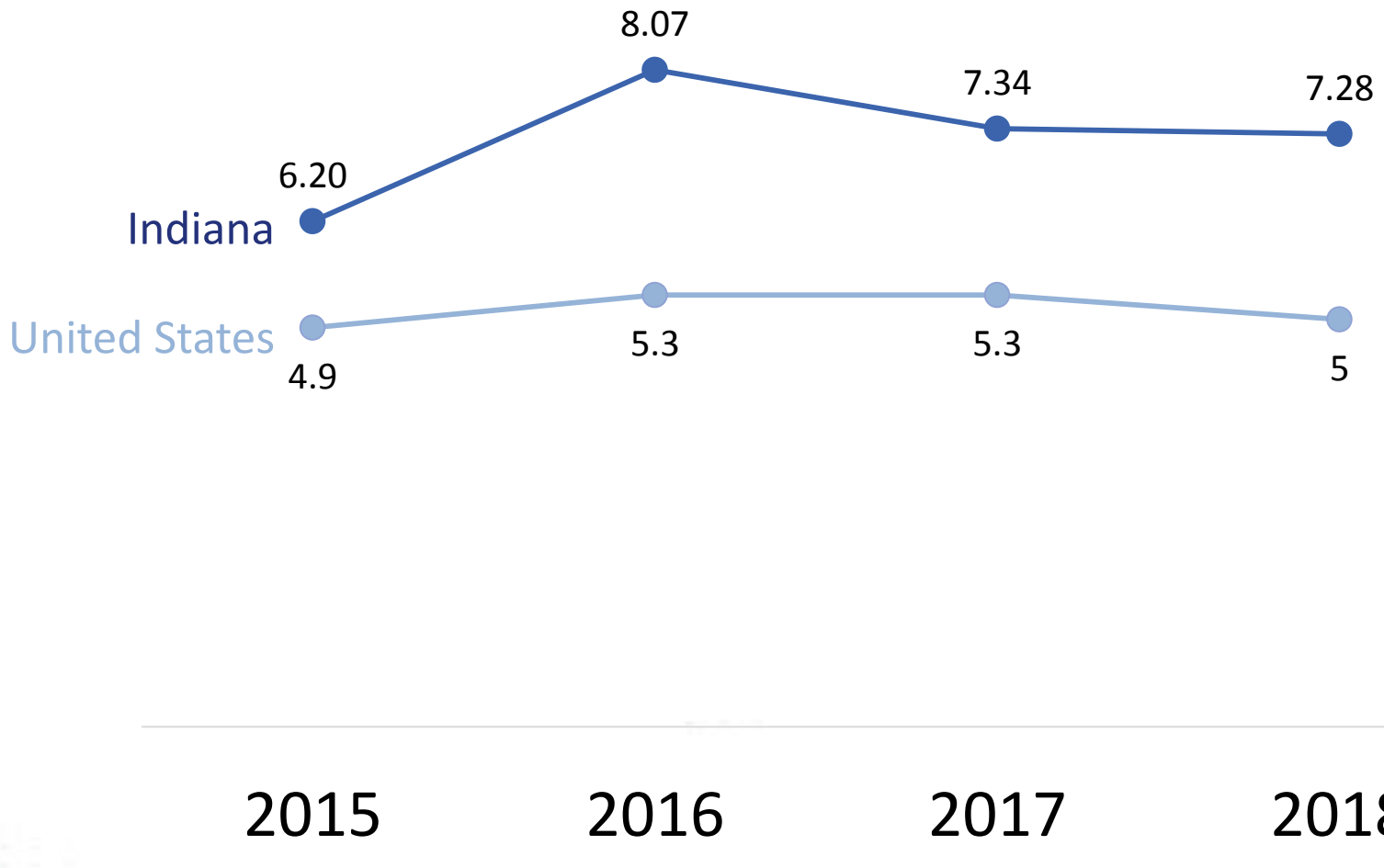
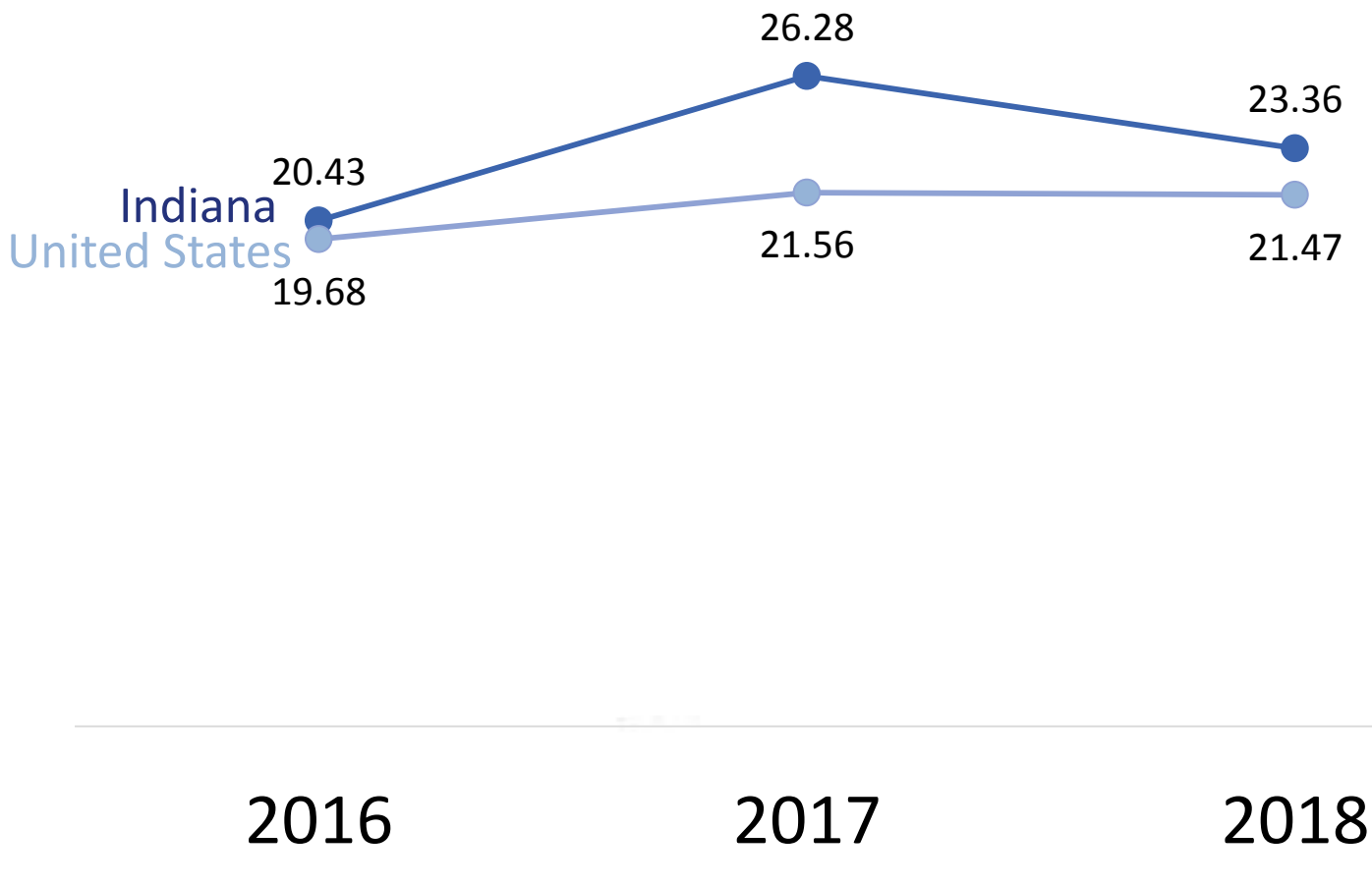
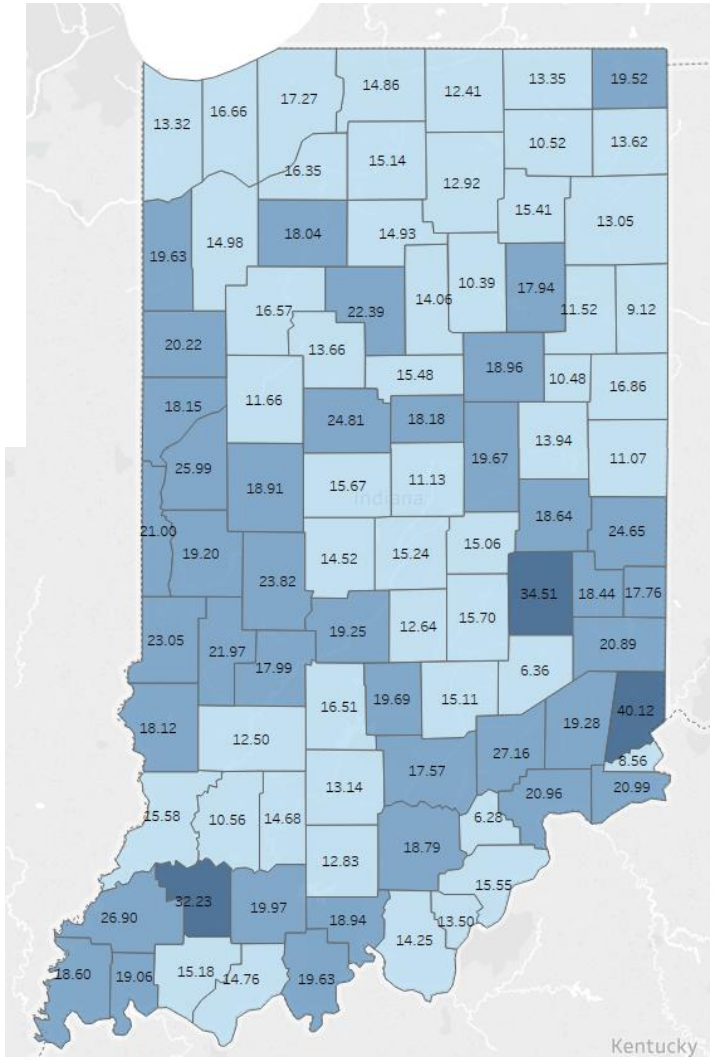
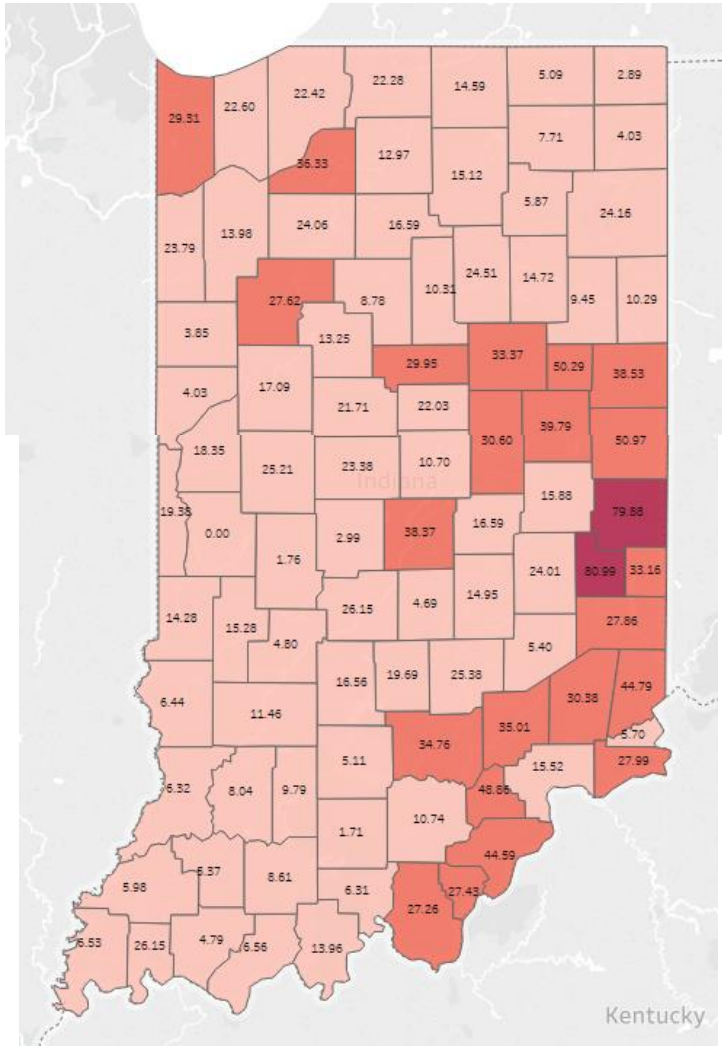


Figure 3. Trends in Unintentional Drug Overdose Rates: United States and Indiana, 2016-2018



Map 1. County Suicide and Fatal Drug Overdose Rates, 2015-2018





Circumstance Variables (where you play a role)

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Extended Demographics

- "SOGI" – sexual orientation & gender identity
- Employment status
- Veteran status
- Type of location of injury or overdose
- Homelessness
- Incarceration
- Recent release from jail or rehab facility

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Beyond Demographics

- Crisis situations
- Current/past mental health problems/treatment
- Previous suicidal behavior
- Life stressors
- Intimate partner violence
- Other crime in process, i.e. robbery
- Drug involvement
  - Dealing, using, arrest, addiction

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Drug Overdose Specific

- Context of scene
  - Substance abuse
  - Overmedication
  - Accidental
- Were drugs prescribed?
- Was victim being treated for chronic or acute pain?
- Previous drug use or overdose history
- Previous treatment for substance abuse

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Drug Overdose Specific

- Indication of drug use
  - Paraphernalia
  - Substances present on site
  - Naloxone
  - Drug form (pill, powder, liquid, etc.)
- Route of administration

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Who is a Witness or Bystander?

- Someone in position to offer help during potential overdose
  - Do they know the signs?
  - Barriers to intervene
  - Administration of naloxone
  - Children often are witness to parents or family member OD'ing

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Barriers to Gathering Information and Including It in Narrative Reports?

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Circumstances from Violent Deaths, 2015-2018

- **74% of all suicides have some situational circumstance known:**
  - 30% were in a depressed mood
  - 28% were experiencing a crisis:
    - 15% disclosed intent to die by suicide
  - 27% diagnosed with current mental health problem
  - 16% problem with current or former intimate partner
  - 12% experience physical health problem
  - 11% in mental health or substance abuse treatment
  - 10% alcohol problem
  - 9% substance abuse problem

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Circumstances from Violent Deaths, 2015-2018

- **74% of youth suicides (<19 years) had at least one circumstance:**
  - 36% were experiencing a crisis in the past or upcoming 2 weeks
  - 25% diagnosed with current mental health problem
  - 23% had a history of suicidal thoughts
  - 13% in mental health or substance abuse treatment
  - 11% had a history of suicide attempts:
    - 19% had disclosed intent to die by suicide
  - 11% problem with current or former intimate partner
  - 6% had family stress of some type
  - 5% substance abuse problem

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Locations and Settings

- For youths and adults, approximately 1% of suicides were homeless
- 75% of youth and adult suicides occurred in home, either the decedents or someone else's
- 8% of youth suicides and 4% of adult suicides occurred in natural areas
- 4% of adults recently released from jail, hospital, or other institution
- 3% of youth suicides occurred at a hospital or medical facility
- 1% of youth in custody of jail, prison, or group home

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Death Investigation Guide

Detecting a Drug Overdose on Scene

Limbs

- ✓Check for evidence of needle tracks, including fine needle punctures or bruising between fingers, under nails, toes, within the lines of tattoos, wrists, ankles, and backs of hands
- ✓Check for evidence of burned fingertips or lips that may suggest smoking or drugs
- ✓Check for transdermal patches that may indicate use of fentanyl

Head

- ✓Check for the presence of foam cone in nose or mouth
- ✓Check for the condition of teeth
- ✓Check for the presence of patches or baggies in oral cavity
- ✓Check for a perforated nasal septum

Surroundings

- ✓Take pictures and document findings in your investigative reports!
- ✓Check clothing for for foreign objects, vials, or baggies
- ✓Check drawers, cupboards, and medicine cabinets
- ✓Check waste baskets and garbage bins outside
- ✓Look for paraphernalia such as needles, tourniquets, powders, scales, cut straws, rolled up money or broken pens
- ✓Count the number of pills. Record the number of prescriptions and who the prescription belongs to

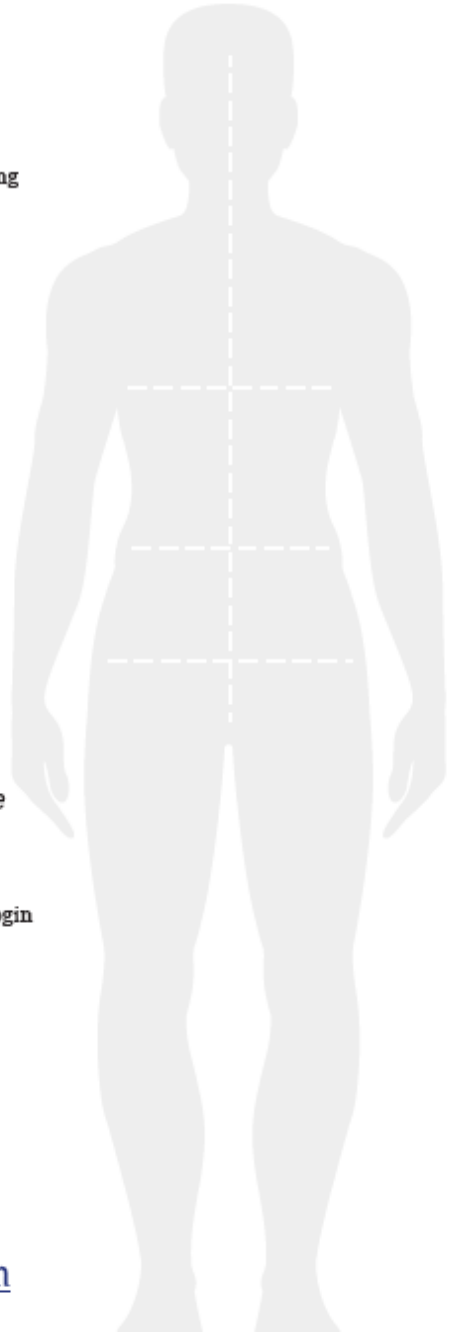
Completing the Drug Overdose Investigation off Scene

Check the PDMP

- ✓Check the Prescription Drug Monitoring Program (PDMP) for prescribed controlled substances: https://indiana.pmpaware.net/login
- ✓Record your findings in the investigation report

Collect Body Specimens

- ✓Blood (at least 10mL)
- ✓Urine
- ✓Vitreous



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Trauma and Injury Prevention

Death Investigation Guide

Circumstantial information is important for investigators. Consider collecting the following for the decedent:

Mental Health

- ✓Current or past treatment for mental health
- ✓Any known mental health diagnosis
- ✓History of suicide ideation or attempts
- ✓Physical evidence of self harm
- ✓Left a letter, note, text or email of intent

Medical History

- ✓Full medical history if possible from primary care provider or psychiatrist
- ✓Pain medications found on scene

Recent Problems

- ✓Relationships
- ✓Alcohol
- ✓Legal
- ✓Physical health
- ✓Job or financial
- ✓Homelessness
- ✓School
- ✓Evictions
- ✓Death in family or among friends
- ✓Arguments or fights
- ✓Bullying or harassment

Demographics

- ✓Age
- ✓Height
- ✓Sex
- ✓Race
- ✓Ethnicity
- ✓Marital status
- ✓Sex of partner
- ✓Sexual orientation and pregnancy status
- ✓Occupation and veteran status

Recent Institution Release

- ✓Incarcerated (jail, prison, probation and community corrections)
- ✓Residential treatment or recovery program
- ✓A medical care facility such as hospital or nursing home

Childhood Trauma

- ✓Physical abuse or neglect
- ✓Sexual abuse or neglect
- ✓Emotional abuse or neglect

Parental history of:

- ✓Abuse
- ✓Separation
- ✓Substance misuse
- ✓Incarceration
- ✓Mental diagnosis

Homicide

- ✓Previous victim of violence
- ✓Physical fight, argument, brawl
- ✓Stalking, prostitution
- ✓Self-defense, bystander, random?
- ✓Hate crime, lover's triangle

Suicide

- ✓Did victim leave a note?
- ✓Did victim disclose intent to someone?
- ✓Did victim experience a recent death of family or friend?
- ✓Did victim have any previous attempt history?

Substance Use History

- ✓Evidence of prescription drugs such as type and name
- ✓Evidence of injection or other route such as snorting, transdermal, smoking, or ingestion
- ✓Evidence of illegal drugs such as powders, tar, crystal, or fake pills
- ✓Evidence of morphine prescription
- ✓Any bystanders present at overdose
- ✓Any naloxone administration given by whom and how much
- ✓Current or past substance use disorder such as opioids, alcohol, or other drug
- ✓Last known use of substance such as days, weeks, or months
- ✓Last known overdose such as month, years, or longer
- ✓Recent relapse such as weeks, months, or longer
- ✓Living with another with substance use disorder who is using

If death included a firearm

- ✓Firearm type such as rifle, pistol, and the caliber/gauge
- ✓Firearm make, model, and serial number
- ✓Firearm owner
- ✓Check if the firearm was stored and locked up loaded

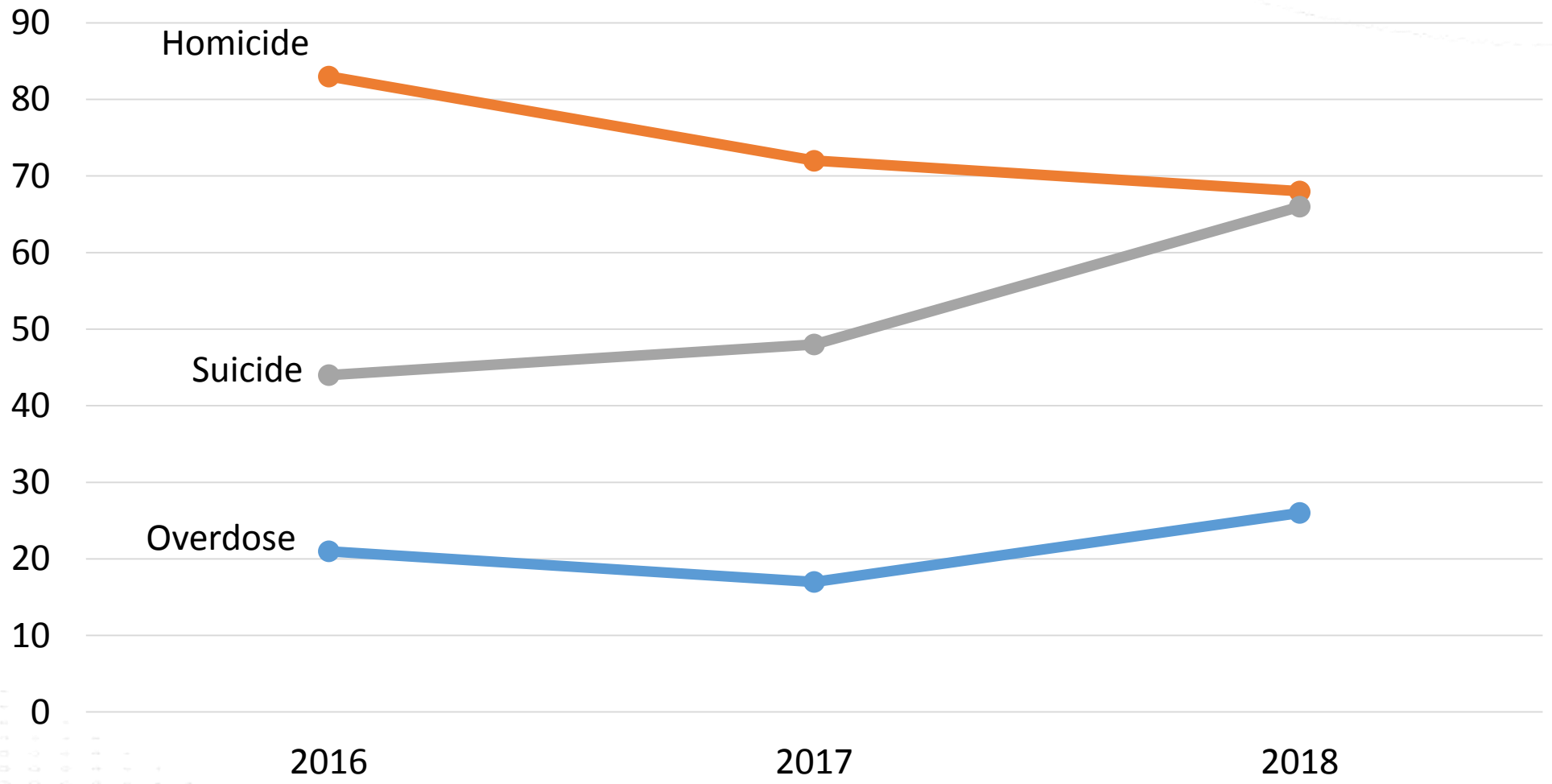
Intentional Injury Data Presentation: Violence in Youth

Morgan Sprecher, *INVDRS Epidemiologist*

Indiana State Department of Health

Email questions to: **indianatrauma@isdh.in.gov**

Youth (<19 years) homicides were once the leading mechanism of death, but is now it is comparable to suicide.



HOMICIDE

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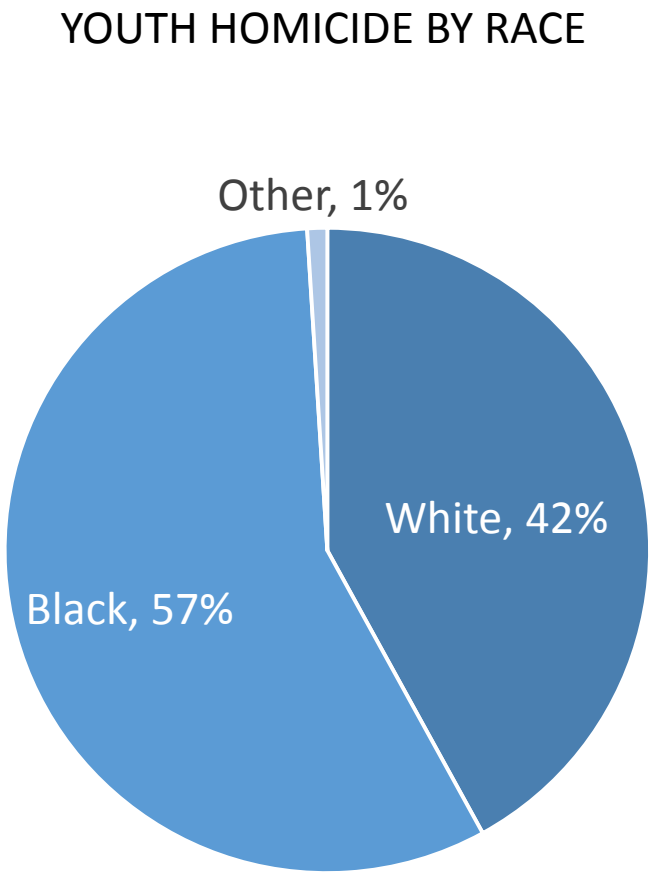
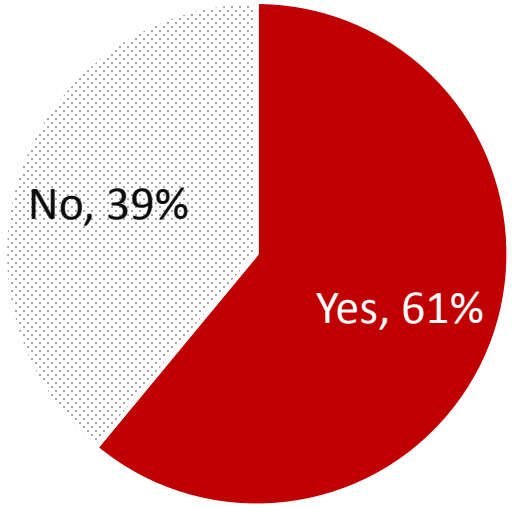
Age	Male	Female
1-3	34	29
4-6	15	11
7-9	6	14
10-12	10	8
13-15	35	9
16-18	121	21

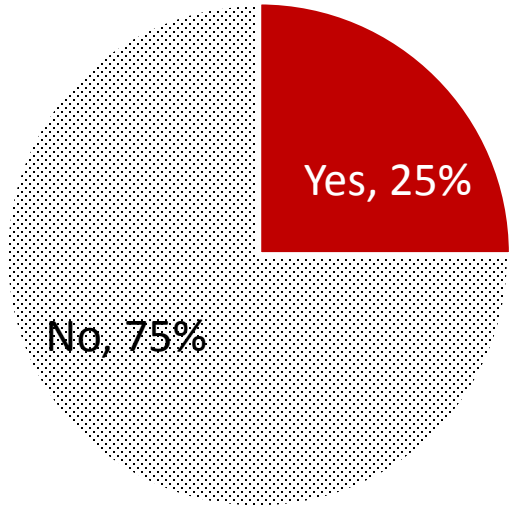
Age	Leading Weapon Type
1-3	Sharp Instrument
4-6	Firearm
7-9	Sharp Instrument and Firearm (tie)
10-12	Blunt Instrument
13-15	Firearm
16-18	Firearm

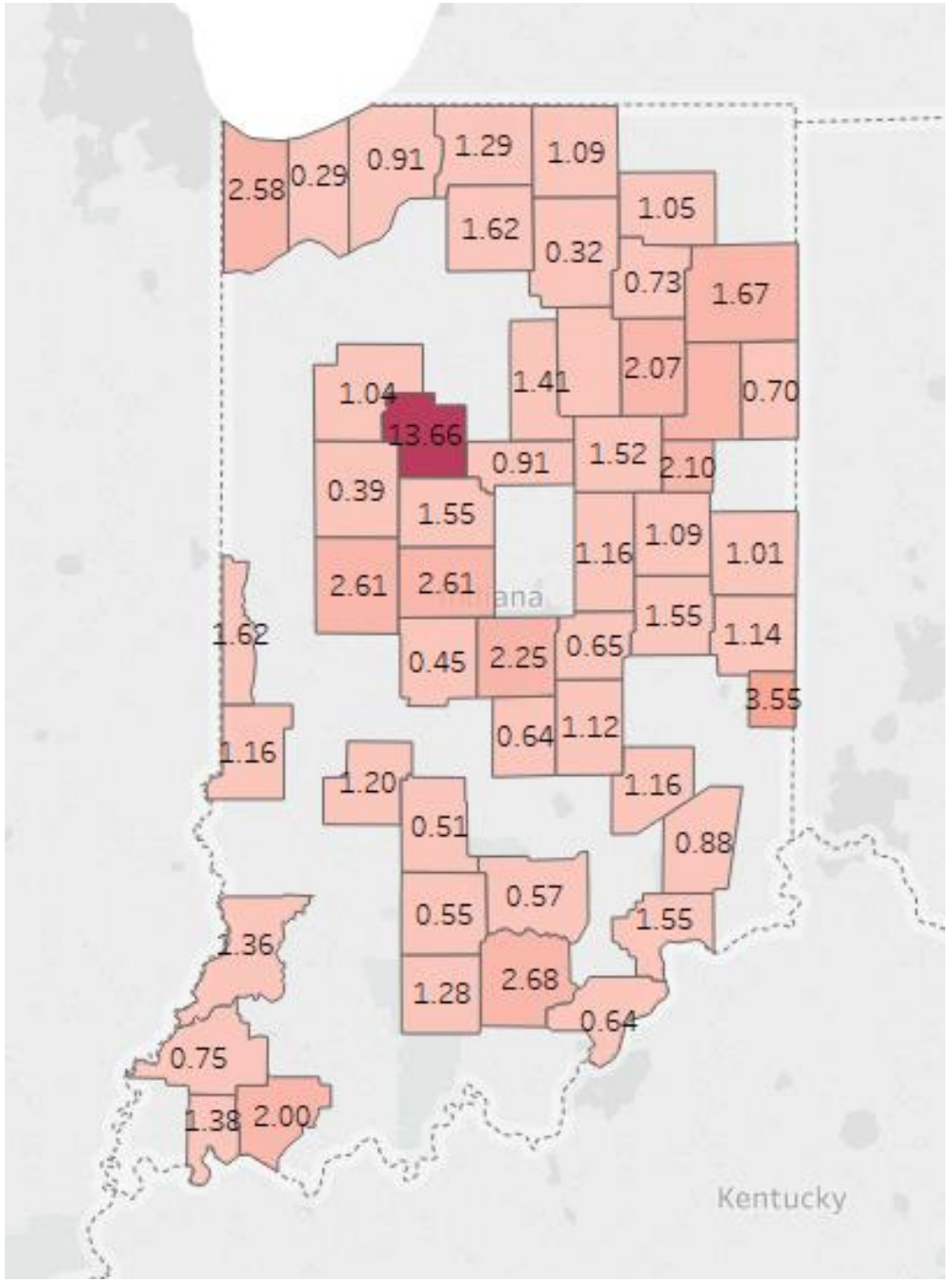


Perpetrator Charged?



Perpetrator Convicted?





SUICIDE

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Email questions to: **indianatrauma@isdh.in.gov**

SUICIDE METHODS AMOUNG YOUTH MALES

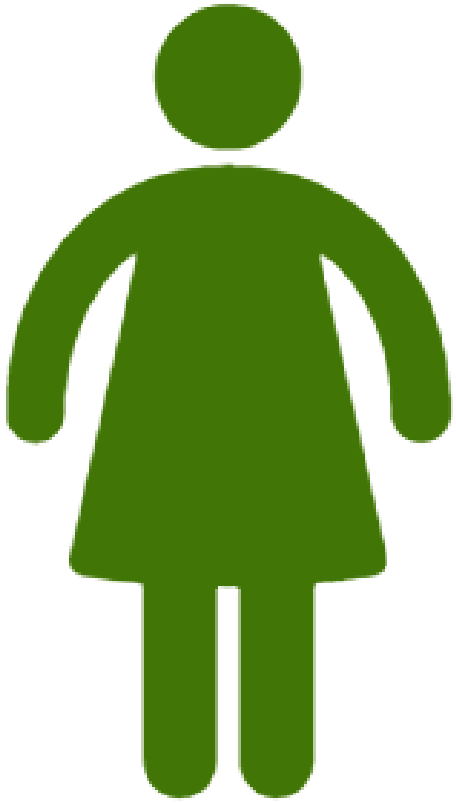
51% Firearm

19% Hanging, Strangulation, Suffocation

7% Poisoning

3% Sharp Instrument

SUICIDE METHODS AMOUNG YOUTH FEMALES



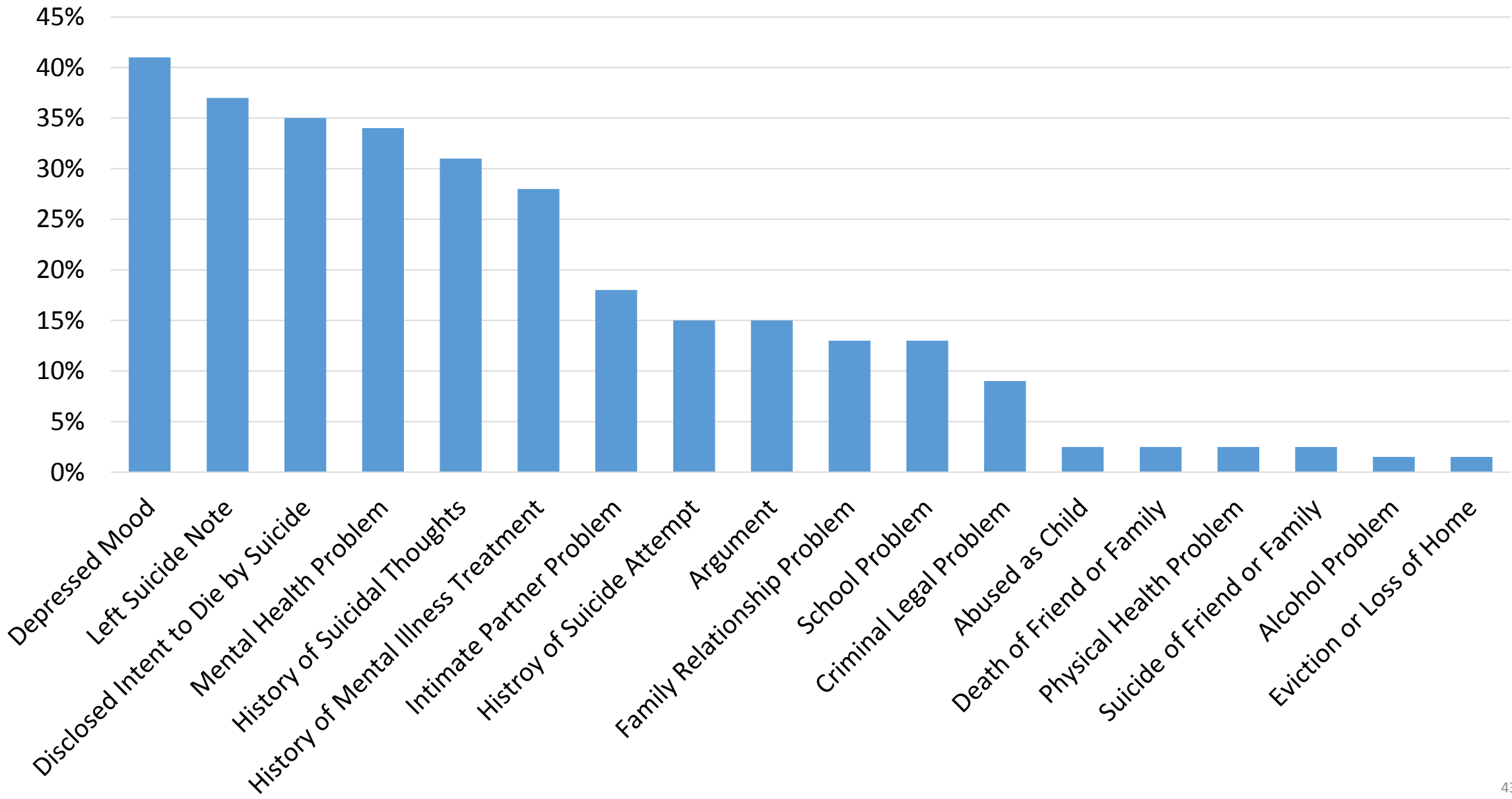
22% Firearm

20% Hanging, Strangulation, Suffocation

14% Poisoning

8% Sharp Instrument

FACTORS LEADING TO CAUSE OF DEATH BY SUICIDE



OVERDOSE

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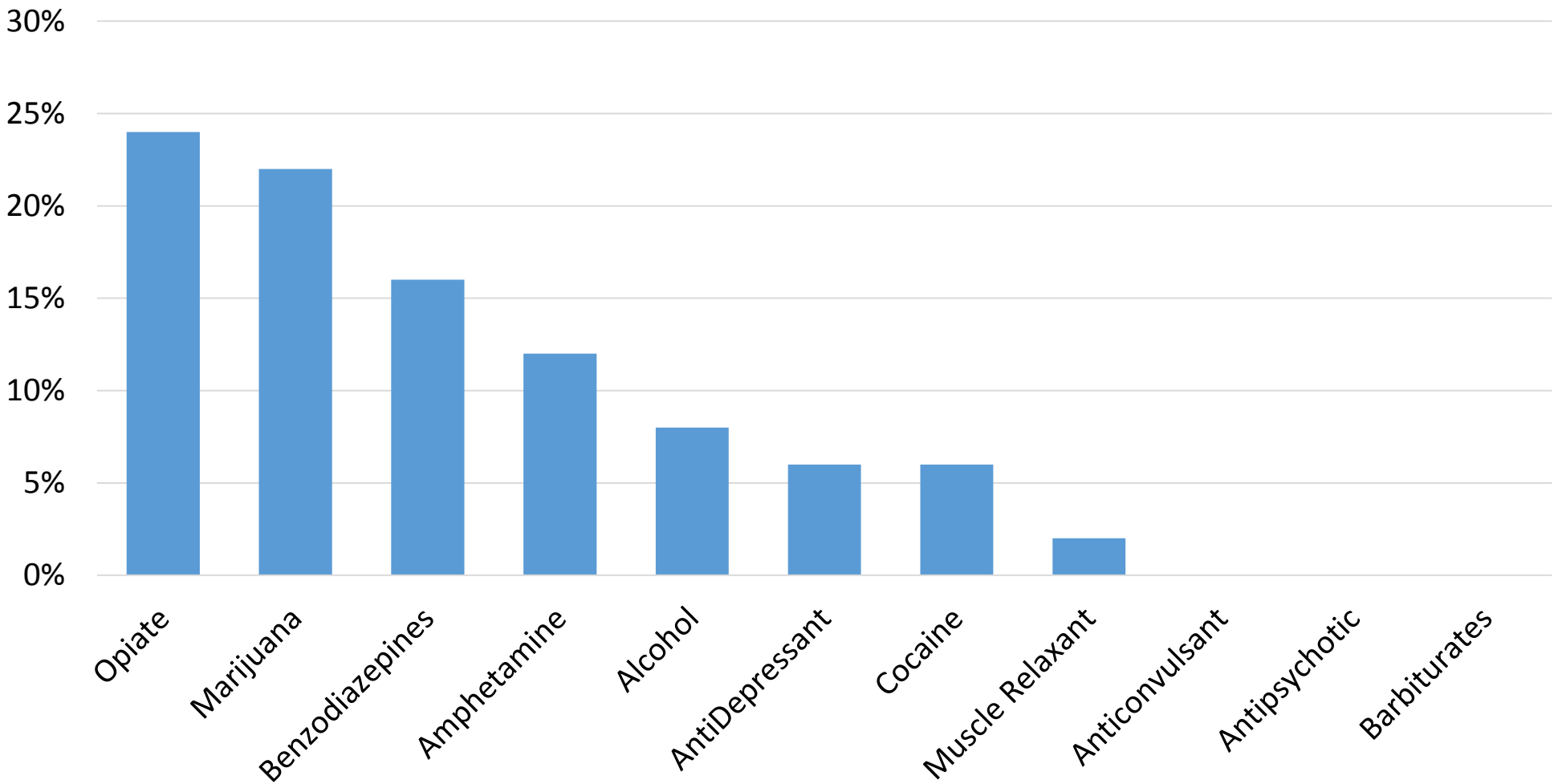
Email questions to: **indianatrauma@isdh.in.gov**

TOXICOLOGY RESULTS



Contact Information

Morgan Sprecher, *INVDRS Epidemiologist*
Trauma and Injury Prevention Division
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msprecher@isdh.in.gov

Email questions to: **Indianatrauma@isd.in.gov**

Indiana State Department of Health

Trauma Center Injury Prevention: Violence Prevention

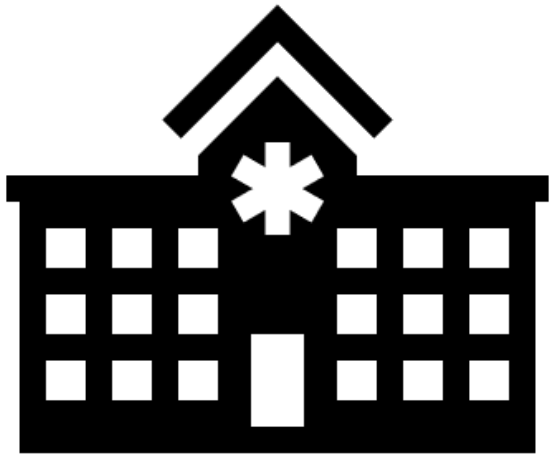
Michaela Graham, MPH, CHES

Methodist Hospital

Presentation Overview

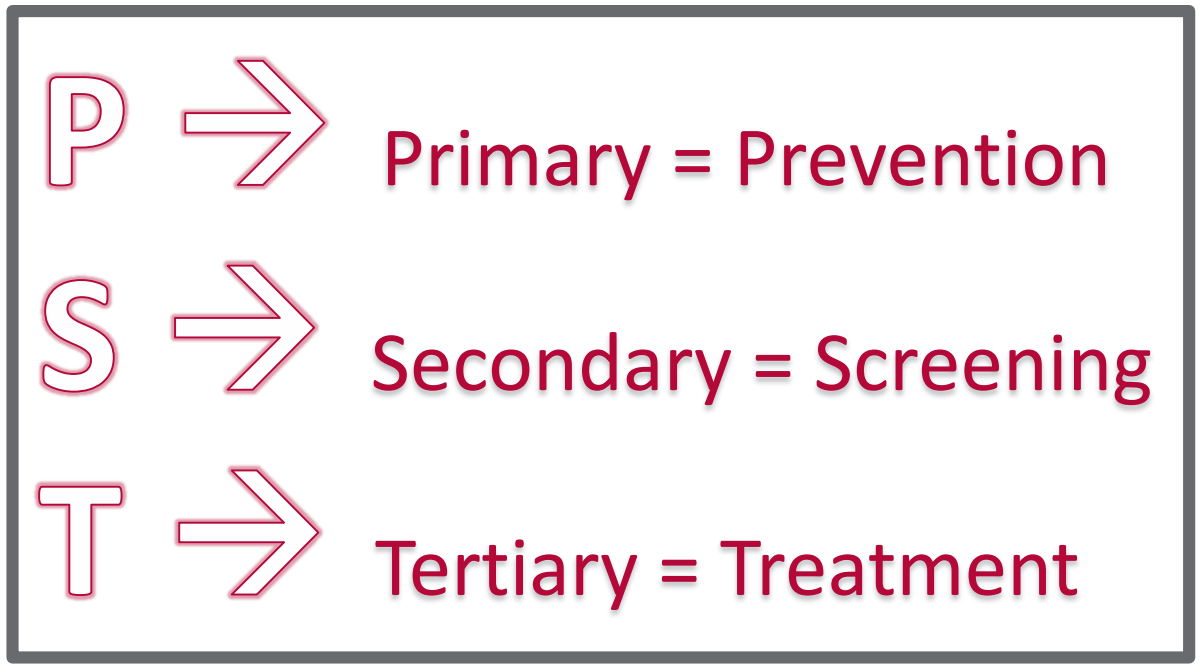
- Why violence prevention?
- How to Pick a Program
- Public Health Approach
- How's it going?

Our Program Drivers



- American College of Surgeons
  - Trauma Center Verification Requirements
    - Top mechanisms of Injury
    - Evidence based risks
- Epidemiological Data
  - From registry
  - Geographic orientation
  - Root cause
- Sentinel Events
  - Engaging topics

Prevention Continuum



Primary

- Intervening before disease or injury occurs
- Altering risky behaviors, policy, systemic changes
- Coalition approach, knowledge building

Secondary

- Screening before signs and symptoms set in
- Early Intervention
- SBIRT, Violence Intervention, justice system

Tertiary

- Managing disease or injury
- Treatment, screening for complications
- Stop the Bleed

Public Health Approach

The Problem

- A health problem
- Issue that is of interest

Risk and Protective Factors

- Eliminate or decrease risk factors
- Increase or promote protective factors
- Not always obvious or directly health related

Prevention Strategies

- Don't reinvent the wheel
- Promising or proven
- Data, Data, Data!

Adoption

- Practitioners
- Recipients

Violence Prevention

The Issue

- Violence Prevention

Risk or Protective Factors

- Protective – employment, health, social connection
- Risk – Substance use, poverty, “broken windows”

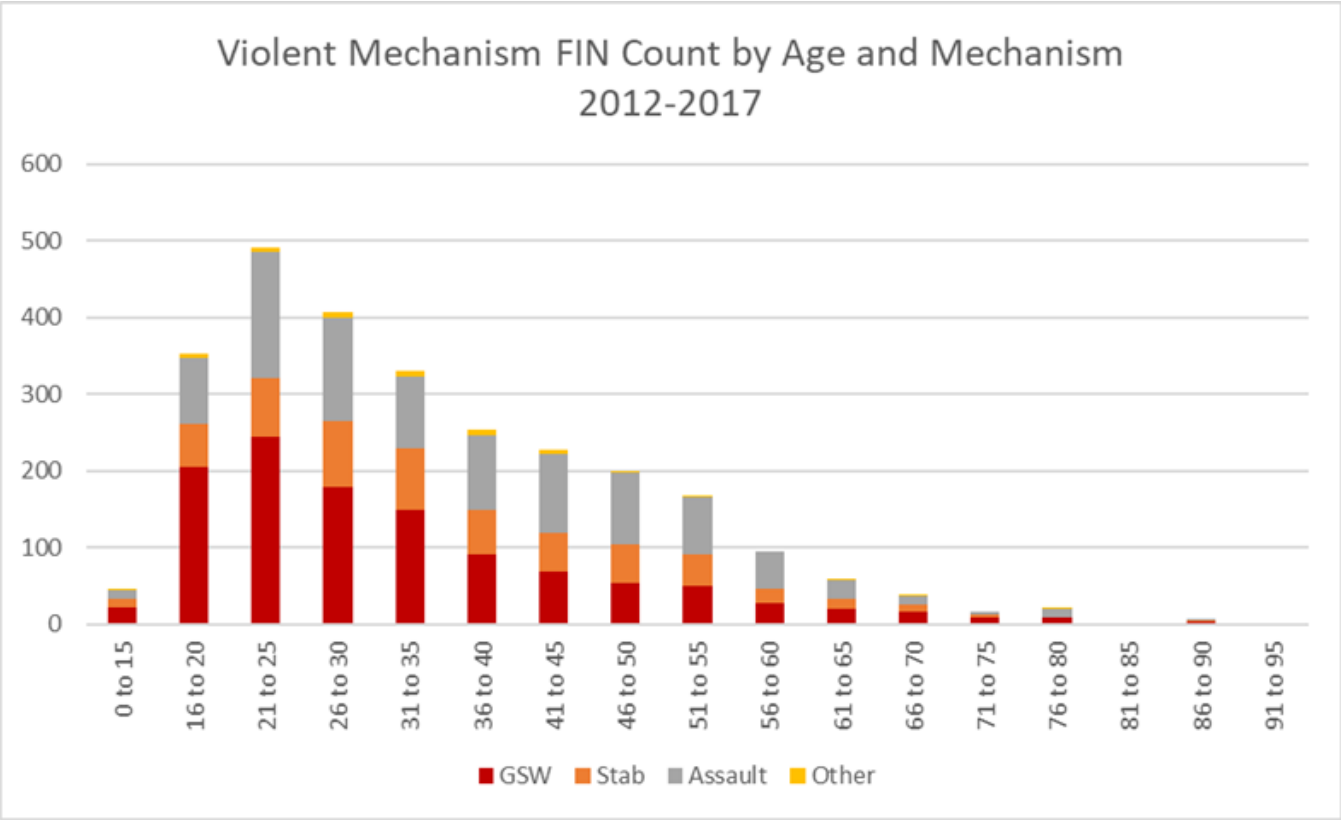
Prevention Strategies

- Literature review
- Promising or evidence based
- Scope it

Adoption

- Health Promotion and Health Education principles
- Replicable
- Know your audience

Identify the problem



You need to care

- Scope the problem
- Sources
  - Sentinel case(s)
  - Registry data
    - 3rd mechanism
  - Community or regional data
- Collect data relevant to you and your stakeholders
  - Define the population
  - Identify stakeholders
  - Revisit scoping

How we found Project LIFE

- Community Partners
  - Riley Hospital at IU Health
  - Marion County Prosecutors Office, Marion County Public Health Department, Eskenazi Health, and others!
- Already labeled “Promising” by DOJ
- Checks the Epidemiologic boxes

Project LIFE

Program Reevaluation

- August 2017
  - New players
  - Tight-rope of execution
- September – December 2017
  - OVERHAUL
  - Mini-needs assessment
  - Determine ideal state
    - Project LIFE heavy & light
  - Define current state goals and plan
- January 2018
  - New structured curriculum
  - Key stakeholder steering group

Let's do this

- Identify
  - Define: Juveniles found true of gun related offenses required by judge to attend as part of probation
- Plan
  - Goals
  - Metrics
  - Curriculum Overhaul
  - Facilitator to improve logistical nightmare
- Execute
  - The BINDER
- Review
  - Quarterly meetings
  - Grant structure

What we did:

Program changes

Set goals with metrics

- Recidivism, perception survey

Made facilitator role

Standard content

Key stakeholders

- Data: IYAS, ACE scores, recidivism, surveys
- Participants
- Time/Skills/Content

Goals:

- Prevent Recidivation to Improve Community
- Prevent Injury or Death Related to Violence
- Present Community Resources to Promote Safety and Resilience

Day 1

- Medical Legal Consequences
- Juvenile charges as Adults display
- Adult Judge
- IMPD
- Common Myths around Justice
- Educating Kids About Gun Violence (EKG)
  - Prosecutor & Eskenazi
- Stop the Bleed

Day 2

- Our Dynamic Day – needs based content
- ~~Costs of Healthcare~~ & Statistics
  - Has become Financial Literacy
- Healthy Meal from Patachou Foundation
- PTSD & Trauma Response
- Goal Setting

Day 3: Guardians Attend

FRONT ROW VIDEO

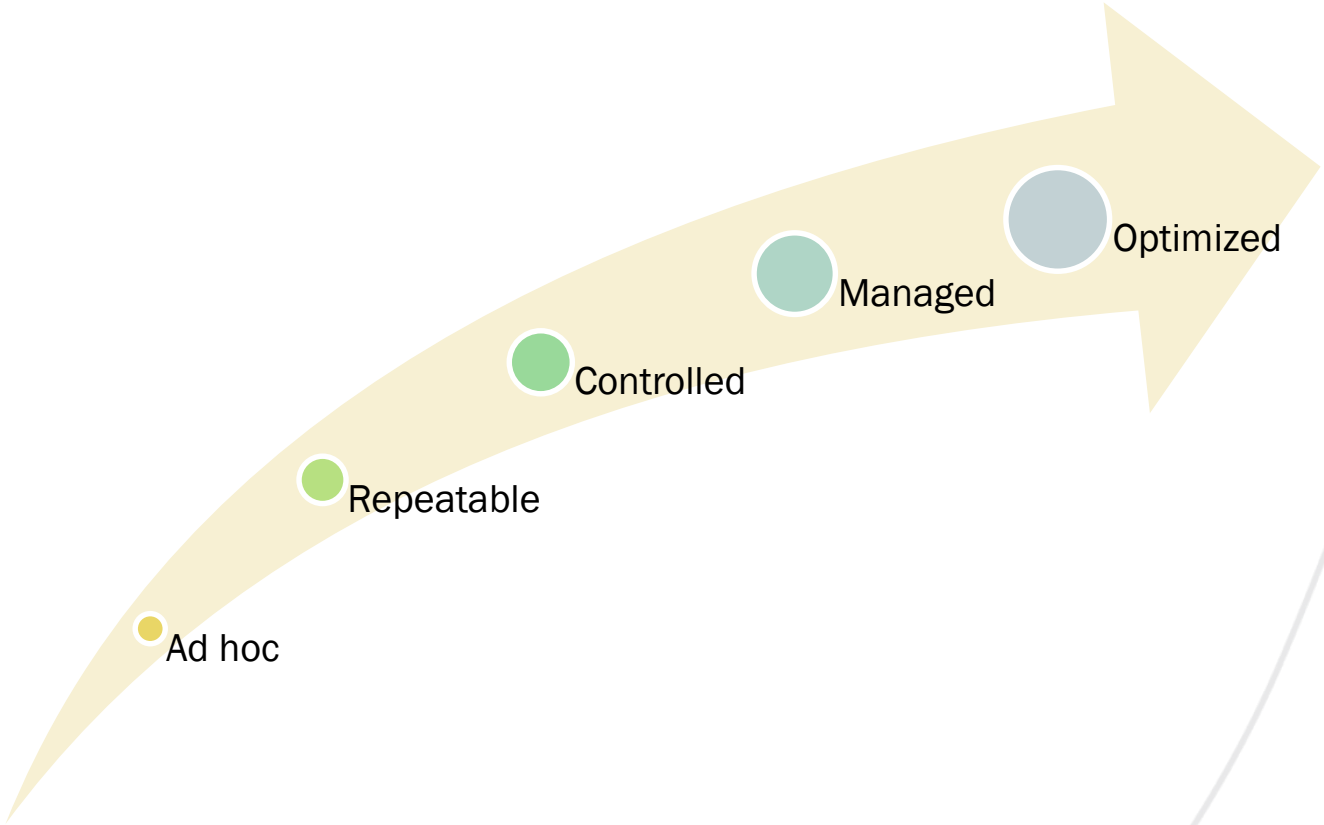
CONFLICT RESOLUTION

HEALTHY MEAL FROM PATACHOU FOUNDATION

PARENTS: CONTENT HAS EVOLVED FROM SUPPORT GROUP TO AMENDED MYTHS & CONTENT REVIEW

YOUTH: SEEKING SAFETY

Mature the Program



Continuous Improvement

- Wheel becomes easier
  - Quarterly meetings with stakeholders
  - Hard stop end of year meeting
- Data
  - Not all data reviewed all the time
  - Unexpected results
    - i.e. Not shifting perceptions because they already perceive danger
  - Qualitative data gives real-time feedback and highlights inconsistencies
- Change is OK
  - Want to control for consistency
  - Improvement is necessary
  - Ownership helps

Questions/Comments/Concerns

Michaela Graham

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Trauma Services
mgraham4@iuhealth.org
317.962.8150

Automotive Safety Program

INDIANA UNIVERSITY SCHOOL OF MEDICINE-DEPARTMENT OF PEDIATRICS

10 Leading Causes of Death by Age Group, United States – 2017

	Age Groups										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
1	Congenital Anomalies 4,580	Unintentional Injury 1,267	Unintentional Injury 718	Unintentional Injury 860	Unintentional Injury 13,441	Unintentional Injury 25,669	Unintentional Injury 22,828	Malignant Neoplasms 39,266	Malignant Neoplasms 114,810	Heart Disease 519,052	Heart Disease 647,457
2	Short Gestation 3,749	Congenital Anomalies 424	Malignant Neoplasms 418	Suicide 517	Suicide 6,252	Suicide 7,948	Malignant Neoplasms 10,900	Heart Disease 32,658	Heart Disease 80,102	Malignant Neoplasms 427,896	Malignant Neoplasms 599,108
3	Maternal Pregnancy Comp. 1,432	Malignant Neoplasms 325	Congenital Anomalies 188	Malignant Neoplasms 437	Homicide 4,905	Homicide 5,488	Heart Disease 10,401	Unintentional Injury 24,461	Unintentional Injury 23,408	Chronic Low. Respiratory Disease 136,139	Unintentional Injury 169,936
4	SIDS 1,363	Homicide 303	Homicide 154	Congenital Anomalies 191	Malignant Neoplasms 1,374	Heart Disease 3,681	Suicide 7,335	Suicide 8,561	Chronic Low. Respiratory Disease 18,667	Cerebro-vascular 125,653	Chronic Low. Respiratory Disease 160,201
5	Unintentional Injury 1,317	Heart Disease 127	Heart Disease 75	Homicide 178	Heart Disease 913	Malignant Neoplasms 3,616	Homicide 3,351	Liver Disease 8,312	Diabetes Mellitus 14,904	Alzheimer's Disease 120,107	Cerebro-vascular 146,383
6	Placenta Cord. Membranes 843	Influenza & Pneumonia 104	Influenza & Pneumonia 62	Heart Disease 104	Congenital Anomalies 355	Liver Disease 918	Liver Disease 3,000	Diabetes Mellitus 6,409	Liver Disease 13,737	Diabetes Mellitus 59,020	Alzheimer's Disease 121,404
7	Bacterial Sepsis 592	Cerebro-vascular 66	Chronic Low. Respiratory Disease 59	Chronic Low Respiratory Disease 75	Diabetes Mellitus 248	Diabetes Mellitus 823	Diabetes Mellitus 2,118	Cerebro-vascular 5,198	Cerebro-vascular 12,708	Unintentional Injury 55,951	Diabetes Mellitus 83,564
8	Circulatory System Disease 449	Septicemia 48	Cerebro-vascular 41	Cerebro-vascular 56	Influenza & Pneumonia 190	Cerebro-vascular 593	Cerebro-vascular 1,811	Chronic Low. Respiratory Disease 3,975	Suicide 7,982	Influenza & Pneumonia 46,862	Influenza & Pneumonia 55,672
9	Respiratory Distress 440	Benign Neoplasms 44	Septicemia 33	Influenza & Pneumonia 51	Chronic Low. Respiratory Disease 188	HIV 513	Septicemia 854	Septicemia 2,441	Septicemia 5,838	Nephritis 41,670	Nephritis 50,633
10	Neonatal Hemorrhage 379	Perinatal Period 42	Benign Neoplasms 31	Benign Neoplasms 31	Complicated Pregnancy 168	Complicated Pregnancy 512	HIV 831	Homicide 2,275	Nephritis 5,671	Parkinson's Disease 31,177	Suicide 47,173

Data Source: National Vital Statistics System, National Center for Health Statistics, CDC.
Produced by: National Center for Injury Prevention and Control, CDC using WISQARS™.

Centers for Disease Control and Prevention
National Center for Injury Prevention and Control

10 Leading Causes of Injury Deaths by Age Group Highlighting Unintentional Injury Deaths, United States – 2017

	Age Groups										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
1	Unintentional Suffocation 1,106	Unintentional Drowning 424	Unintentional MV Traffic 327	Unintentional MV Traffic 428	Unintentional MV Traffic 6,697	Unintentional Poisoning 16,478	Unintentional Poisoning 15,032	Unintentional Poisoning 14,707	Unintentional Poisoning 10,581	Unintentional Fall 31,190	Unintentional Poisoning 64,795
2	Homicide Unspecified 139	Unintentional MV Traffic 362	Unintentional Drowning 125	Suicide Suffocation 280	Unintentional Poisoning 5,030	Unintentional MV Traffic 6,871	Unintentional MV Traffic 5,162	Unintentional MV Traffic 5,471	Unintentional MV Traffic 5,584	Unintentional MV Traffic 7,667	Unintentional MV Traffic 38,659
3	Unintentional MV Traffic 90	Homicide Unspecified 129	Unintentional Fire/Burn 94	Suicide Firearm 185	Homicide Firearm 4,391	Homicide Firearm 4,594	Suicide Firearm 3,098	Suicide Firearm 3,937	Suicide Firearm 4,219	Suicide Firearm 5,996	Unintentional Fall 36,338
4	Homicide Other Spec., Classifiable 76	Unintentional Suffocation 110	Homicide Firearm 78	Homicide Firearm 126	Suicide Firearm 2,959	Suicide Firearm 3,458	Suicide Suffocation 2,562	Suicide Suffocation 2,294	Unintentional Fall 2,760	Unintentional Unspecified 5,125	Suicide Firearm 23,854
5	Undetermined Suffocation 56	Unintentional Fire/Burn 95	Unintentional Suffocation 36	Unintentional Drowning 110	Suicide Suffocation 2,321	Suicide Suffocation 3,063	Homicide Firearm 2,561	Suicide Poisoning 1,604	Suicide Suffocation 1,631	Unintentional Suffocation 3,920	Homicide Firearm 14,542
6	Unintentional Drowning 43	Unintentional Pedestrian, Other 88	Unintentional Other Land Transport 25	Unintentional Other Land Transport 66	Unintentional Drowning 469	Undetermined Poisoning 887	Suicide Poisoning 1,089	Homicide Firearm 1,447	Suicide Poisoning 1,459	Adverse Effects 2,902	Suicide Suffocation 13,075
7	Undetermined Unspecified 37	Homicide Other Spec., Classifiable 49	Homicide Suffocation 15	Unintentional Fire/Burn 56	Suicide Poisoning 463	Suicide Poisoning 788	Undetermined Poisoning 792	Unintentional Fall 1,248	Homicide Firearm 824	Unintentional Poisoning 2,871	Unintentional Suffocation 6,946
8	Homicide Suffocation 26	Homicide Firearm 44	Homicide Cut/pierce 14	Suicide Poisoning 39	Undetermined Poisoning 280	Unintentional Drowning 479	Unintentional Fall 522	Undetermined Poisoning 887	Unintentional Suffocation 811	Unintentional Fire/Burn 1,278	Unintentional Unspecified 6,606
9	Unintentional Natural/ Environment 18	Unintentional Natural/ Environment 34	Unintentional Firearm 14	Unintentional Poisoning 39	Homicide Cut/pierce 266	Homicide Cut/Pierce 404	Unintentional Drowning 397	Unintentional Drowning 451	Adverse Effects 773	Suicide Poisoning 1,111	Suicide Poisoning 6,554
10	Three Tied 16	Unintentional Firearm 31	Two Tied 13	Unintentional Suffocation 35	Unintentional Fall 212	Unintentional Fall 351	Homicide Cut/Pierce 337	Unintentional Suffocation 441	Undetermined Poisoning 732	Suicide Suffocation 919	Adverse Effects 4,459

Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System.
Produced by: National Center for Injury Prevention and Control, CDC using WISQARS™.

Centers for Disease Control and Prevention
National Center for Injury Prevention and Control

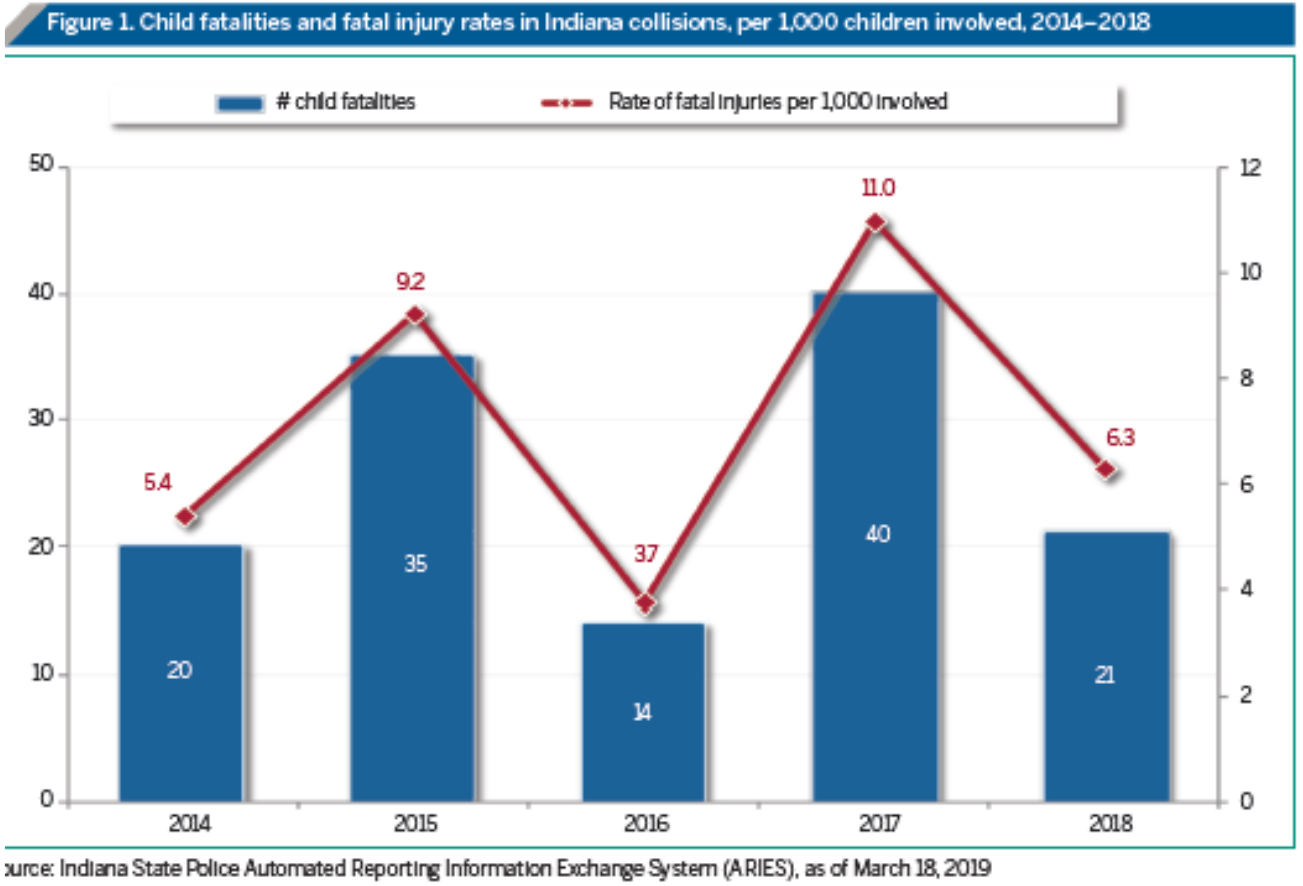
Motor Vehicle Collisions

In the United States, young lives are cut short or severely altered by motor vehicle crashes.

In 2016, on average three children were killed each day from injuries sustained in motor vehicle collisions, an increase of eight (8) percent from the previous year.

Indiana Traffic Safety Facts Children 2018

- 21 fatalities in 2018
  - 8 pedestrian



*Indiana Traffic Safety Facts-Children 2018

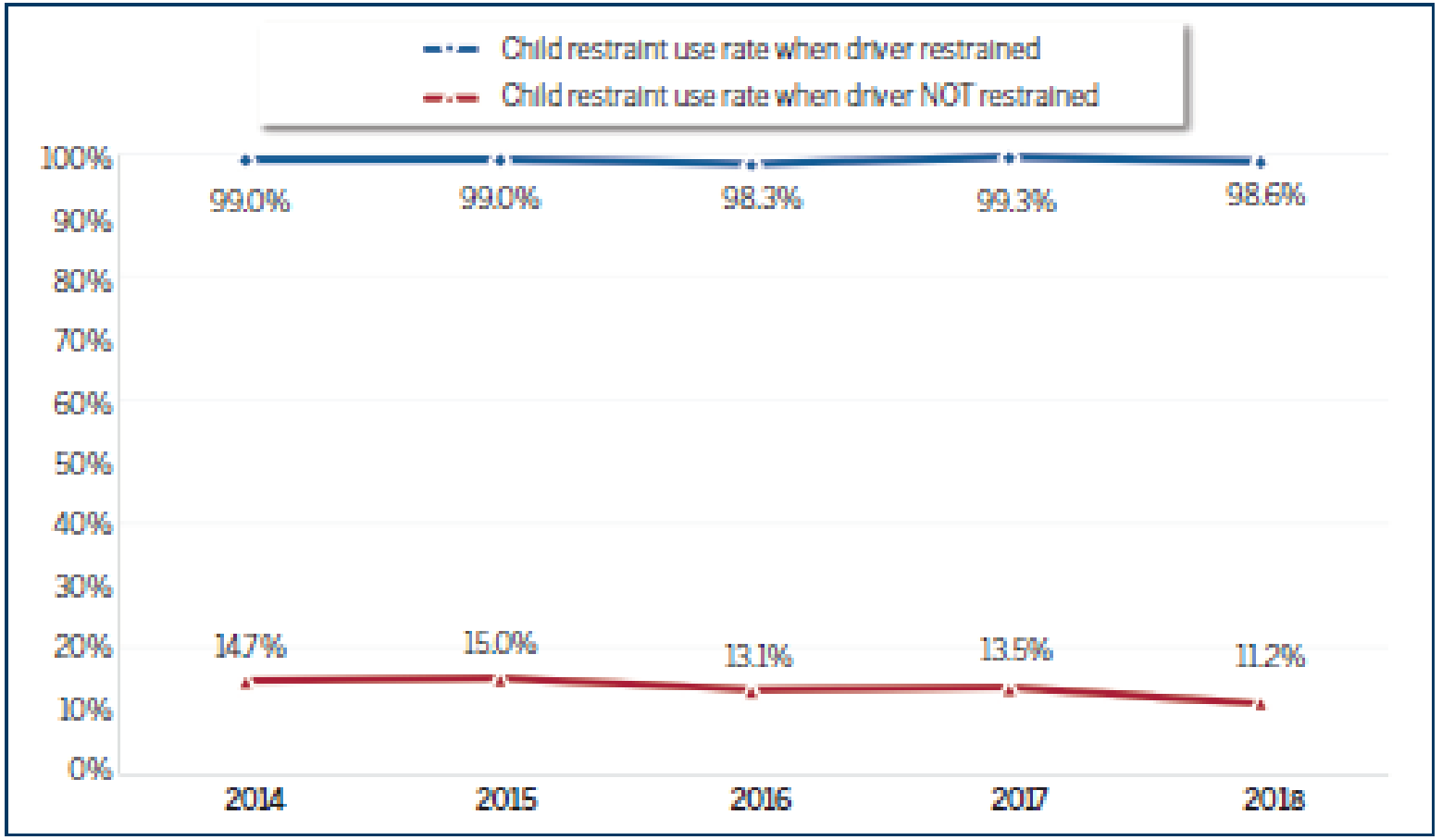
Table 1. Children involved in Indiana traffic collisions, by injury status and age group, 2014–2018

Injury status by age group	2014		2015		2016		2017		2018		Annual rate of change	
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total	2017–18	2014–18
Fatal	**20**	**100.0%**	**35**	**100.0%**	**14**	**100.0%**	**40**	**100.0%**	**21**	**100.0%**	**-47.5%**	**1.2%**
<1	3	5.7%	2	15.0%	0	5.7%	6	6.7%	0	0.0%	-100.0%	-100.0%
1–3	1	22.9%	6	5.0%	7	17.1%	5	46.7%	2	9.5%	-60.0%	18.9%
4–7	4	22.9%	7	20.0%	1	20.0%	13	6.7%	7	33.3%	-46.2%	15.0%
8–12	7	31.4%	15	35.0%	4	42.9%	8	26.7%	6	28.6%	-25.0%	-3.8%
13–14	5	17.1%	5	25.0%	2	14.3%	8	13.3%	6	28.6%	-25.0%	4.7%
Incapacitating	**305**	**100.0%**	**1,204**	**100.0%**	**1,350**	**100.0%**	**1,236**	**100.0%**	**1,290**	**100.0%**	**4.4%**	**43.4%**
<1	17	3.8%	49	4.8%	59	5.0%	71	4.3%	54	4.2%	-23.9%	33.5%
1–3	35	12.9%	202	13.7%	201	14.7%	210	14.4%	203	15.7%	-3.3%	55.2%
4–7	68	26.0%	284	25.2%	307	24.7%	291	24.3%	275	21.3%	-5.5%	41.8%
8–12	105	36.2%	439	35.1%	514	37.0%	437	39.0%	520	40.3%	19.0%	49.2%
13–14	80	21.1%	230	21.1%	269	18.6%	227	18.0%	238	18.4%	4.8%	31.3%
Non-incapacitating	**3,029**	**100.0%**	**2,245**	**100.0%**	**2,153**	**100.0%**	**2,132**	**100.0%**	**1,822**	**100.0%**	**-14.5%**	**-11.9%**
<1	142	4.7%	122	5.4%	94	4.4%	114	5.3%	87	4.8%	-23.7%	-11.5%
1–3	423	14.0%	304	13.5%	302	14.0%	254	11.9%	276	15.1%	8.7%	-10.1%
4–7	774	25.6%	568	25.3%	543	25.2%	551	25.8%	465	25.5%	-15.6%	-12.0%
8–12	1,066	35.2%	838	37.3%	851	39.5%	832	39.0%	685	37.6%	-17.7%	-10.5%
13–14	624	20.6%	413	18.4%	363	16.9%	381	17.9%	309	17.0%	-18.9%	-16.1%
Not injured	**363**	**100.0%**	**308**	**100.0%**	**232**	**100.0%**	**232**	**100.0%**	**218**	**100.0%**	**-6.0%**	**-12.0%**
<1	5	3.5%	5	1.4%	13	1.6%	15	5.6%	6	2.8%	-60.0%	4.7%
1–3	7	2.2%	9	1.9%	20	2.9%	14	8.7%	14	6.4%	0.0%	18.9%
4–7	18	5.1%	31	5.0%	26	10.1%	25	11.3%	32	14.7%	28.0%	15.5%
8–12	58	34.9%	94	16.0%	78	30.5%	78	33.8%	74	33.9%	-5.1%	6.3%
13–14	275	54.3%	169	75.8%	95	54.9%	100	40.7%	92	42.2%	-8.0%	-23.9%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Includes individuals identified as drivers, injured occupants, pedestrians, and pedalcyclists and in the 8 to 14 year old age group, animal-drawn vehicle operators.
2) The < 1, 1–3, and 4–7-year-old age groups exclude data records coded as driver or animal-drawn vehicle operator, due to unavailable or invalid age reporting. Unknown age or birthdate often result in age assignment in the ARIES database that is not an accurate value of driver age.
3) Non-incapacitating injuries include those injuries reported as non-incapacitating, possible, not reported, unknown, and refused (treatment) injury status codes.
4) Not injured definition included at end of report.
5) A previous ARIES upgrade added a clarification to reporting officers on the definition of incapacitating injuries criteria to include "transported from scene for treatment"; therefore, 2014 to 2015 increases in incapacitating injuries reflect a definitional change.

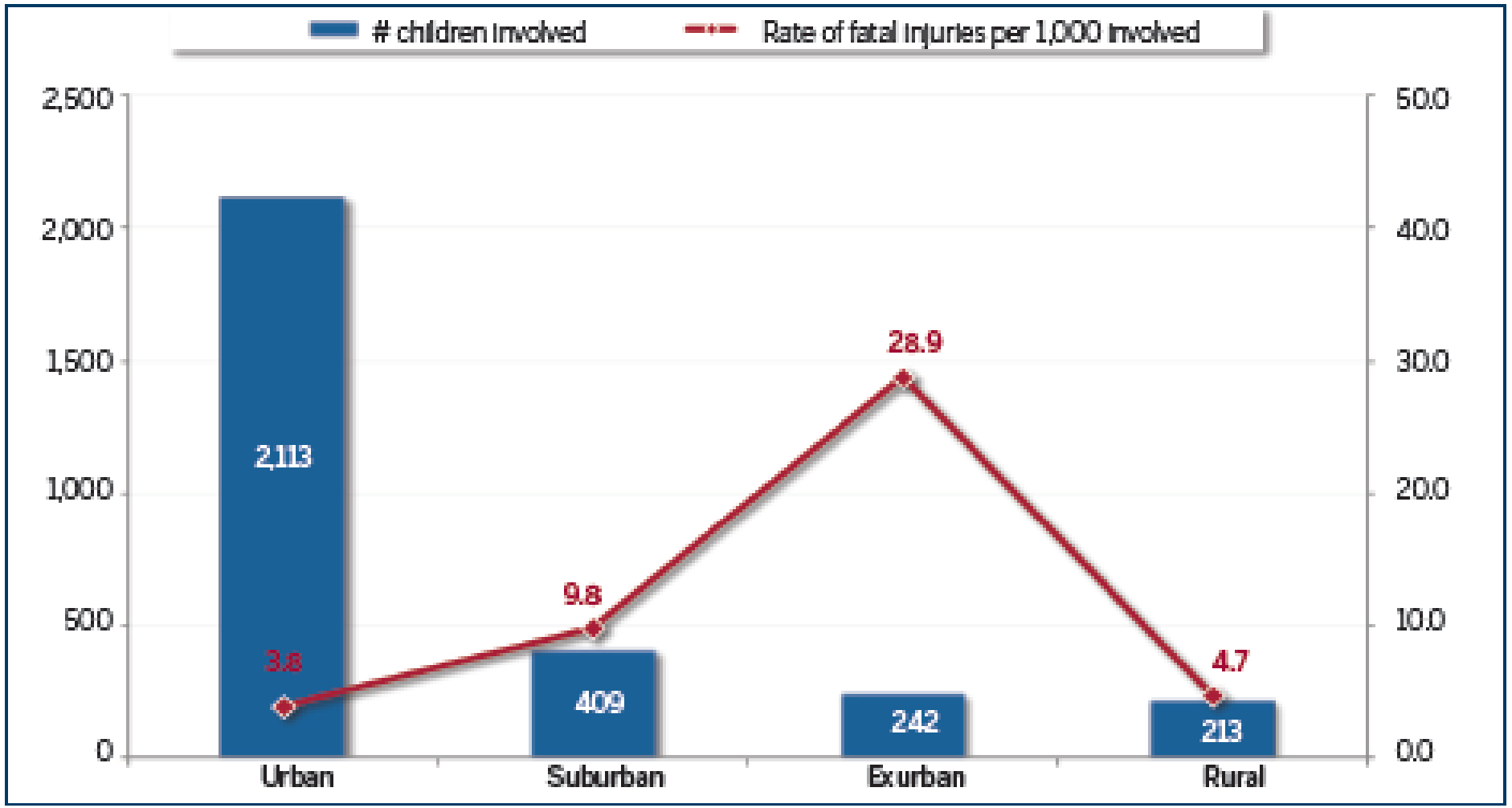
Figure 5. Restraint use among child occupants involved in Indiana collisions, by driver restraint use, 2014–2018



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

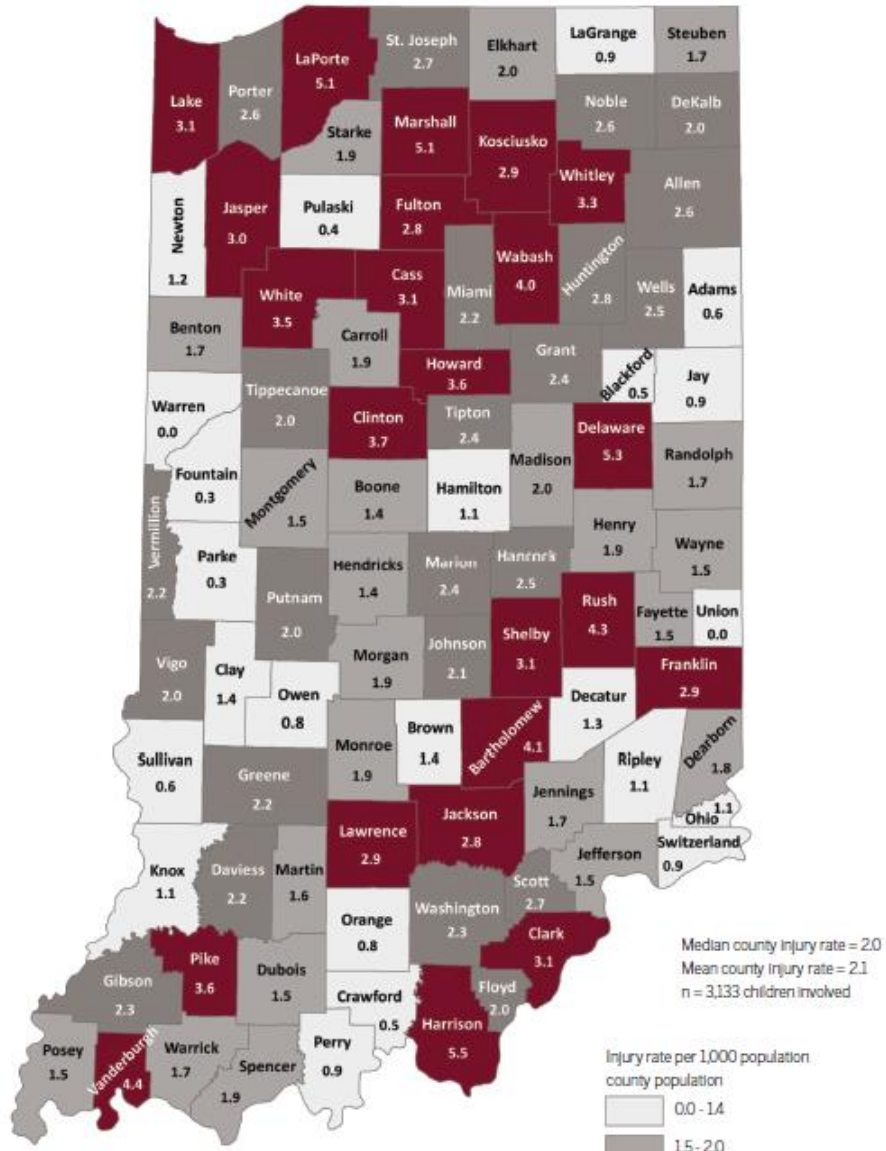
Notes:
1) Restraint usage rates are limited to those occuring in passenger vehicles (defined as passenger cars, pickup trucks, sport utility vehicles, and vans).
2) Includes individuals identified as drivers and injured occupants.

Figure 7. Children involved in Indiana collisions by Census locale, 2018



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of April 6, 2018

Map 1. Children 0 to 14 years injured in collisions, 2018



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019; U.S. Census Bureau

Note: Injured includes fatal, incapacitating, and non-incapacitating categories.

Child Passenger Safety Statistics, cont.

- The National Highway Traffic Safety Administration (NHTSA) conducted the National Child Restraint Use Special Study in 2011
  - Observed the use of car seats and booster seats
  - Birth to 8 years old
  - In 4,167 vehicles
- Analysis of overall misuse estimated that one or more misuses existed in 46 percent of all car seats and booster seats
- Safe Kids Worldwide estimates that every 3 out of 4 car seats are not used or installed correctly

Correctly used child safety seats can reduce the risk of death by as much as 71 percent.

Program Background

- IU School of Medicine (Department of Pediatrics)
- Affiliated with Riley Hospital for Children-IU Health
- Founded by Dr. Marilyn Bull in 1981
- Funded by Indiana Criminal Justice Institute (ICJI)
- Program directs child passenger safety research, education and training in the state of Indiana

ASP Mission Statement

- The mission of the Automotive Safety Program is to reduce injuries and fatalities resulting from motor vehicle crashes in Indiana for children birth to 14 years old.

Automotive Safety Program

1.800.KID.N.CAR

Dr. Marilyn Bull, Co-Medical Director

Dr. Joseph O'Neil, Co-Medical Director

Marsha French, Program Director

Automotive Safety Program

Rosy Hyre, Project Manager, Child Passenger Safety

Erin Kuroiwa, Project Manager, Safe Kids Indiana & Latino Outreach

Charles Akerland, Administrative Assistant

Automotive Safety Program

- Provide resources to community members, service providers and families
- Referrals to a network of car seat inspection stations across Indiana
- Serve as technical advisors on child passenger safety; responsible for training throughout IN and technician certification
- Provide funds for the national certification program to become a Certified Child Passenger Safety Technician

National Certification

- Certified Child Passenger Safety Technician training
  - 4 day training
  - Cert.safekids.org
- Certified Passenger Safety Technician Instructor

Car Seat Inspection Stations

Provide assistance to families in regards to:

- Obtaining a car seat
- Educate on proper use of car seat
- Assist with installation of car seat

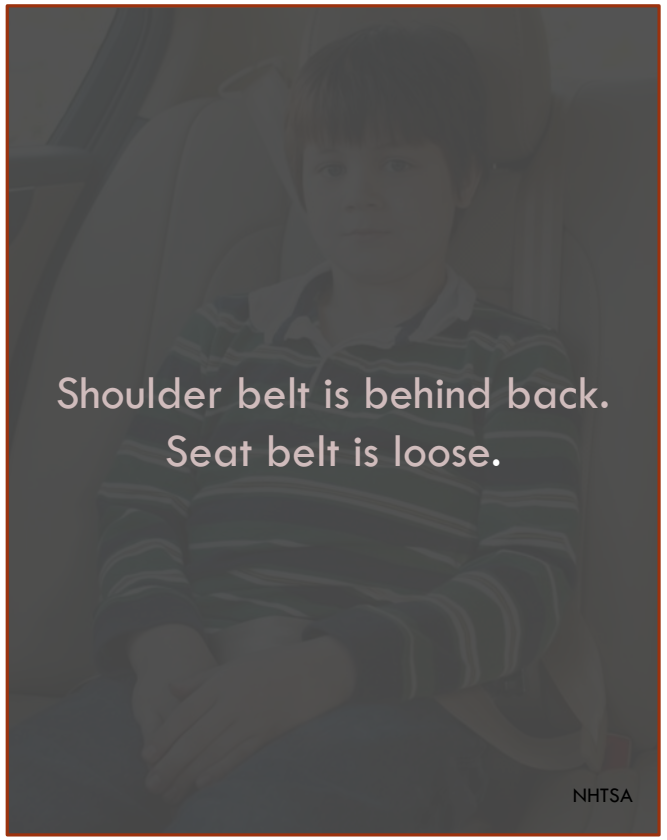
Inspections only

- Provide education on use and installation assistance by appointment only

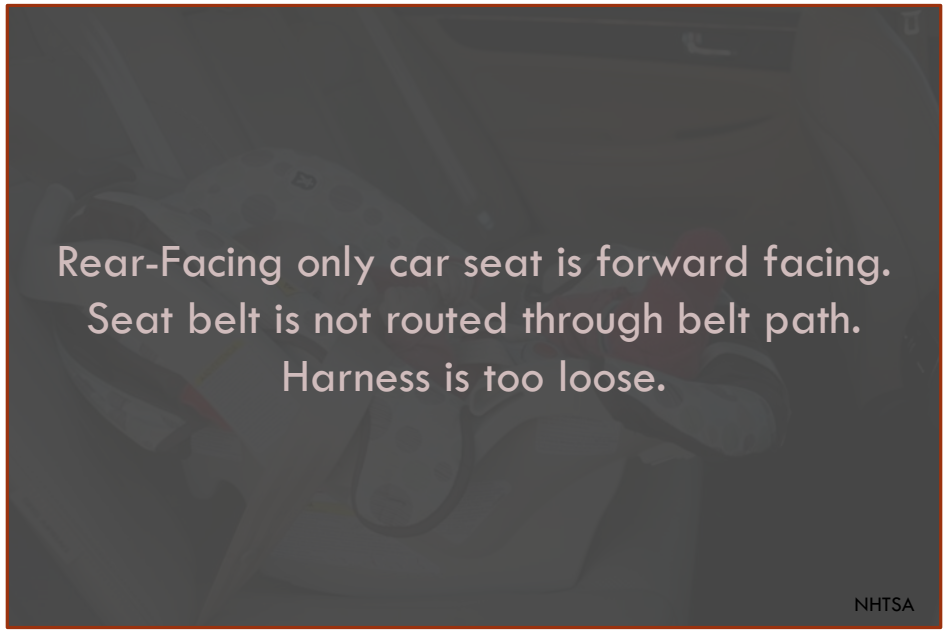
Assistance with obtaining car seat

- Donation based
- Families on some type of government assistance

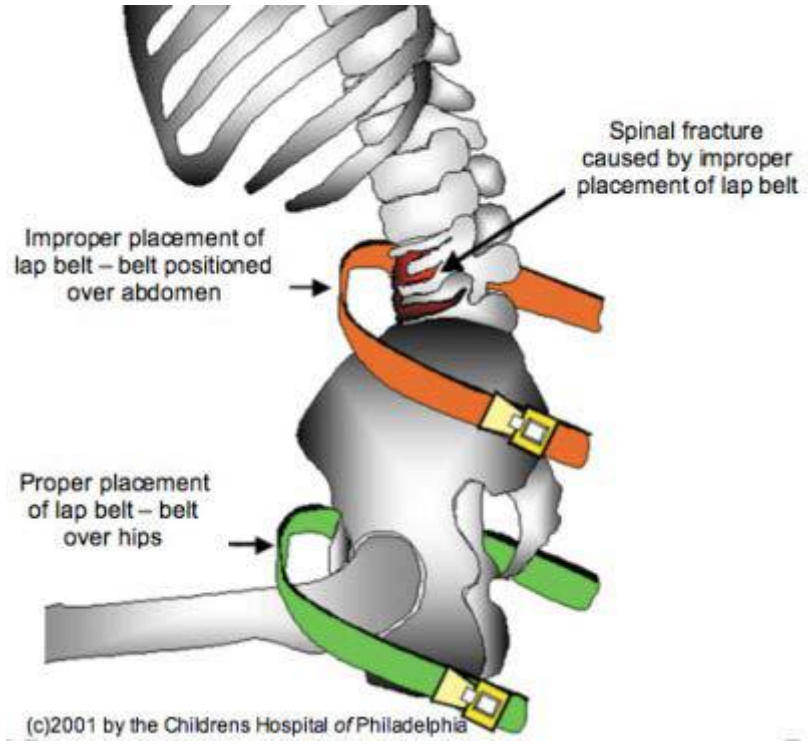
Misuse


Shoulder belt is behind back.
Seat belt is loose.
NHTSA


Child is in a booster seat
with lap belt only.


Rear-Facing only car seat is forward facing.
Seat belt is not routed through belt path.
Harness is too loose.
NHTSA

Seat Belt Syndrome



Annual Indianapolis Zoo Car Seat Clinic

Provide car seats to families in need
First come, first serve
Child, caregiver and vehicle to install car seat must be present
*Pregnant women must be in their third trimester.

2019 Indianapolis Zoo Car Seat Clinic

- 194 inspections and replaced 146 car seats!
- 84 CPSTs/CPSTIs; 50 Volunteers!
- 2020: June 9th-location…TBD!

Indiana Child Passenger Safety Conference

- 164 Child Passenger Safety Technicians
- 2020: June 9th and 10th @ IUPUI Conference Center

Indiana Child Restraint Law

- Birth until 8th birthday
  - Child must be properly restrained, according to manufacturer instructions, in a child restraint system
  - DRIVER RESPONSIBLE
- 8th birthday until 16 years old
  - Child must be properly restrained in a child restraint system or seatbelt
  - DRIVER RESPONSIBLE

Applies to all seating positions in all passenger vehicles, including pick-up trucks and SUV's

PROJECT LOVE

Programs for Children

BUCKLE UP BUG

BELT ABOUTS

A no cost program for 8 to 12 year olds to increase buckling up, riding in the back and using a booster seat.

National Center for the Safe Transportation of Children With Special Healthcare Needs

Established in 2004 by the Automotive Safety Program

Funded through ICJI and the National Safety Council

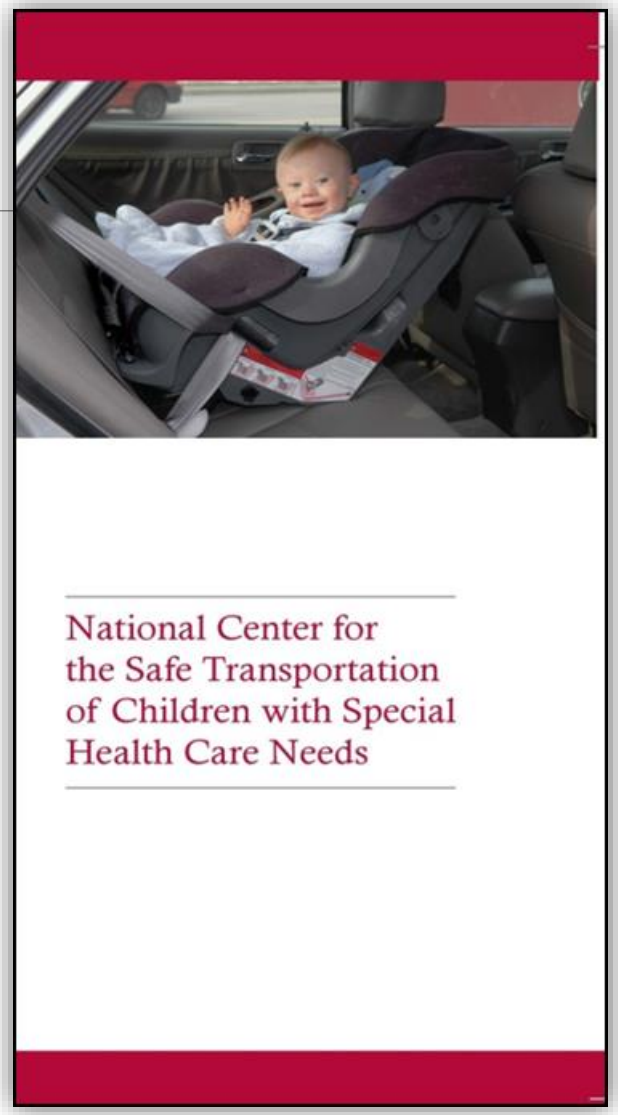
1.800.755.0912

Marsha French, Director

Judith Talty, Expert Assistant

Anthony McGovern, MOTR

Janell Yonkman, MS OTR



National Center

Provides resources:

- Toll free hot line staff by CPSTs who are experiences in resolving issues associated with transporting child with special health care needs
- Web-based resources for questions about medical conditions and possible restraints
- Special Needs list-serv for professionals
- Database of CPSTs trained in transporting children with special health care needs
- National curriculum-training; presentations, workshops and educational materials.

Safe Kids Indiana

- ASP has been lead agency since 1997
- Safe Kids Indiana is part of Safe Kids Worldwide in Washington D.C.
- Safe Kids mission is to raise awareness that preventable injuries are the leading public health threat to children
- Safe Kids Indiana has 14 local Safe Kids Coalitions across the state

SAFE KIDS INDIANA

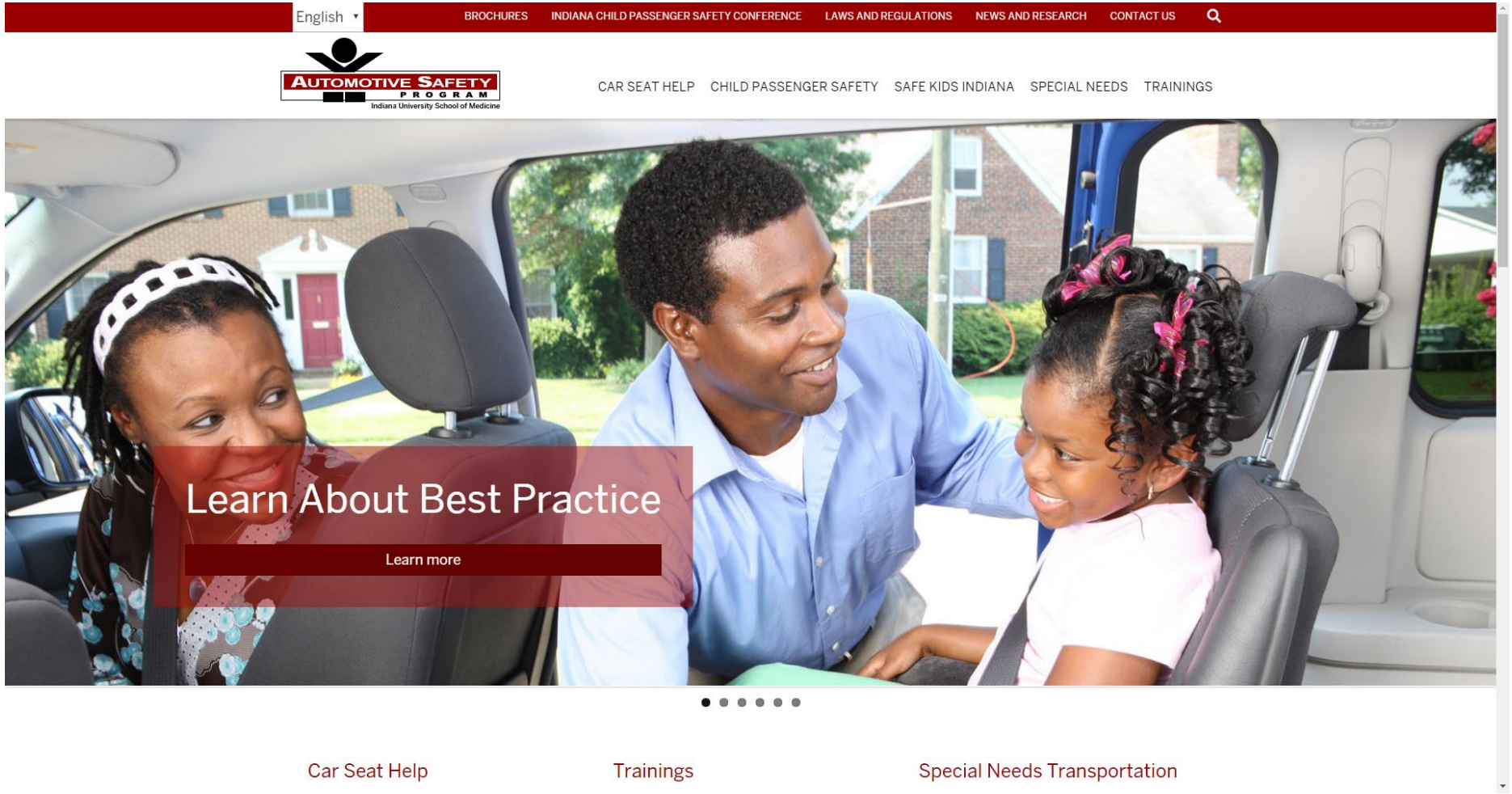
Safe Kids Indiana

Safe Kids Indiana focuses on preventing injuries in and around vehicles

- Pedestrian Safety
  - National Walk to School Day
- Bicycle Safety
  - National Bike to School Day
- Safety in and around vehicles
  - Heatstroke prevention
  - Entrapment
  - Front over/Back over

SAFE KIDS INDIANA

Preventinjury.pediatrics.iu.edu



Brochures

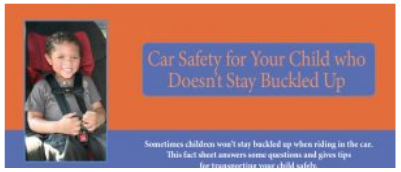
Brochures

The Automotive Safety Program offers a number of brochures and materials free of charge to Indiana residents and organizations. Quantities are limited to 200 of each item. You may order online by clicking "Add To Cart" below. If you have any questions please call 1-800-KID-N-CAR or 317/274-2977. Please allow 2 weeks for shipping.

Fact sheets on transporting children with special health care needs are also available in bundles of 25 for $10.00 plus shipping. These are available to in-state and out-of-state residents.

Refund Policy

The Automotive Safety Program does not refund literature or video purchases. Items damaged upon receipt will be replaced in-kind. If the items you have ordered arrive damaged, please return them to the Automotive Safety Program at: Fesler Hall, Room 207; 1130 West Michigan Street; Indianapolis, IN 46202. Damaged items must be returned to the Automotive Safety Program within 30 days of receipt in order to receive replacements. Please direct questions to 800-755-0912.



Car Safety for Your Child who Doesn't Stay Buckled Up

Tips and answers to questions about children who won't stay buckled up while riding in the vehicle. Please indicate the quantity (#) of brochures desired (limit of up to 200).

Kid-N-Car & Automotive Safety Program

Resources and Child Safety Seat Inspection Stations

- Automotive Safety Program and Safe Kids Indiana
  - PreventInjury.org
  - 1-800-KID-N-CAR
  - Child Safety Seat Inspection Stations
- Safe Kids Worldwide
  - Safekids.org
  - 14 local chapters
- National Highway Traffic Administration
  - Safercar.gov
- Network of 1000+ technicians in Indiana

Key Audiences

- Caregivers: parents, grandparents, siblings, foster parents, legal guardians
- Caseworkers: DCS and other contract agencies
- Child Passenger Safety Technicians
  - Nurses/Healthcare professionals
  - Public Health
  - First Responders: LE; Fire; EMS

Challenges

- Reaching racial and ethnic minority groups
- Grandparents
- Rural areas

Questions?

Contact:

Erin Kuroiwa

Project Manager, Safe Kids Indiana & Latino Outreach

(317) 274-2977

erodda@iu.edu

Questions?

Contact:

Erin Kuroiwa

Project Manager, Safe Kids Indiana & Latino Outreach

(317) 274-2977

erodda@iu.edu

Unintentional Injury Data: Injury in Indiana

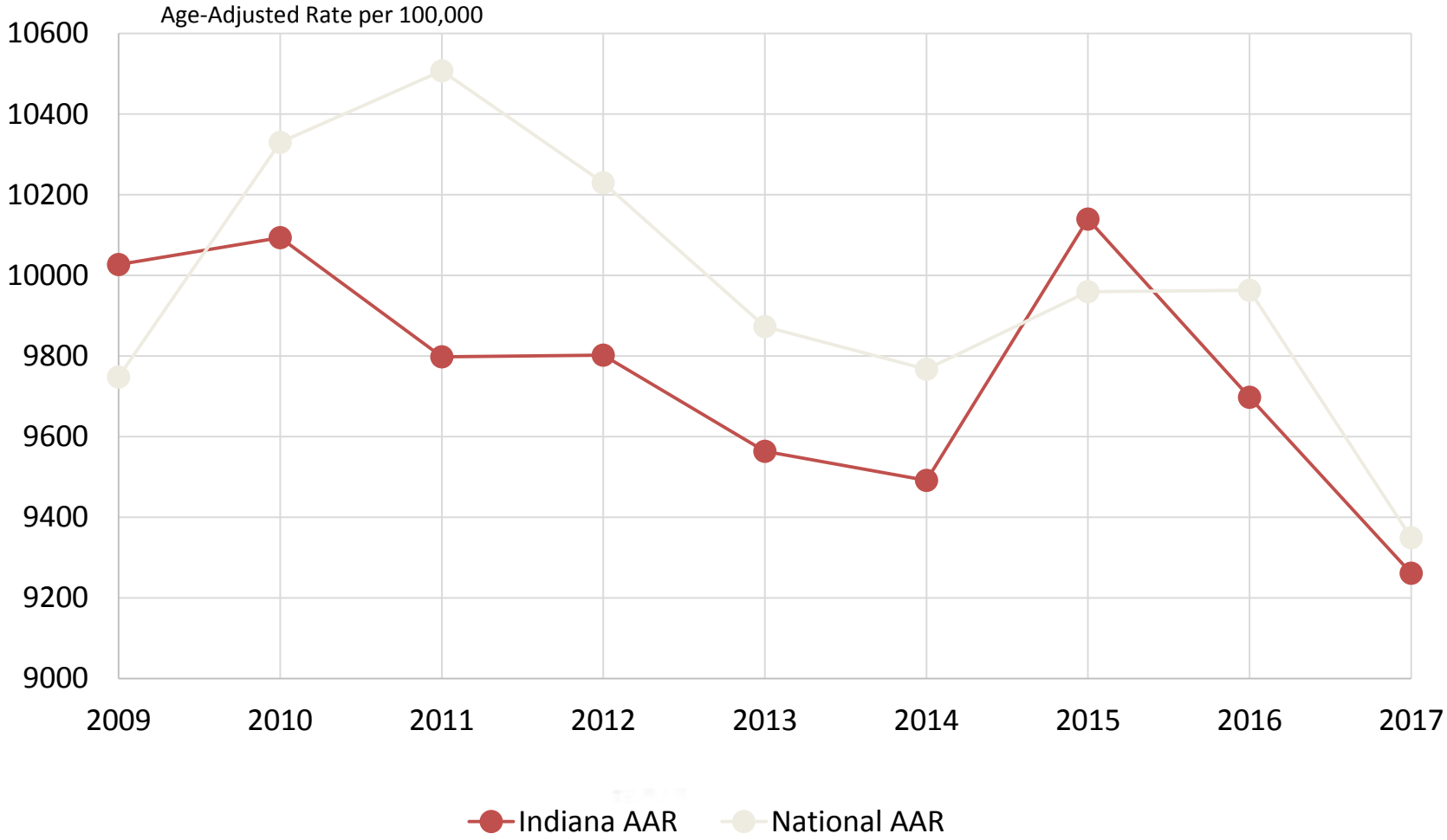
Andzelika Rzucidlo, *Injury Prevention Epidemiologist*
Trauma and Injury Prevention Division

Email questions to: **Indianatrauma@isdh.in.gov**

Injuries in Indiana

- 5,686 died from injuries in 2017.
  - ~70% of these deaths were unintentional.
- There were 606,244 ED visits that were injury-related in 2017.

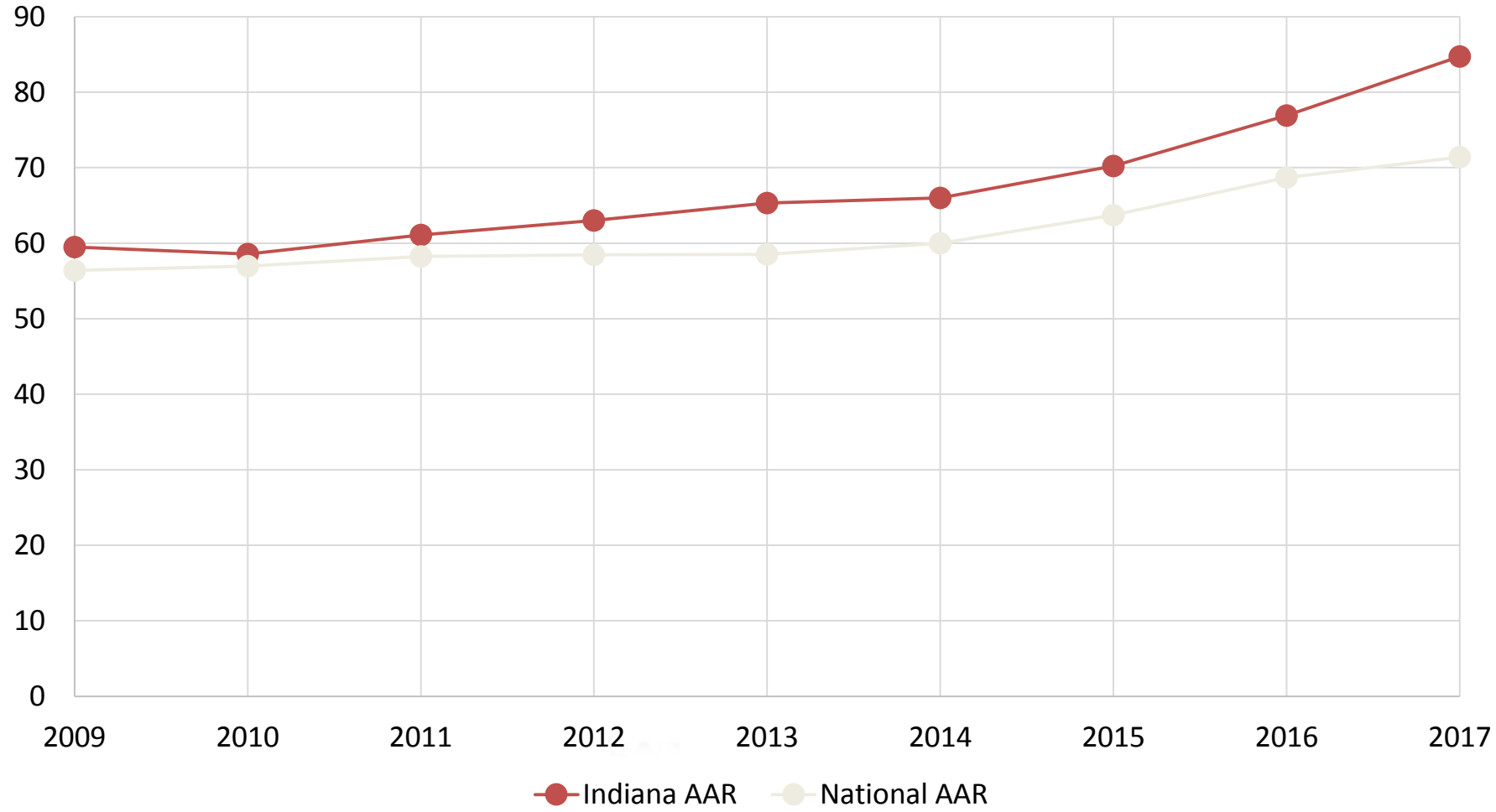
The age-adjusted ED visit rates have declined by 8% over the last 10 years in Indiana



Source:
1. National Center for Injury Prevention and Control, National Center for Health Statistics Vital Statistics System, WISQARS
2. Indiana State Department of Health, Division of Trauma and Injury Prevention

The injury death rate has increased 42% in Indiana and is almost 19% higher than the national age-adjusted rate

Age-Adjusted Rate per 100,000

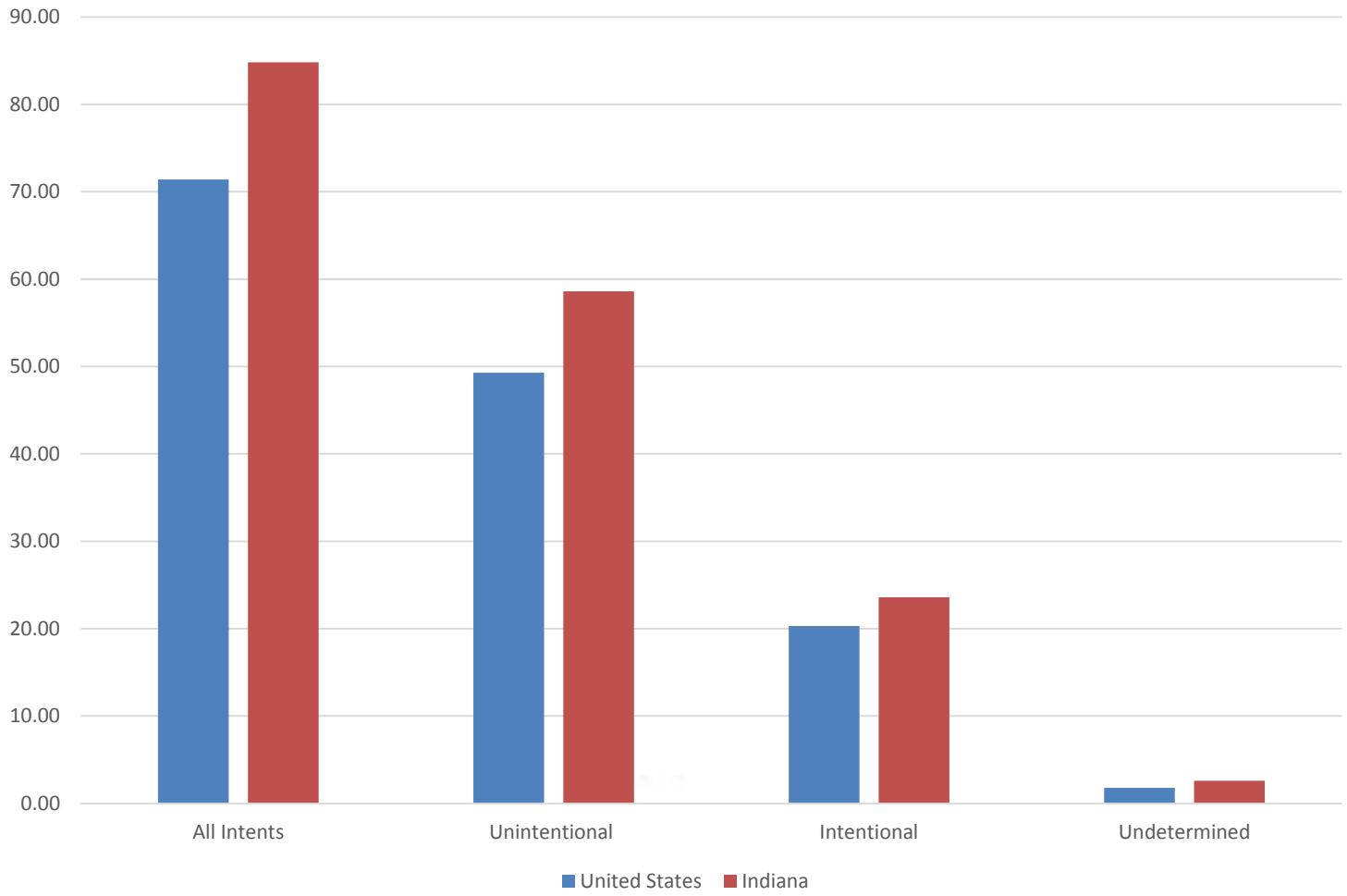


Source:

1. National Center for Injury Prevention and Control, National Center for Health Statistics Vital Statistics System, WISQARS
2. Indiana State Department of Health, Division of Trauma and Injury Prevention

Injury Death Rate, United States and Indiana Comparison, 2017

Age-Adjusted Rate per 100,000



Source: National Center for Injury Prevention and Control, National Center for Health Statistics Vital Statistics System, WISQARS

10 Leading Causes of Death, Indiana
2008, All Races, Both Sexes

Click on any age group for percentages.

	Age Groups										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Congenital Anomalies 130	**Unintentional Injury 43**	**Unintentional Injury 30**	**Unintentional Injury 26**	**Unintentional Injury 321**	**Unintentional Injury 326**	**Unintentional Injury 351**	Malignant Neoplasms 1,100	Malignant Neoplasms 2,448	Heart Disease 10,745	Heart Disease 13,663
2	Short Gestation 105	Congenital Anomalies 17	Malignant Neoplasms 12	Malignant Neoplasms ---	**Homicide 94**	**Suicide 131**	Heart Disease 295	Heart Disease 895	Heart Disease 1,588	Malignant Neoplasms 9,172	Malignant Neoplasms 13,137
3	**Unintentional Injury 52**	**Homicide 13**	Congenital Anomalies ---	**Suicide ---**	**Suicide 88**	**Homicide 92**	Malignant Neoplasms 281	**Unintentional Injury 387**	Chronic Low. Respiratory Disease 450	Chronic Low. Respiratory Disease 3,253	Chronic Low. Respiratory Disease 3,878
4	SIDS 44	Heart Disease ---	**Homicide ---**	Congenital Anomalies ---	Malignant Neoplasms 34	Heart Disease 88	**Suicide 169**	**Suicide 160**	Diabetes Mellitus 289	Cerebro-vascular 2,688	Cerebro-vascular 3,114
5	Maternal Pregnancy Comp. 29	Influenza & Pneumonia ---	Heart Disease ---	**Homicide ---**	Heart Disease 27	Malignant Neoplasms 76	**Homicide 54**	Liver Disease 145	**Unintentional Injury 252**	Alzheimer's Disease 1,949	**Unintentional Injury 2,558**
6	Respiratory Distress 21	Malignant Neoplasms ---	Chronic Low. Respiratory Disease ---	Chronic Low. Respiratory Disease ---	Congenital Anomalies ---	HIV 17	Diabetes Mellitus 52	Cerebro-vascular 133	Cerebro-vascular 227	Diabetes Mellitus 1,207	Alzheimer's Disease 1,971
7	Placenta Cord Membranes 18	Chronic Low. Respiratory Disease ---	Diabetes Mellitus ---	Heart Disease ---	Influenza & Pneumonia ---	Influenza & Pneumonia 13	Cerebro-vascular 47	Chronic Low. Respiratory Disease 126	Liver Disease 137	Nephritis 1,147	Diabetes Mellitus 1,683
8	Circulatory System Disease 17	Septicemia ---	Nephritis ---	Influenza & Pneumonia ---	Chronic Low. Respiratory Disease ---	Cerebro-vascular 12	Liver Disease 44	Diabetes Mellitus 122	Nephritis 136	Influenza & Pneumonia 1,112	Nephritis 1,363
9	Bacterial Sepsis 16	Diseases Of Appendix ---	Perinatal Period ---	Diabetes Mellitus ---	**Three Tied ---**	Congenital Anomalies 11	HIV 39	Influenza & Pneumonia 68	**Suicide 120**	**Unintentional Injury 770**	Influenza & Pneumonia 1,318
10	Necrotizing Enterocolitis 15			**Two Tied ---**	**Three Tied ---**	Nephritis 10	Chronic Low. Respiratory Disease 28	Septicemia 63	Septicemia 114	Septicemia 599	Septicemia 810

Source: National Center for Injury Prevention and Control, National Center for Health Statistics Vital Statistics System, WISQARS

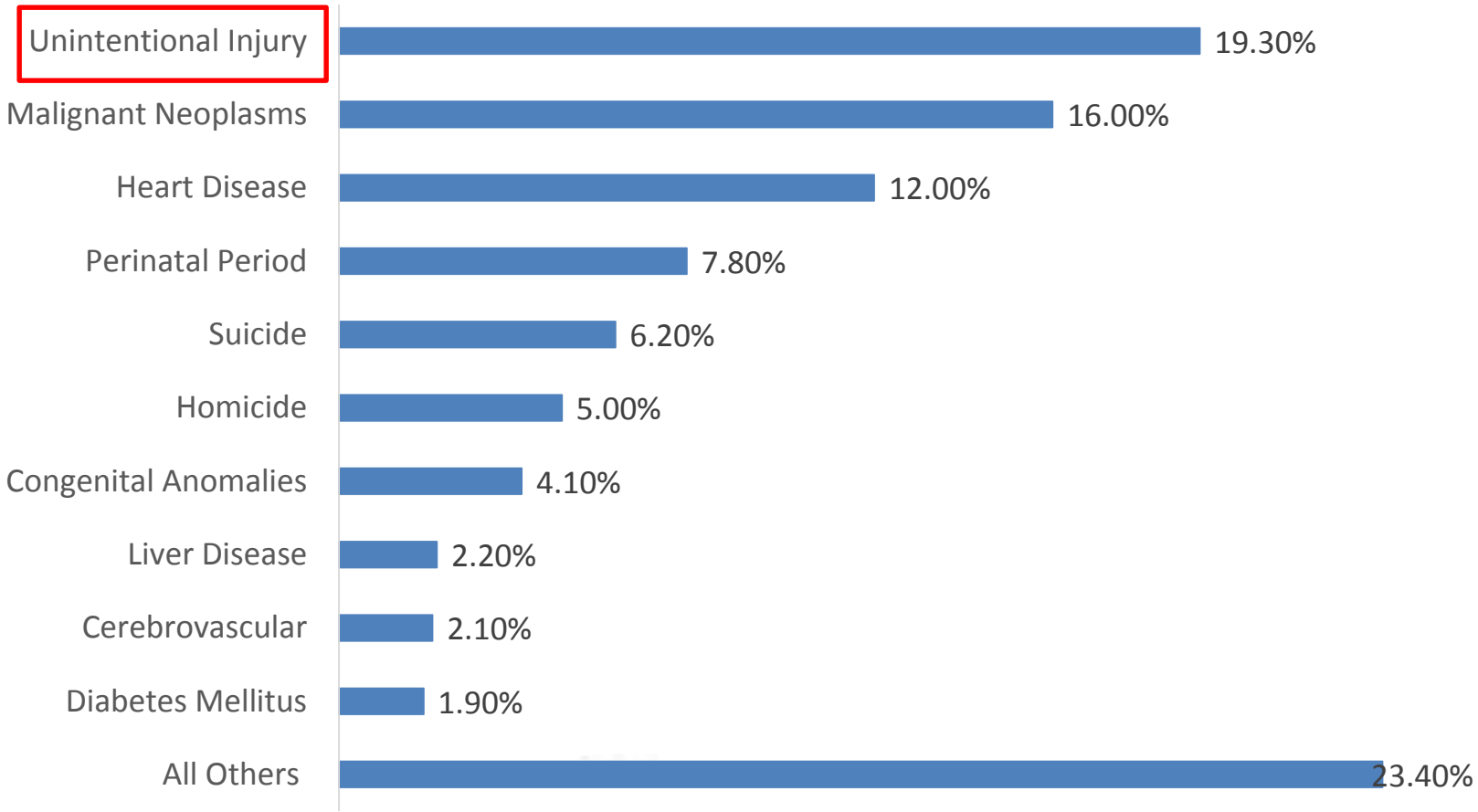
10 Leading Causes of Death, Indiana

2017, All Races, Both Sexes

	Age Groups										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Short Gestation 119	Unintentional Injury 35	Unintentional Injury 25	Unintentional Injury 25	Unintentional Injury 335	Unintentional Injury 689	Unintentional Injury 626	Malignant Neoplasms 959	Malignant Neoplasms 2,648	Heart Disease 11,324	Heart Disease 14,445
2	Congenital Anomalies 116	Homicide ---	Malignant Neoplasms ---	Homicide ---	Suicide 156	Suicide 205	Heart Disease 308	Heart Disease 784	Heart Disease 1,894	Malignant Neoplasms 9,478	Malignant Neoplasms 13,462
3	SIDS 53	Congenital Anomalies ---	Heart Disease ---	Suicide ---	Homicide 117	Homicide 136	Malignant Neoplasms 260	Unintentional Injury 604	Chronic Low. Respiratory Disease 569	Chronic Low. Respiratory Disease 3,627	Chronic Low. Respiratory Disease 4,375
4	Unintentional Injury 51	Heart Disease ---	Homicide ---	Malignant Neoplasms ---	Heart Disease 33	Heart Disease 86	Suicide 184	Suicide 218	Unintentional Injury 522	Alzheimer's Disease 2,754	Unintentional Injury 3,978
5	Maternal Pregnancy Comp. 22	Influenza & Pneumonia ---	Congenital Anomalies ---	Congenital Anomalies ---	Malignant Neoplasms 26	Malignant Neoplasms 76	Homicide 77	Liver Disease 184	Diabetes Mellitus 373	Cerebro-vascular 2,691	Cerebro-vascular 3,150
6	Bacterial Sepsis 15	Malignant Neoplasms ---	Influenza & Pneumonia ---	Influenza & Pneumonia ---	Influenza & Pneumonia ---	Liver Disease 21	Liver Disease 60	Diabetes Mellitus 165	Liver Disease 290	Diabetes Mellitus 1,481	Alzheimer's Disease 2,771
7	Atelectasis 14	Meningitis ---	Benign Neoplasms ---	Cerebro-vascular ---	Diabetes Mellitus ---	Diabetes Mellitus 17	Diabetes Mellitus 53	Chronic Low. Respiratory Disease 140	Cerebro-vascular 286	Nephritis 1,195	Diabetes Mellitus 2,096
8	Circulatory System Disease 12	Septicemia ---	Chronic Low. Respiratory Disease ---	Chronic Low. Respiratory Disease ---	Chronic Low. Respiratory Disease ---	Chronic Low. Respiratory Disease 14	Cerebro-vascular 42	Cerebro-vascular 111	Suicide 167	Unintentional Injury 1,066	Nephritis 1,440
9	Placenta Cord Membranes 12	Five Tied ---	Nutritional Deficiencies ---	Heart Disease ---	Complicated Pregnancy ---	Complicated Pregnancy 12	Septicemia 32	Septicemia 70	Septicemia 159	Septicemia 1,001	Septicemia 1,277
10	Two Tied 11	Five Tied ---	---	Two Tied ---	Congenital Anomalies ---	Congenital Anomalies 12	Nephritis 26	Nephritis 57	Nephritis 150	Influenza & Pneumonia 906	Suicide 1,092

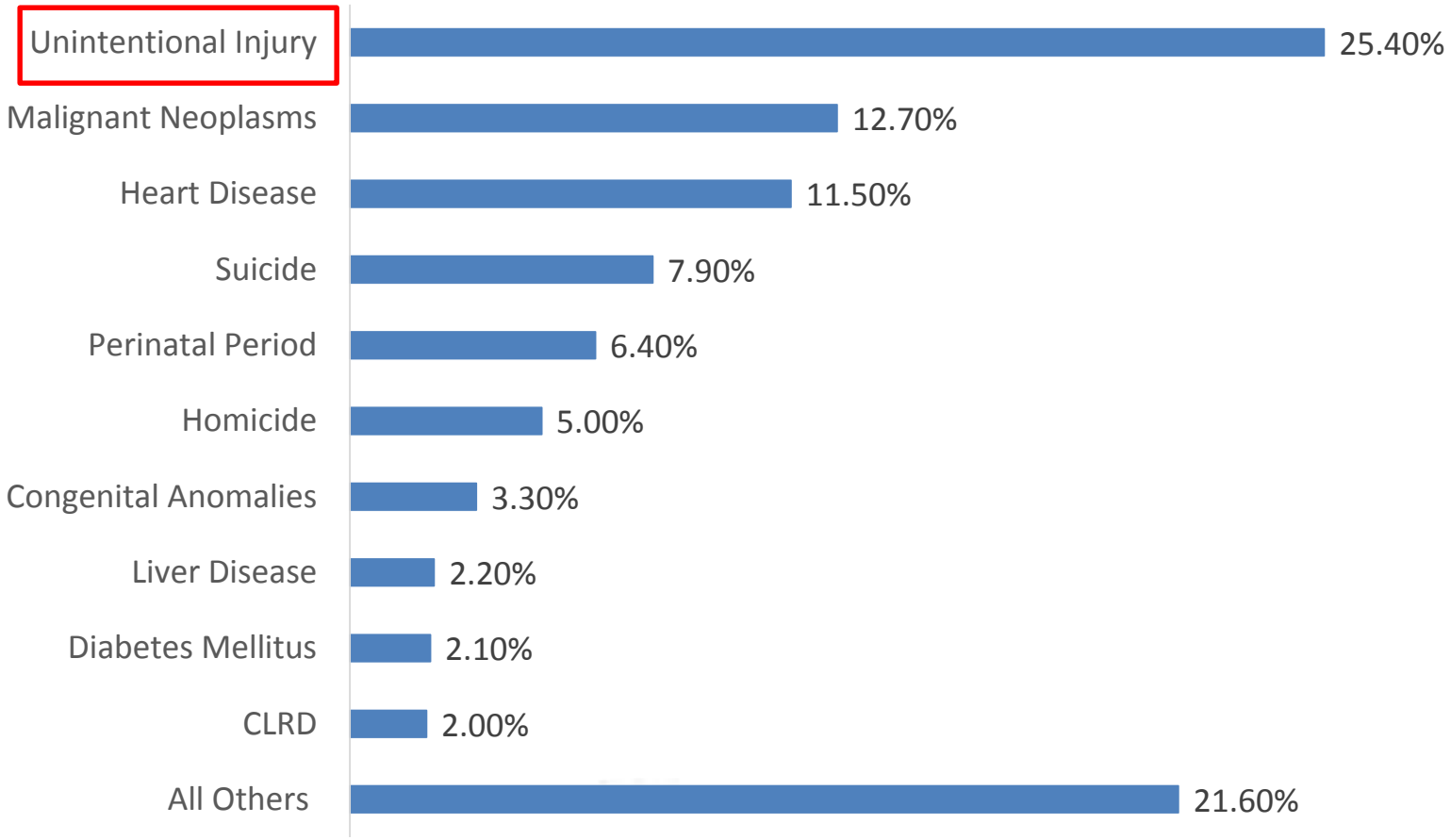
Source: National Center for Injury Prevention and Control, National Center for Health Statistics Vital Statistics System, WISQARS

Years Potential Life Lost Before Age 65, Indiana, 2008



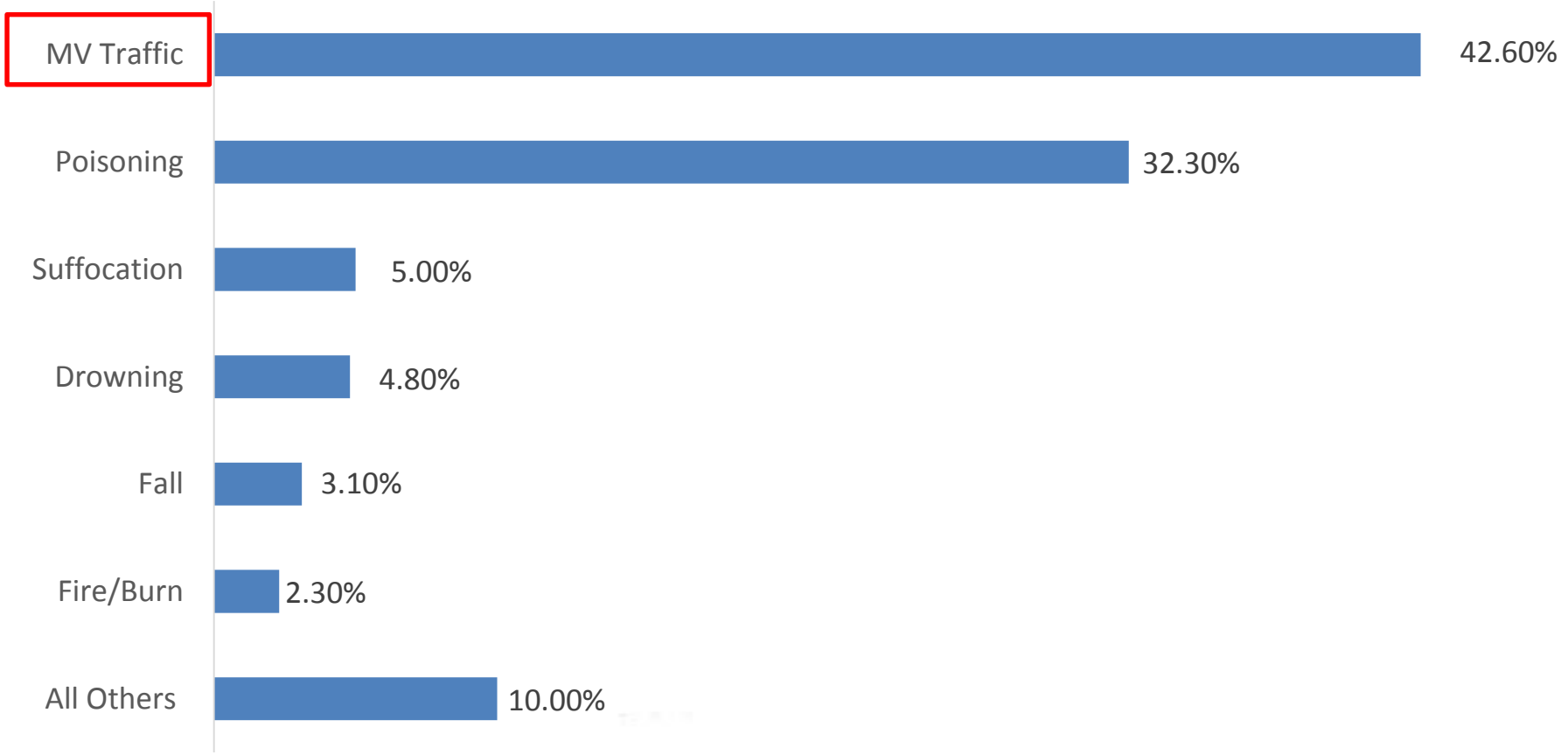
Source: National Center for Injury Prevention and Control, National Center for Health Statistics Vital Statistics System, WISQARS

Years Potential Life Lost Before Age 65, Indiana, 2017



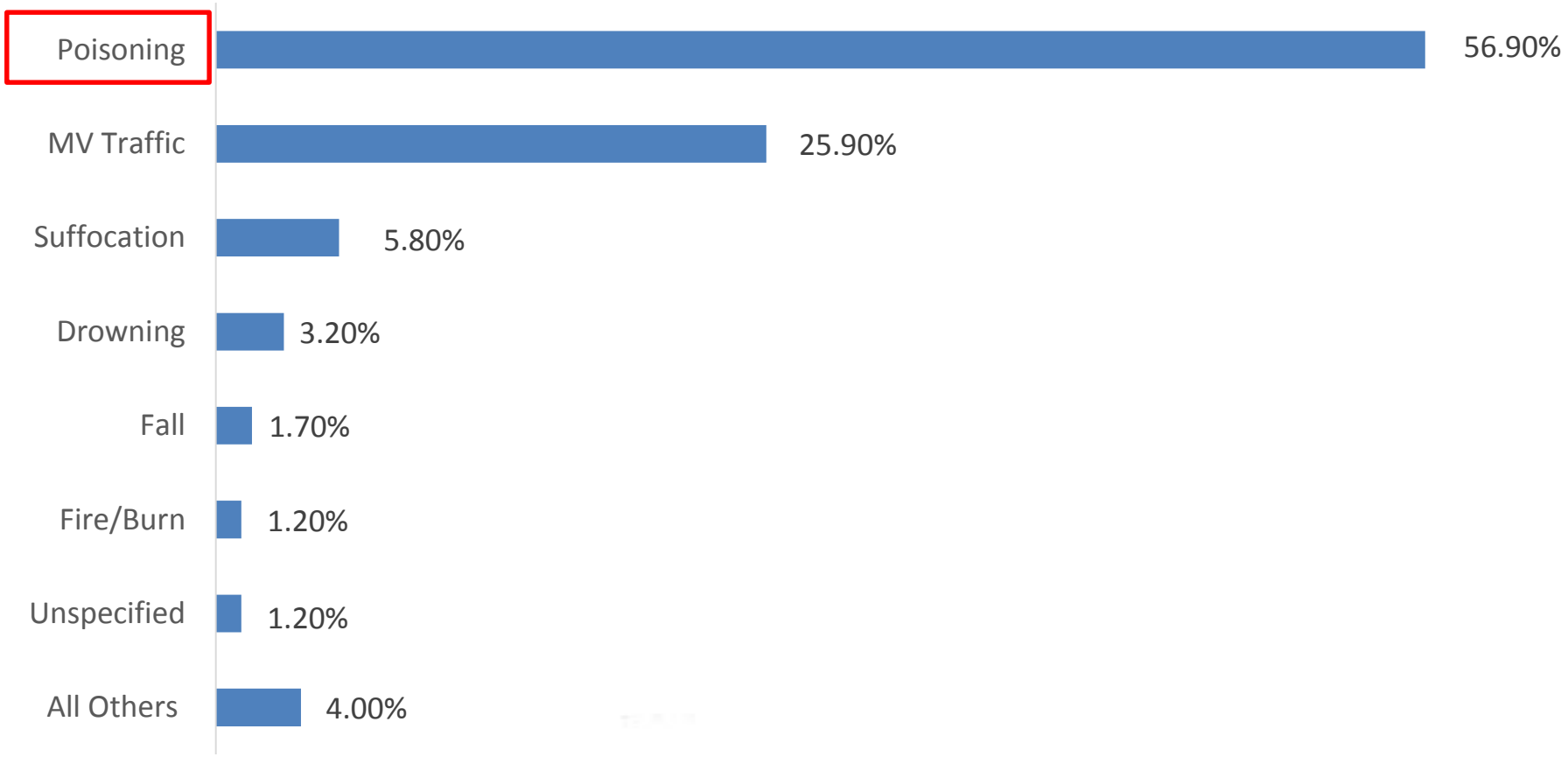
Source: National Center for Injury Prevention and Control, National Center for Health Statistics Vital Statistics System, WISQARS

Unintentional Injury Causes of Years Potential Life Lost Before Age 65, Indiana, 2008



Source: National Center for Injury Prevention and Control, National Center for Health Statistics Vital Statistics System, WISQARS

Unintentional Injury Causes of Years Potential Life Lost Before Age 65, Indiana, 2017



Source: National Center for Injury Prevention and Control, National Center for Health Statistics Vital Statistics System, WISQARS

Contact information

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Trauma and Injury Prevention Division
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arzucidlo@isdh.in.gov

Email questions to: **Indianatrauma@isd.in.gov**

Indiana State Department of Health

Richard M. Fairbanks School of Public Health at IUPUI

Welcome to Project ECHO

Joan Duwve, MD, MPH
Associate Dean for Public Health Practice
ECHO Center Director

Touching 1 billion lives by 2025

ECHO Origin Story:
Hepatitis C (HCV) in New Mexico

- Estimated 36,000 individuals in New Mexico with HCV
  - Only 5% were in treatment
- Shortage of specialists
  - Only 2 clinics in New Mexico with the necessary expertise
- Virtual clinics for providers to treat HCV in their own communities
- Increased community capacity → Increased access to care → Reduction in racial and ethnic disparities in treatment outcomes → Healthier communities

Arora, S., Thornton, K., Murata, G., Deming, P., Kalishman, S., Dion, D., ... & Kistin, M. (2011). Outcomes of treatment for hepatitis C virus infection by primary care providers. *New England Journal of Medicine*, *364*(23), 2199-2207.

About Project ECHO

- ECHO = Extension for Community Healthcare Outcomes
- Mission: "…democratize medical knowledge and get best practice care to underserved people all over the world."
- Project ECHO® is a lifelong learning and guided practice model that revolutionizes medical education and exponentially increases workforce capacity to provide best practice specialty care and reduce health disparities through its hub-and-spoke knowledge sharing networks

People need access to specialty care for complex conditions

Not enough specialists to treat everyone, especially in rural communities

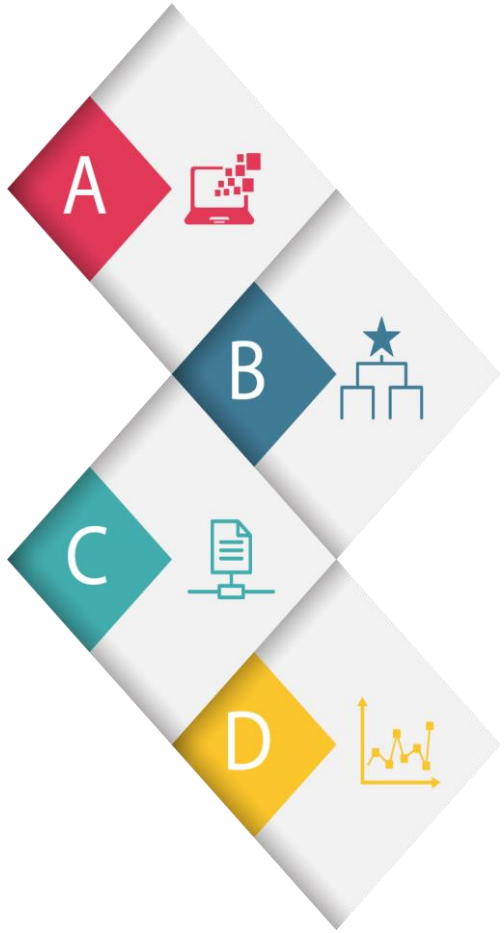
ECHO® trains primary care clinicians to provide specialty care services

Patients get the right care, in the right place, at the right time.

ECHO Model

Amplification – Use **Technology** to leverage scarce resources

Case Based **Learning** to master complexity



Share **B**est **Practices** to reduce disparity

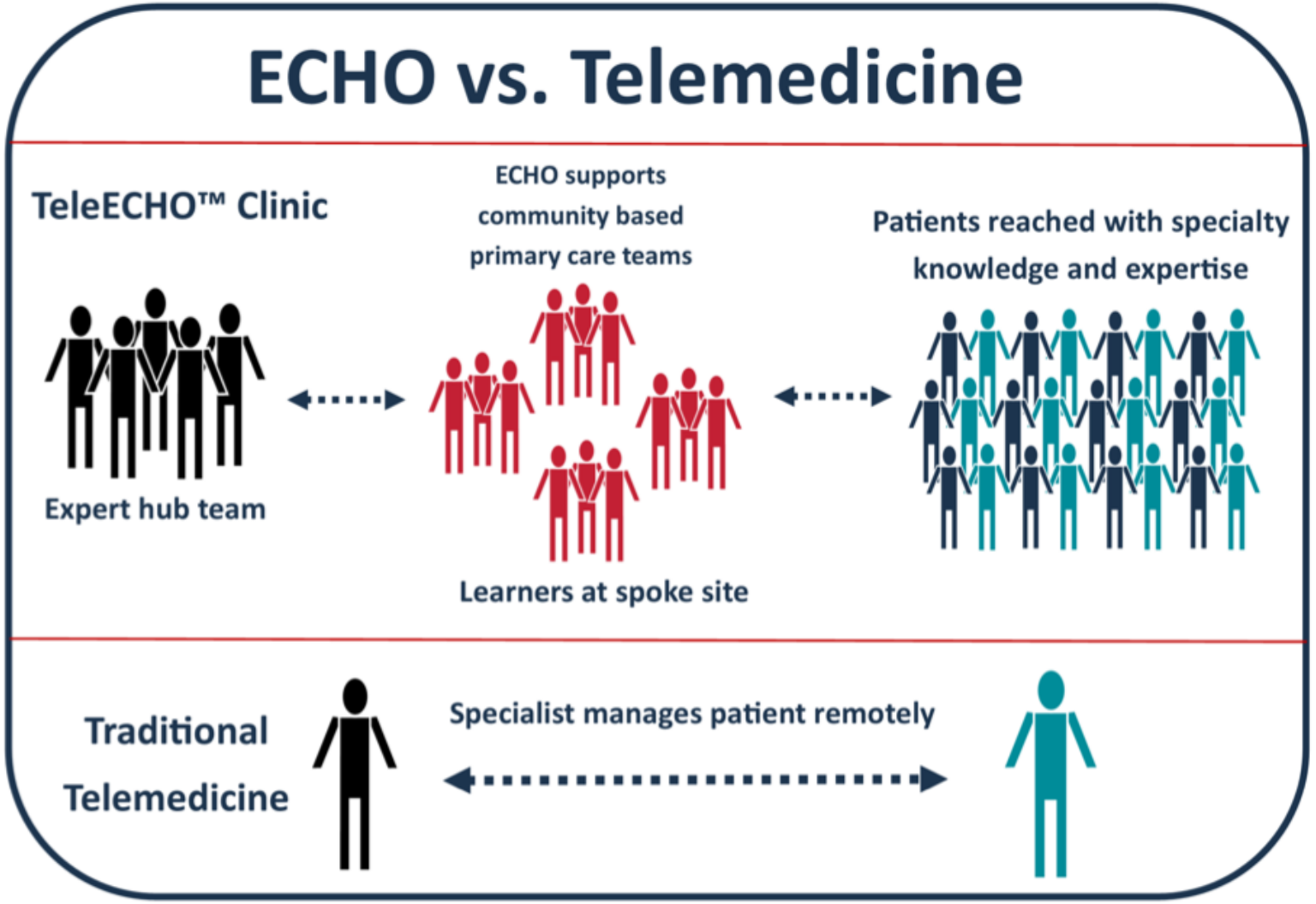
Web-based **D**atabase to **Monitor Outcomes**

All Teach, All Learn

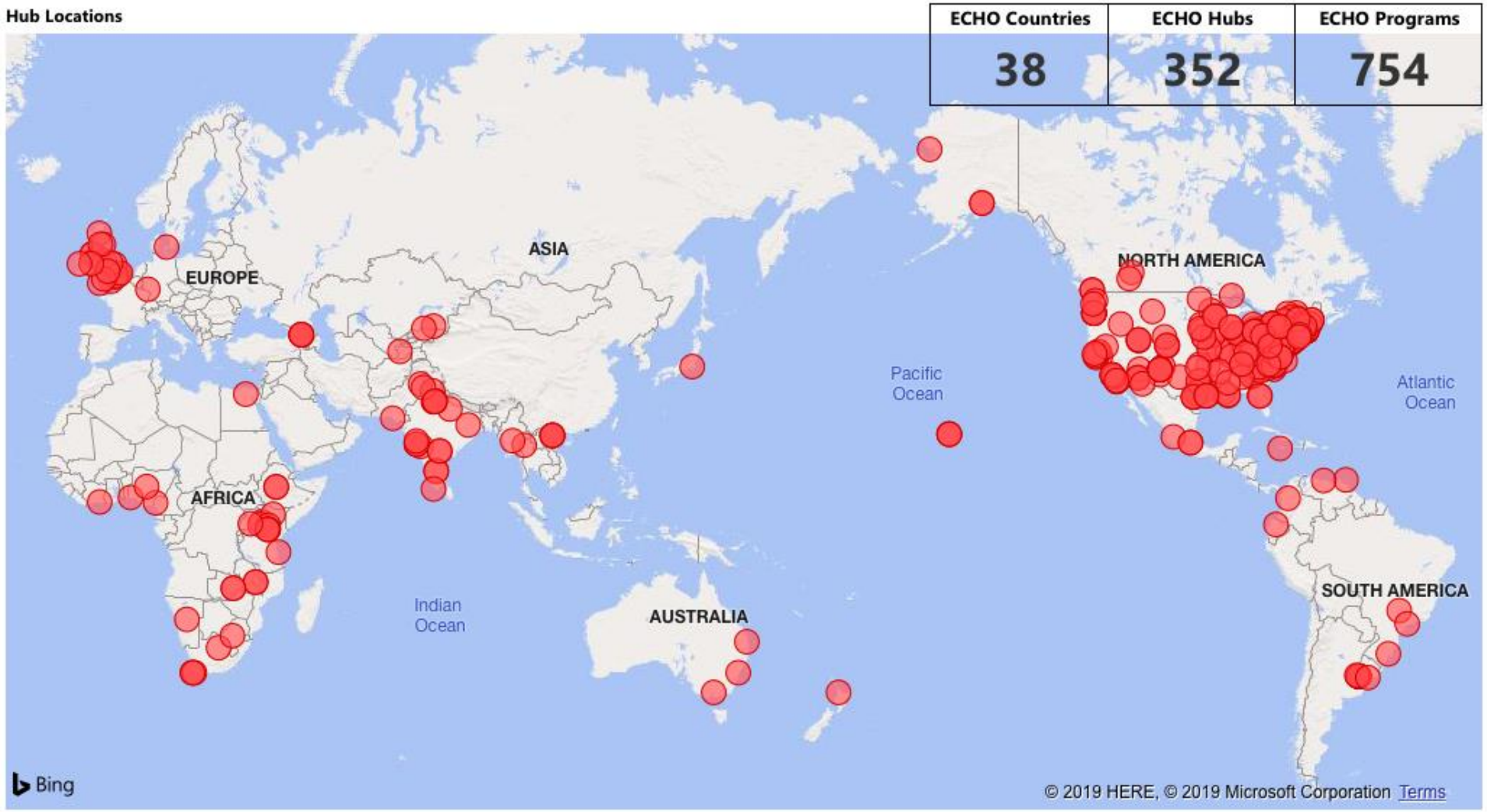
Hub and spoke knowledge sharing creates a learning loop:

- Community providers learn from specialists
- Community providers learn from each other
- Specialists learn from community providers as best practices emerge

ECHO vs. Telemedicine



ECHO Hubs & Programs: Global



ECHO

ECHO (Extension for Community Healthcare Outcomes) is a movement to connect local primary care teams with inter-disciplinary specialist teams to improve treatment for complex and chronic health conditions. ECHO uses technology to facilitate mentoring and knowledge sharing, enabling local primary care clinicians to provide best practice care for patients when they need it, close to home.

Experts at Indiana University School of Medicine and the Fairbanks School of Public Health are leading ECHO clinics that are freely available to all providers. Visit the individual project sites below to learn more about ECHO clinics and how to participate:

Anatomy of an ECHO Clinic

- Meets virtually on a regular schedule
- Group Introductions
- ~20 Minute Didactic + Q&A
- Case Presentations

Project ECHO: Outcomes

Research demonstrates that Project ECHO can:

- Increase provider knowledge, competence, & confidence in treating patients with complex conditions
- Improve access to care
- Improve patient health
- Increase job satisfaction & retention

Indiana Communities Advancing Recovery Efforts (IN CAREs) ECHO

- Non-clinical ECHO programs include:
  - IN PEP (Peer Educator Training in Correctional Facilities), domestic violence, special education, ethics, CITI training for law enforcement, etc.
- IN CAREs is a partnership between ISDH and IU Fairbanks School of Public Health, funded under CDC OD2A grant
- Recognizes the need for community partners to come together to address SUD/OUD and drug overdose deaths at the community level
- Expands Project ECHO model from clinical improvement to systems improvement

Indiana State Department of Health

IUPUI
RICHARD M. FAIRBANKS
SCHOOL OF PUBLIC HEALTH

IN CAREs ECHO Goal & Areas of Focus

- **Goal: Reduce drug overdose deaths**
- Key IN CAREs ECHO focus areas:
  1. Collect and monitor data on OD death
  2. Provide rapid access to low-barrier OUD treatment
  3. Promote widespread availability of naloxone
  4. Promote ready access to recovery supports

IN CAREs ECHO Local Leaders

- Identify a local leader or catalyst within each community - “Community Convener”
- To bring together working groups of leaders of key sectors within the community, including individuals from the following sectors:

  - Public health, and/or community coalition leaders
  - Health care providers, particularly organizations that provide (or could provide) rapid, low-barrier access to OUD treatment, including evidence-based MAT
  - Behavioral health/SUD/OUD counseling providers
  - Emergency departments
  - Recovery community, particularly people with lived experience with OUD
  - Elected officials
  - Law enforcement, including police and sheriff departments
  - Emergency Medical Services and first responders
  - Correctional facilities, particularly county jails
  - Drug treatment courts
  - Homeless shelters
  - Schools / School-based Health Centers / School resource officers
  - Faith leaders

IN CAREs ECHO Hub and Spoke teams

- Hub: Interdisciplinary team of Experts with experience in reducing overdose (OD) deaths with community based teams
- Spokes: Interdisciplinary team of Community Leaders committed to working together to reduce opioid OD deaths

IN CAREs ECHO Sessions

1. Beginning in January 2020
2. Once a month – 90 minutes
3. Each session will include:
   - a didactic presentation
   - a case presentation and discussion
4. Didactic topics will include:
   - Tackling the stigma of addiction;
   - Increasing access to naloxone;
   - Using data to better understanding OD deaths; and more.

ECHO Center Partners

- Indiana University/IUPUI
- IN State Dep't of Health
- IN Family and Social Services Administration/IN Medicaid
- IU School of Medicine
- IU Interprofessional Ed.
- Eskenazi Health
- IU Health
- Med IQ
- CDC
- HRSA
- IN Primary Health Care Association
- IN Rural Health Association
- IN Academy of Family Physicians
- Univ. of New Mexico
- IN State Medical Association
- Greater Indianapolis Health Foundation
- Riley Hospital
- Roudebush VA

Naloxone

Information and Administration

Indiana State Department of Health

Learning Objectives

- Understand the burden of the opioid epidemic.
- Become familiar with the Know the O Facts campaign.
- Describe Indiana legislation related to naloxone.
- List common opioid drug names.
- Recognize the signs and symptoms of an opioid overdose.

Indiana State Department of Health

Learning Objectives (cont'd)

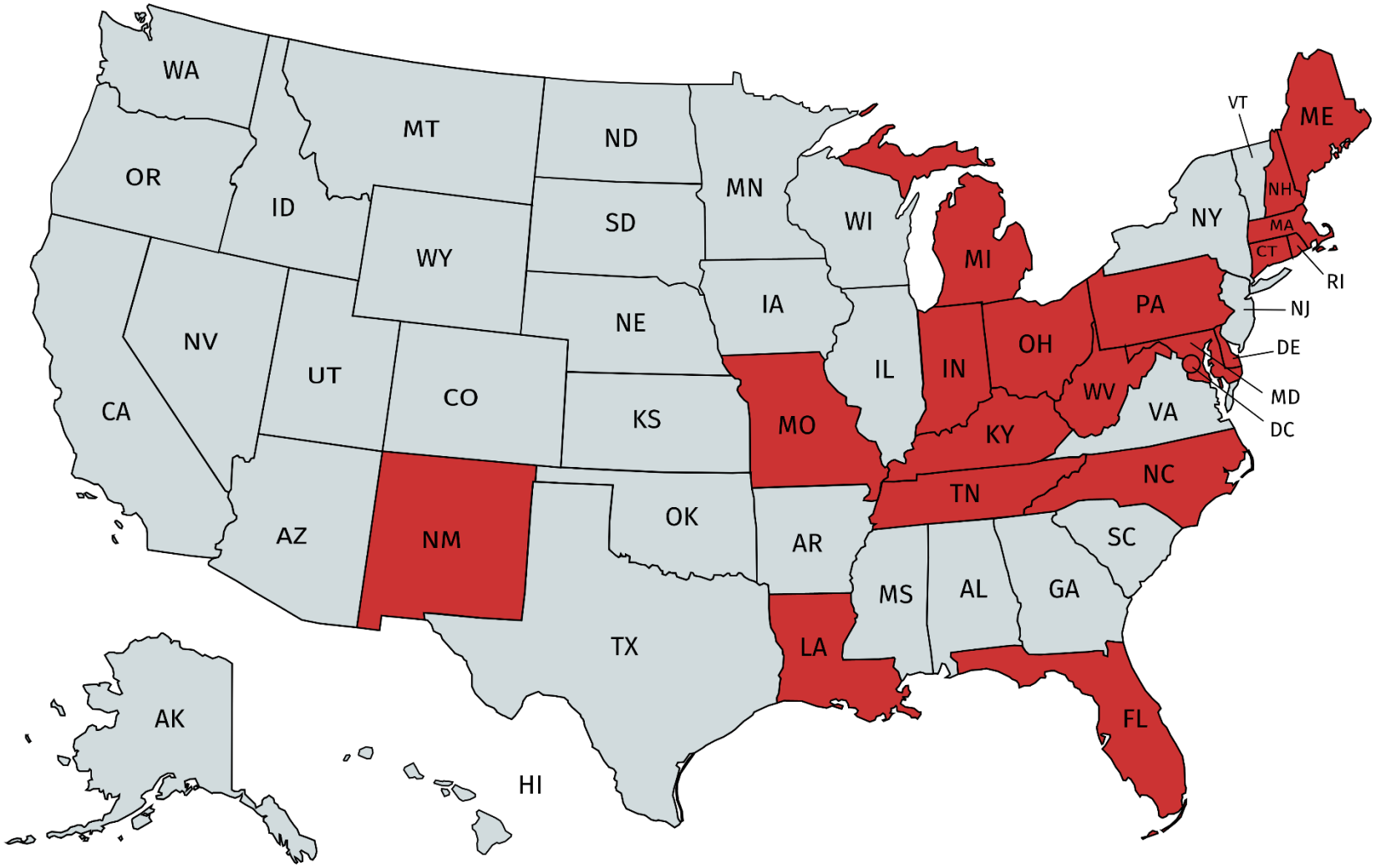
- Explain how to use naloxone.
- Recognize possible responses to naloxone.
- Describe how to provide continued support to the opioid overdose victim.
- Practice preparing and administering naloxone.
- Learn about treatment and recovery.

Indiana State Department of Health

I. FRAMING THE CRISIS

Indiana State Department of Health

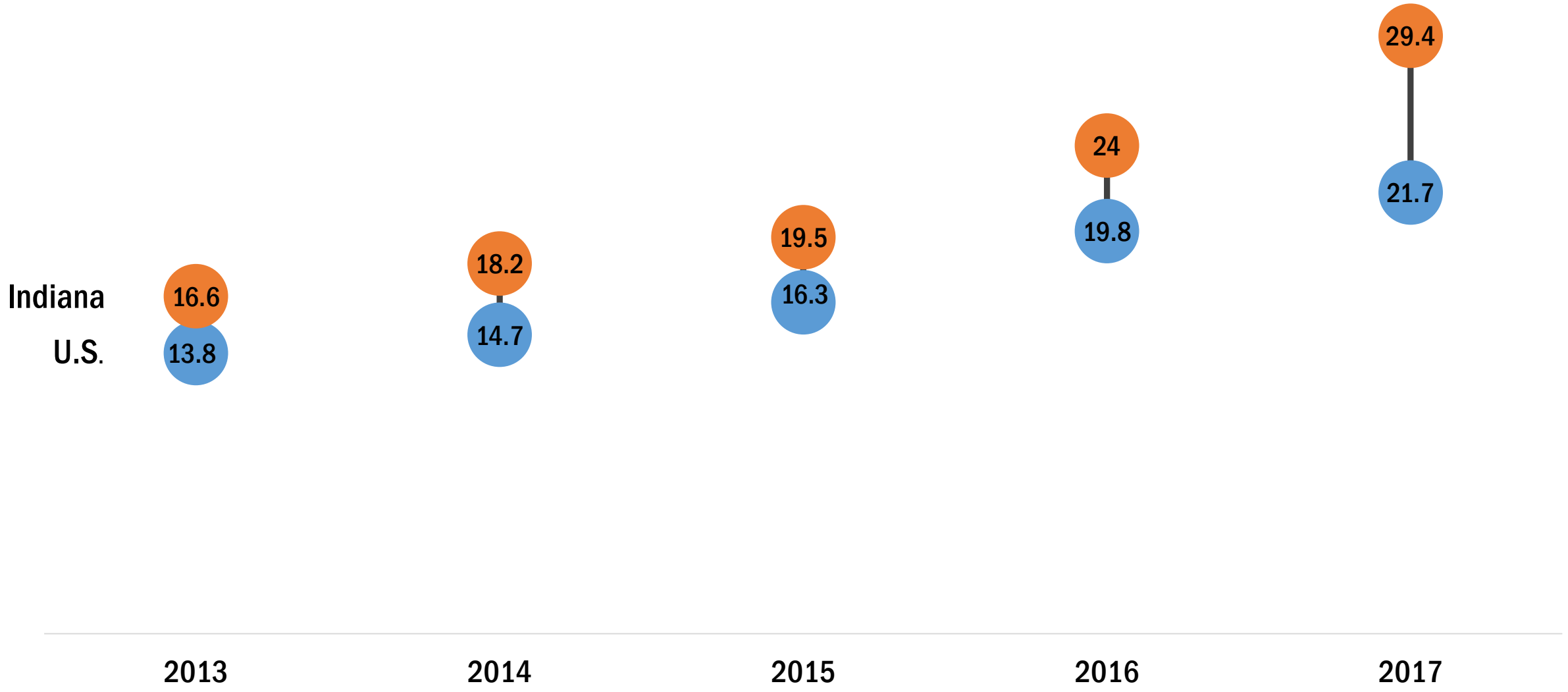
Indiana is 1 of 20 states that had a statistically higher drug overdose mortality rate than the U.S. rate in 2017.



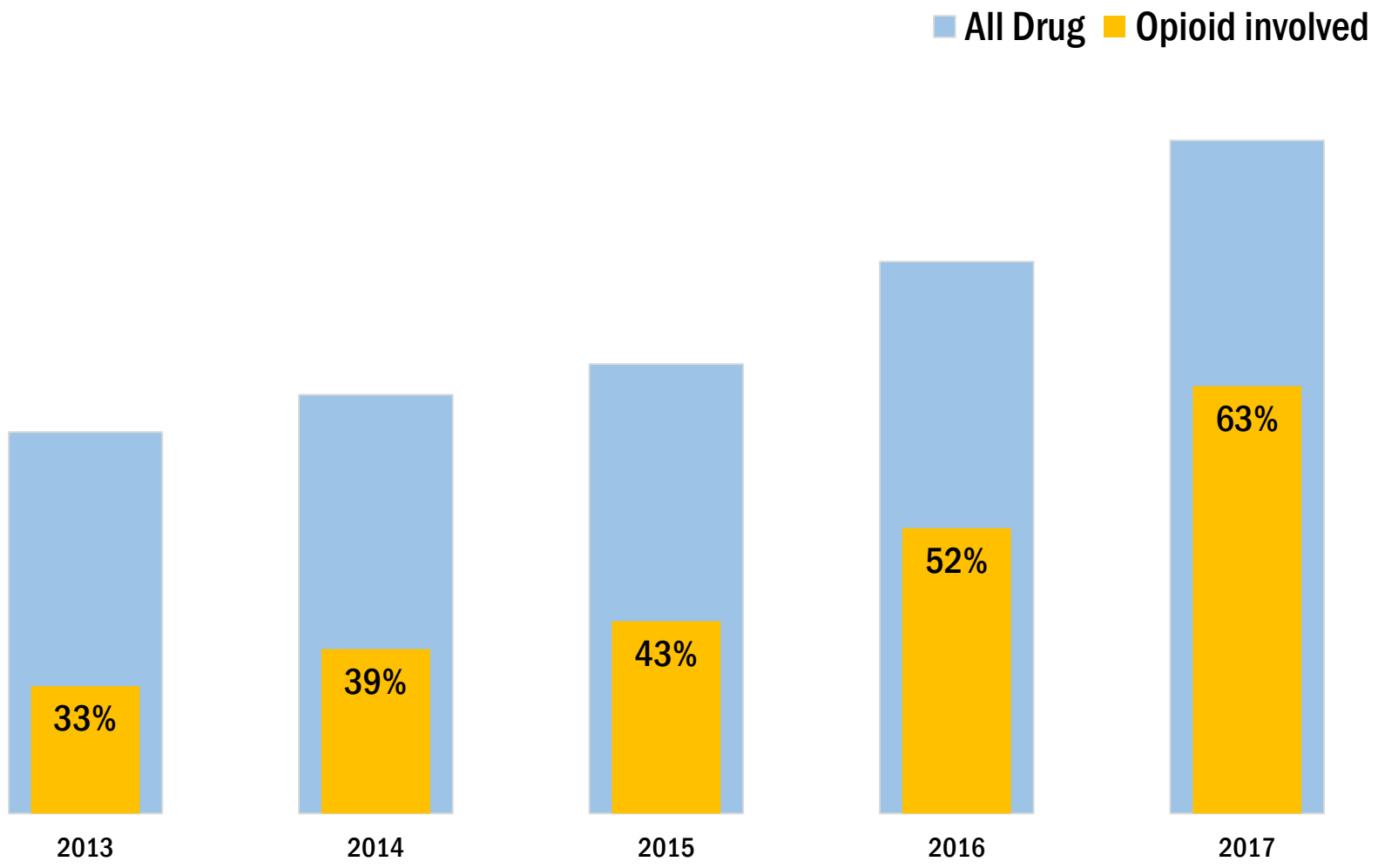
Notes: Deaths are classified using the International Classification of Diseases, 10th Revision. Drug-poisoning (overdose) deaths are identified using underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. Access data table for Figure 3 at: https://www.cdc.gov/nchs/data/databriefs/db329_tables-508.pdf#3. SOURCE: NCHS, National Vital Statistics System, Mortality

More Indiana residents are dying due to drug overdose than the national average and the gap has continued to increase.

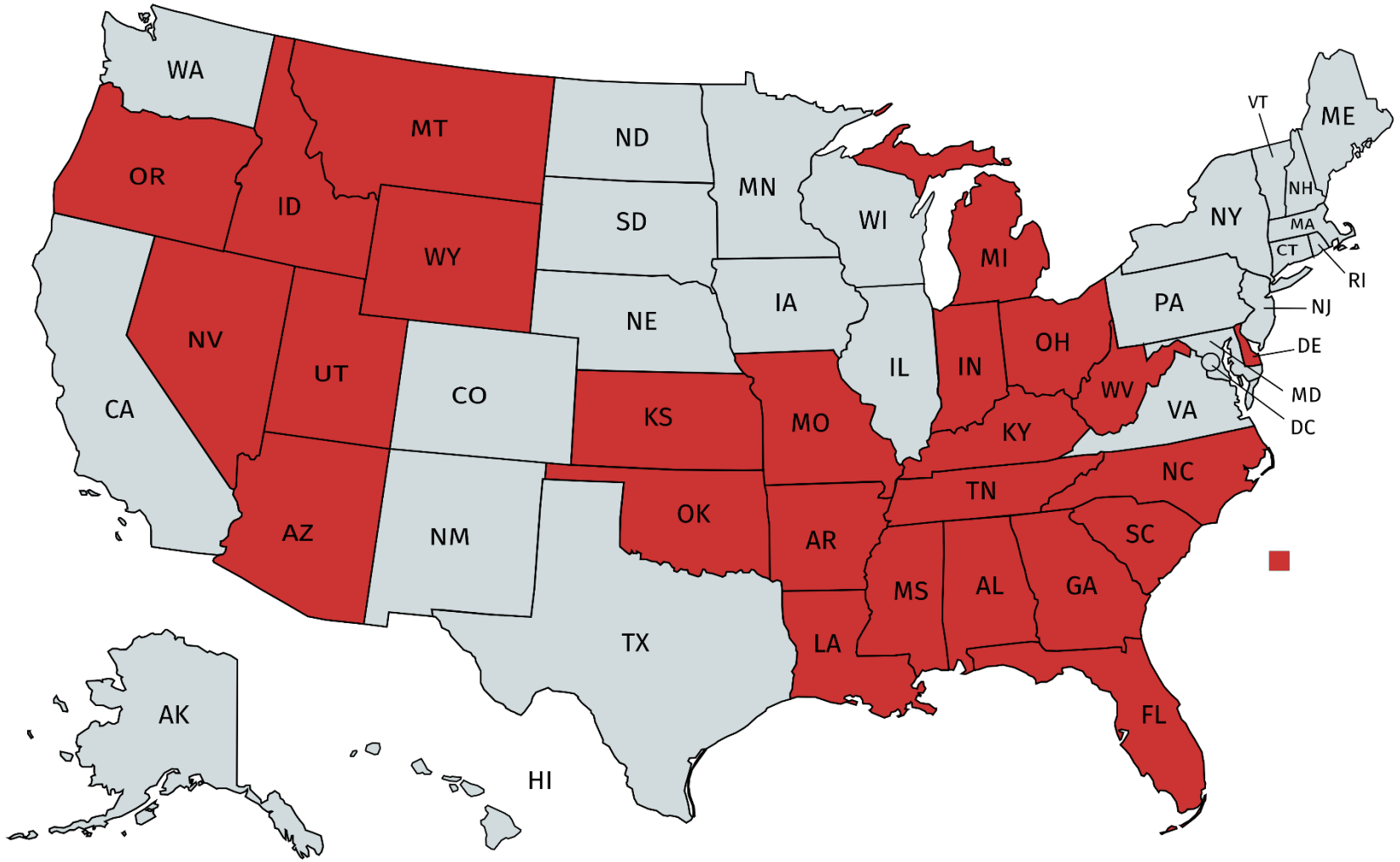
Age-adjusted rate per 100,000



The number of drug overdose deaths have increased in Indiana and opioids are the most frequently involved substance.

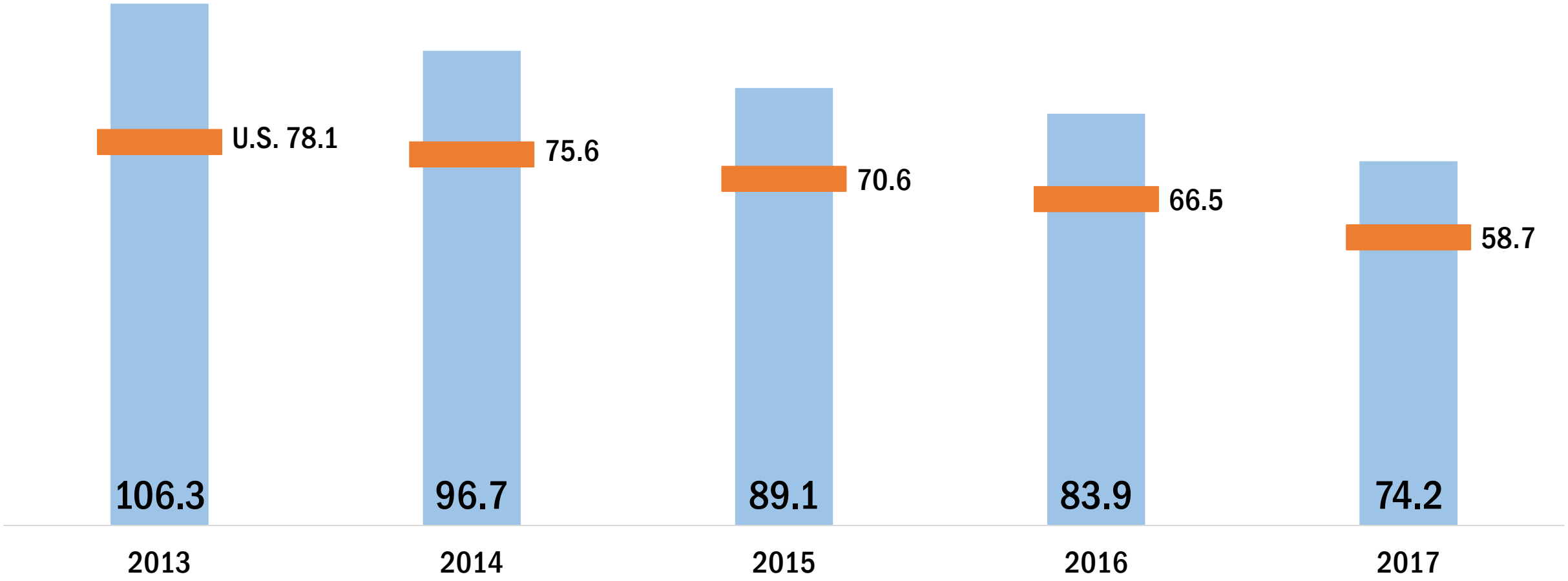


Indiana is 1 of 25 states that had a higher opioid prescribing rate than the U.S. rate in 2017.



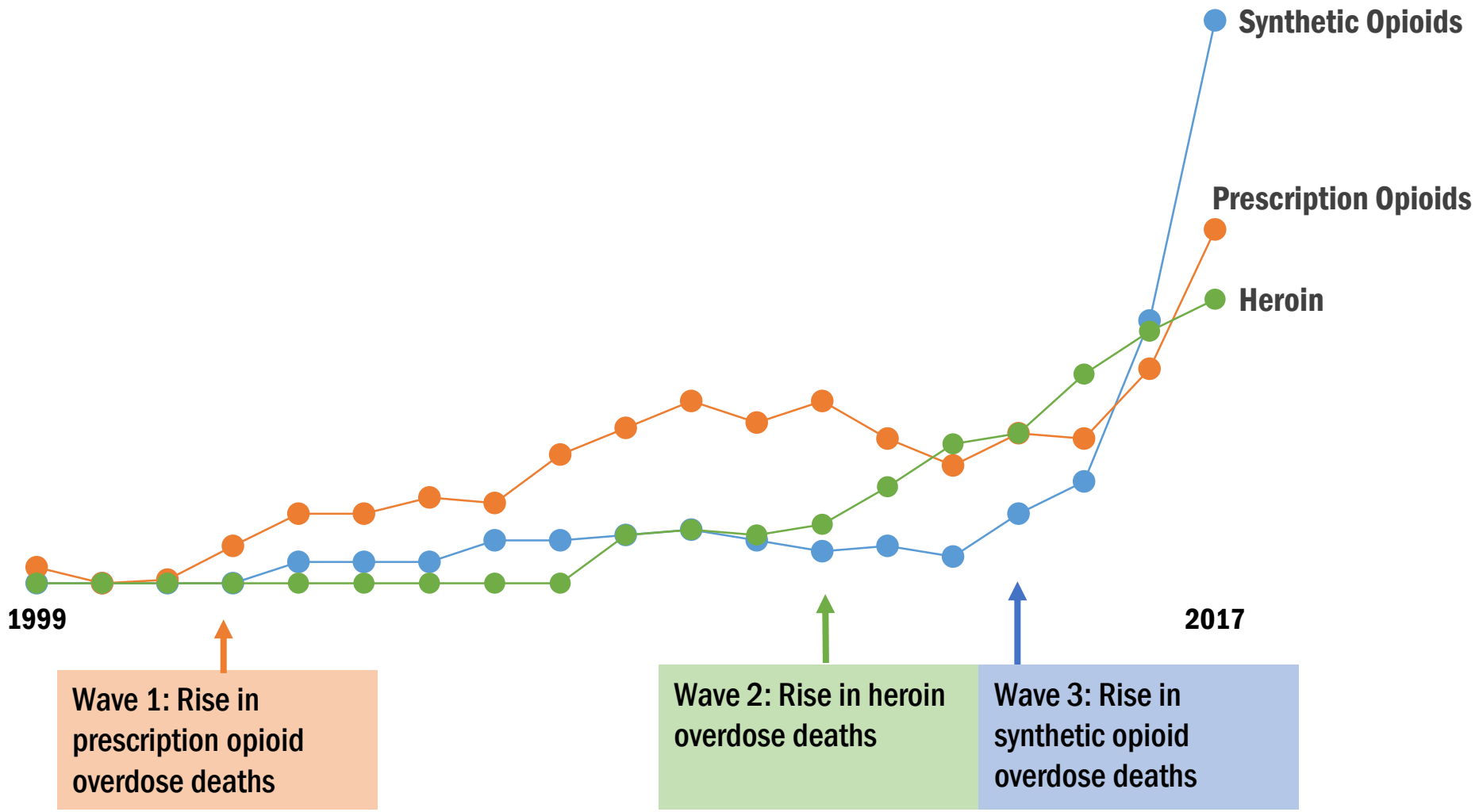
Indiana has consistently had higher opioid prescribing than the U.S. average, but both nationally and statewide there is clear evidence of decreases.

Opioid prescribing rate per 100 persons.



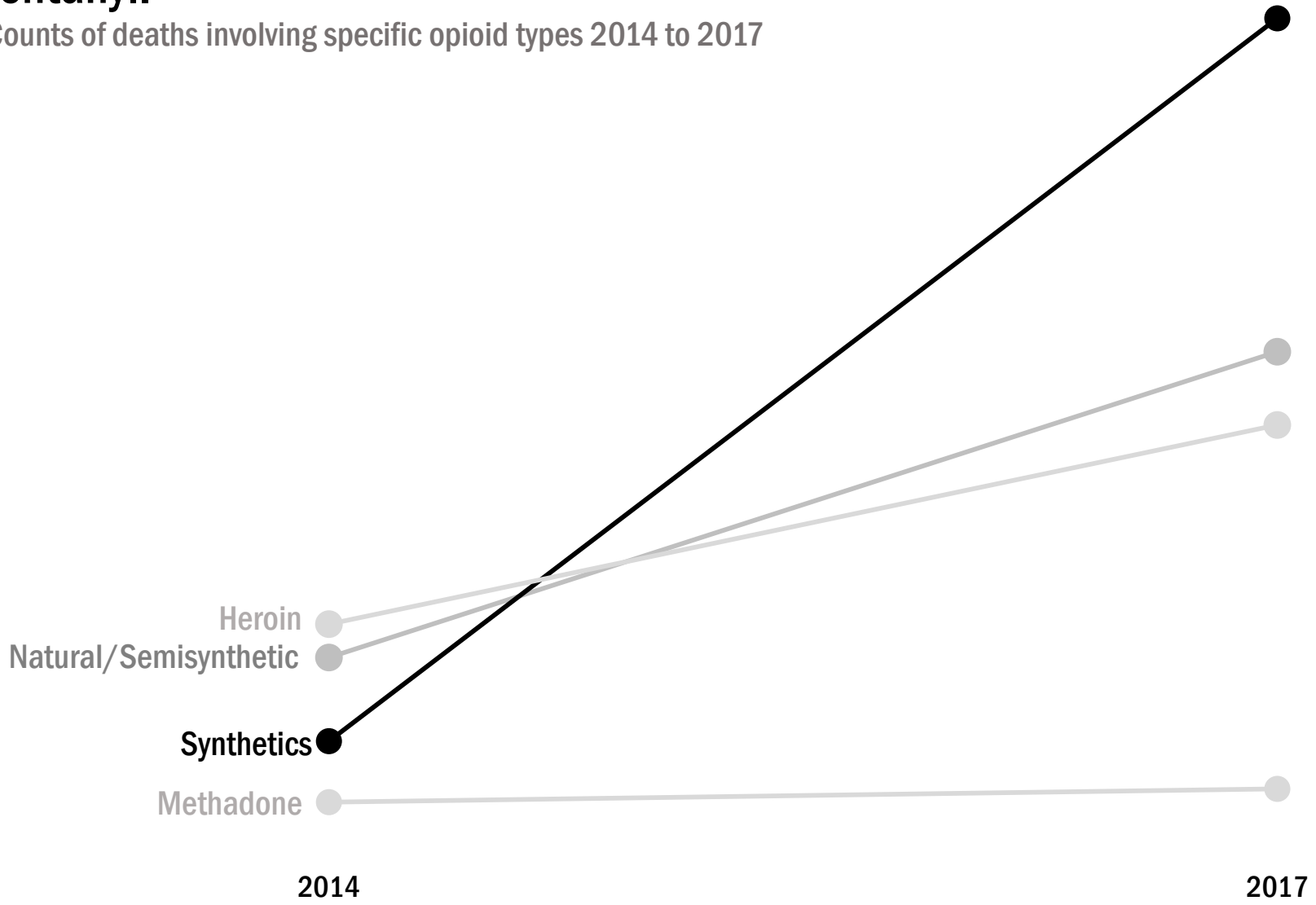
The evolving nature of the opioid epidemic in Indiana has comes in three distinct waves.

Age-adjusted drug class overdose death rate 1999-2017

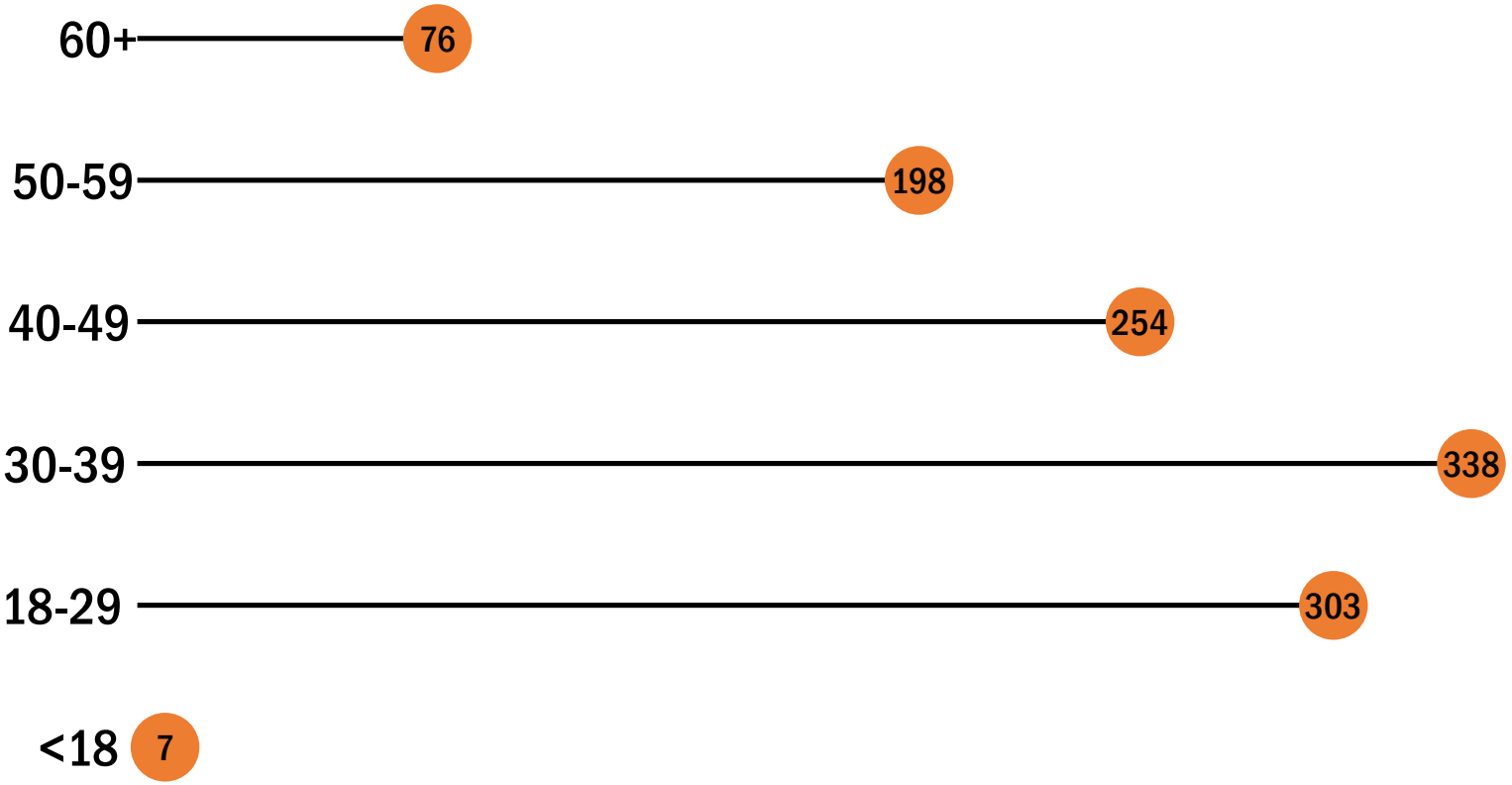


The type of opioids involved in overdose deaths rose for all opioid types except methadone but the highest driver of opioid involved deaths was **synthetic opioids such as illicitly made fentanyl.**

Counts of deaths involving specific opioid types 2014 to 2017

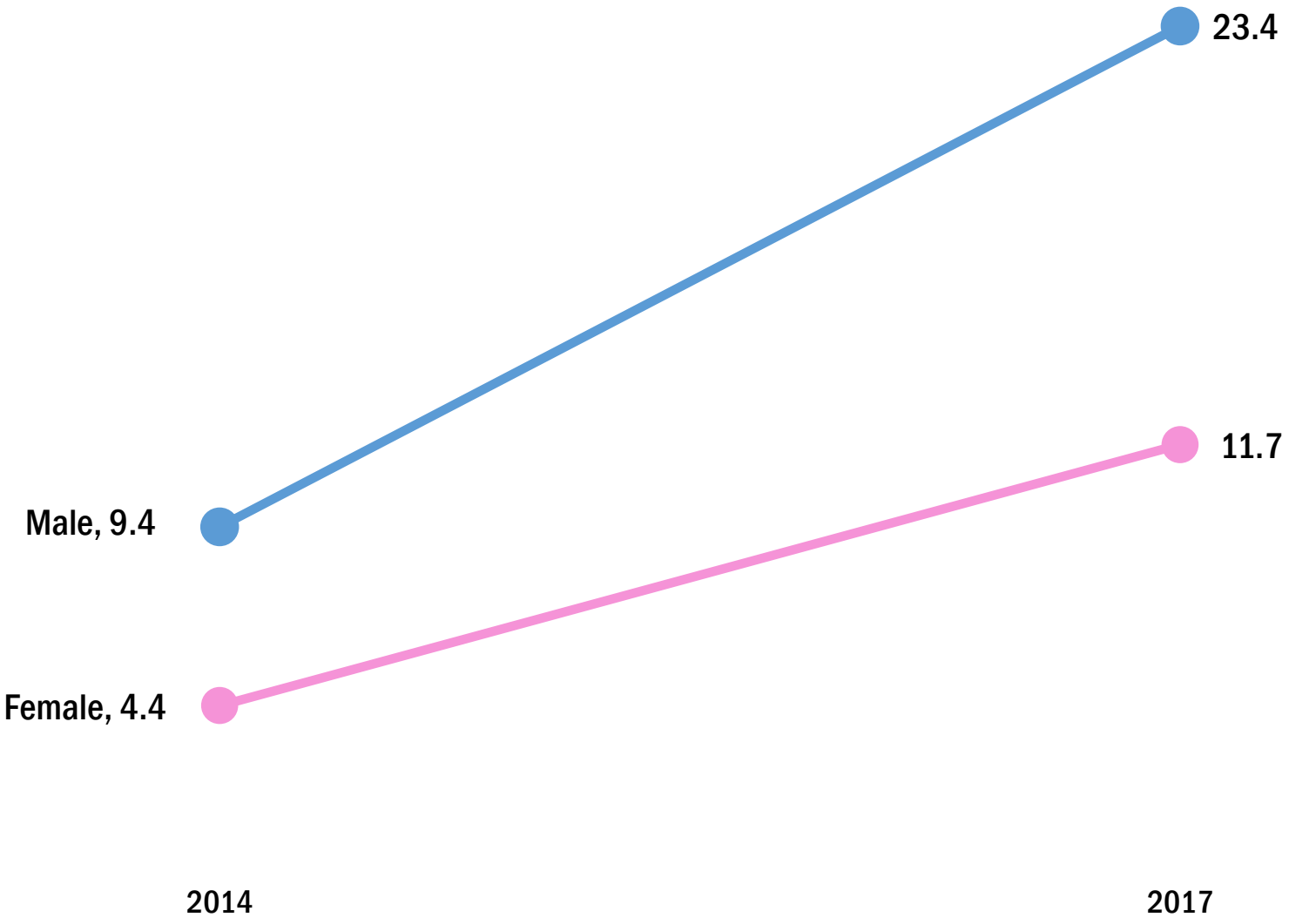


In Indiana all age groups are impacted by the opioid epidemic but those aged 30-39 had the highest number of opioid involved overdose deaths in 2017.



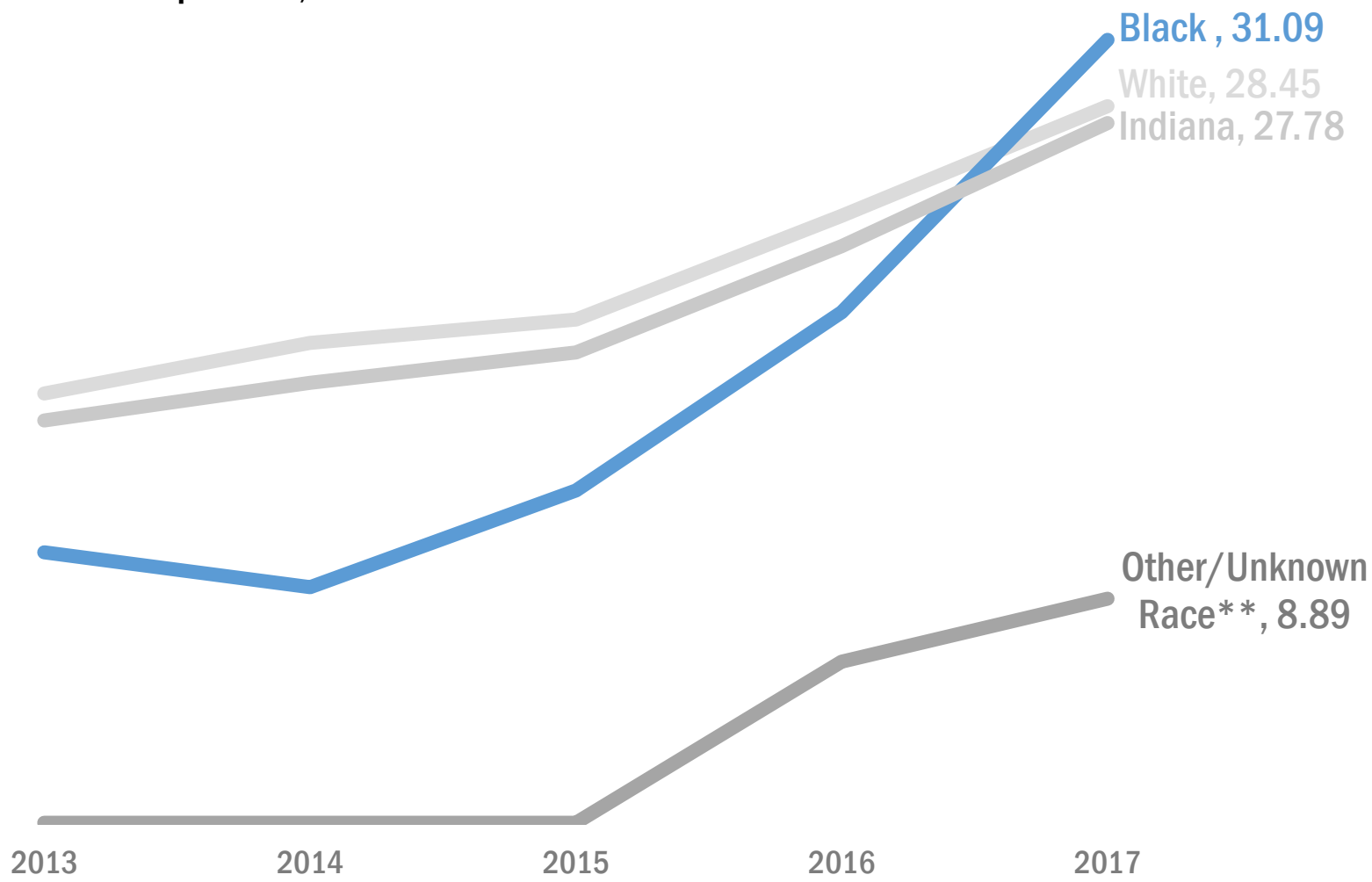
Opioid overdose has increased for both sexes but males are consistently at higher risk of opioid overdose in Indiana.

Sex-specific opioid overdose rates 2014 to 2017



Overdose death rates reached a high for all populations in 2017, but the rate increase was highest for the Black population.

Race-specific rates per 100,000



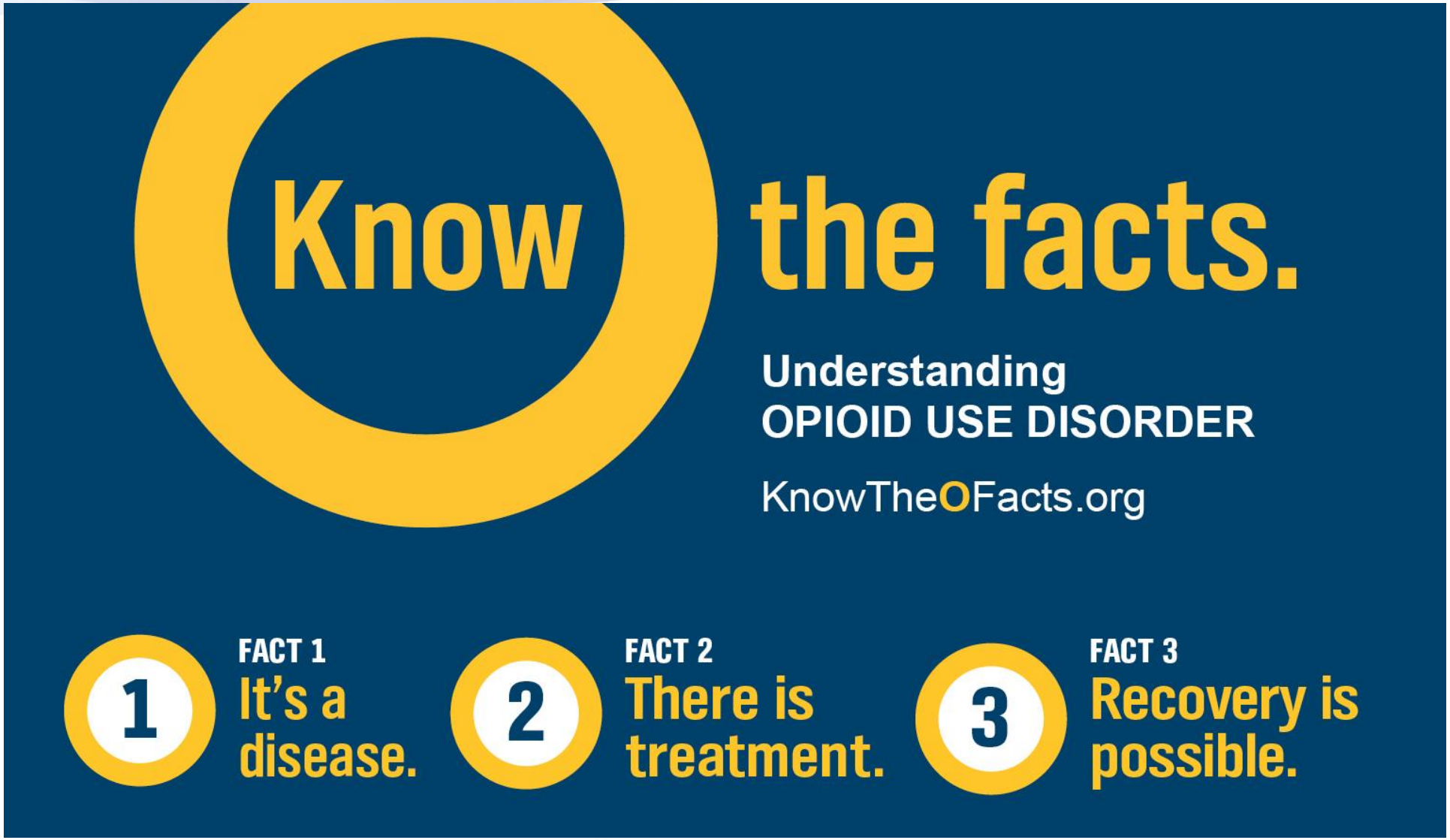
II. INTRODUCTION AND CONTEXT

Indiana State Department of Health

Addiction

Addiction is considered a brain disease because drugs alter the brain — they change its structure and how it works.

They alter the reward pathway, leading to long-lasting changes.



#KnowTheOFacts

https://youtu.be/9LzDw7U6dJg

What can you do to reduce the stigma?

#KnowTheOFacts

Know the facts.

Language matters

SAY THIS → NOT THIS

Person with Opioid Use Disorder	Addict, user, druggie, junkie, abuser
Disease	Drug habit
Person living in recovery	Ex-addict
Person arrested for a drug violation	Drug offender
Substance dependent	Hooked

#KnowTheOFacts

Know the facts.

Language matters

SAY THIS → NOT THIS

Medication is a treatment tool	Medication is a crutch
Had a setback	Relapsed
Maintained recovery; substance-free	Stayed clean

Sources: Office of National Drug Control Policy, *Changing the Language of Addiction., 01/09/17.*
National Council for Behavioral Health, Language Matters, September 2015.

#KnowTheOFacts

Know the facts.

Signs of Substance Misuse

PHYSICAL	HEALTH	BEHAVIOR	ENVIRONMENT / WHAT YOU MAY NOTICE OR FIND	
Constricted pinpoint pupils	Weight loss	“Nod off” to sleep	Missing money, credit cards, checks and/or valuables	Empty Ziploc baggies or paper folded w/ a waxy substance. Small balloons.
Track marks on arms, covering arms w/ long sleeves	Nausea/Vomiting	Start using laxatives	Pawn slips	Spoons with burn marks or missing spoons
Itches and scratches on skin	Constipation	Lose friends they’ve had for a long time	Purchases returned for refunds	Loose change with powder substance on it
Overall unhealthy look	In women, not getting period	Problems in school or work	Constant requests for money	Aluminum foil or gum wrappers with burn marks
Lack of hygiene	Depression	Spend more time away from home	More frequent, secret phone calls	Cans with tops torn off and burn marks
Slurred speech	Changes in appetite or sleep	Trouble with police	Bottles of vinegar or bleach	Straws cut in half and/or empty pens
Poor coordination		Loss of interest in activities/hobbies	Cotton Balls	Syringes and tourniquet (shoe laces, belts)

Harm Reduction

Goal: minimize the negative effects of drug use for people who use drugs, their families and their communities. Harm reduction approaches:

- Are rooted in a commitment to public health and human rights
- Combat stigma
- Empower people who use drugs to keep themselves as safe as possible
- Meet people where they are
- Aim to attain any positive change

III. NALOXONE REVERSAL AND EDUCATION

Indiana State Department of Health

What is Naloxone?

Naloxone is a medication that reverses opioid overdose by restoring breathing.

About naloxone:

- Wears off in 30 minutes to two hours
- Delivery: intramuscular, intranasal or intravenous
- Side effects are minimal and rare
- No potential for misuse or high
- No effect on someone who hasn't taken opioids
- Safe for children and pregnant women

Naloxone is only effective in reversing **opioid** overdoses.

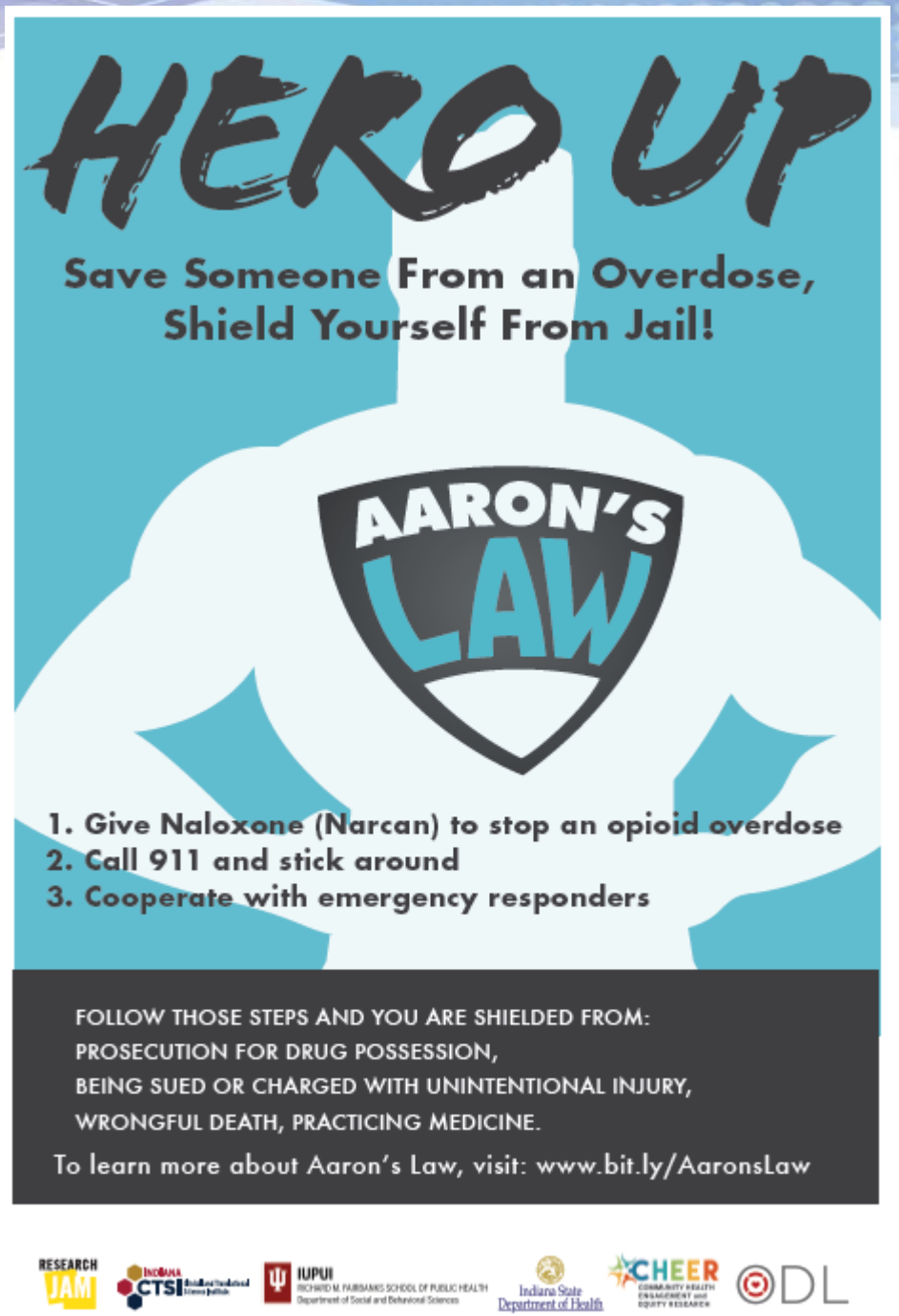
Naloxone Products

Six companies manufacture nine naloxone products.

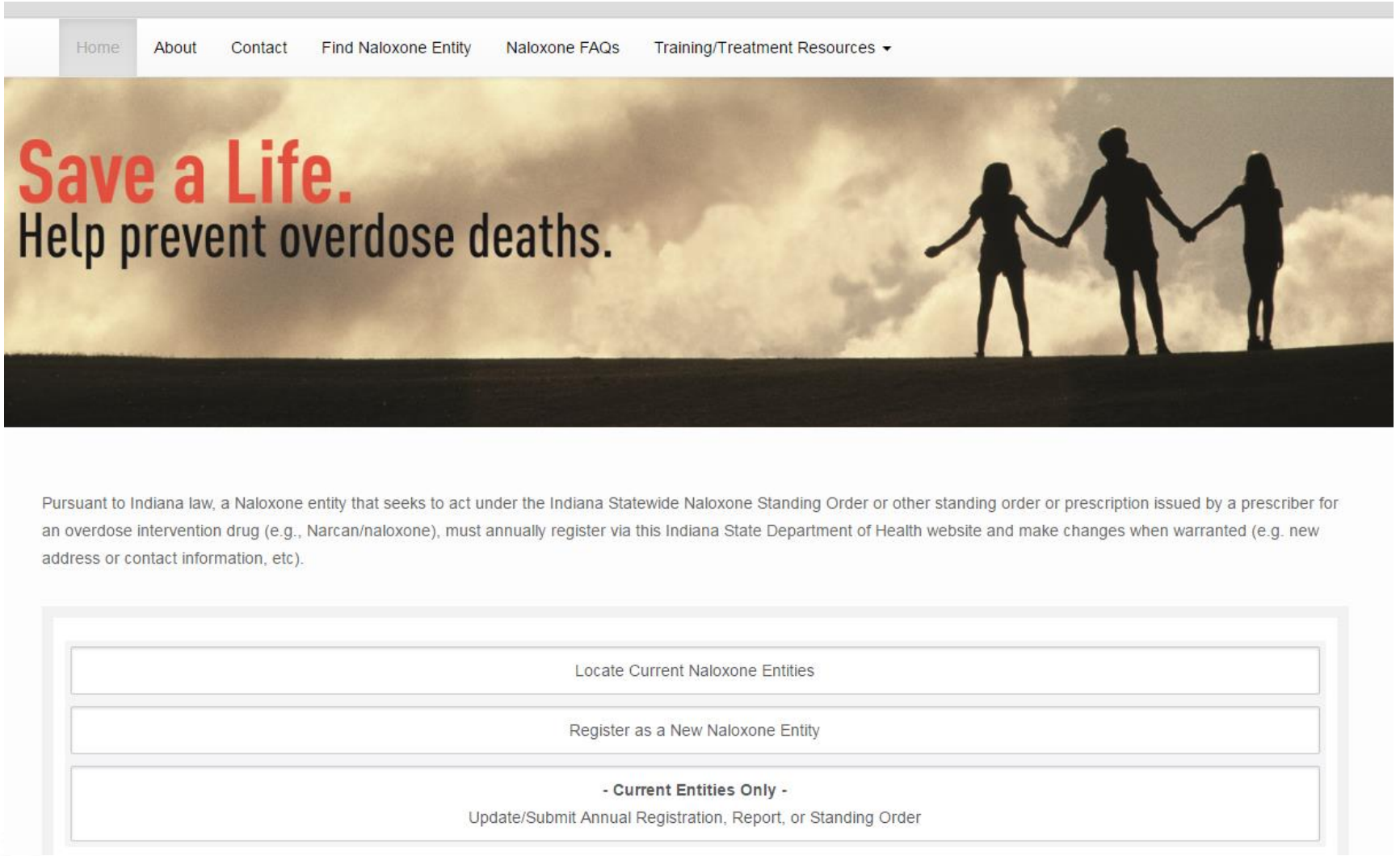
Visit PrescribeToPrevent.org to compare products.

Indiana Legislation

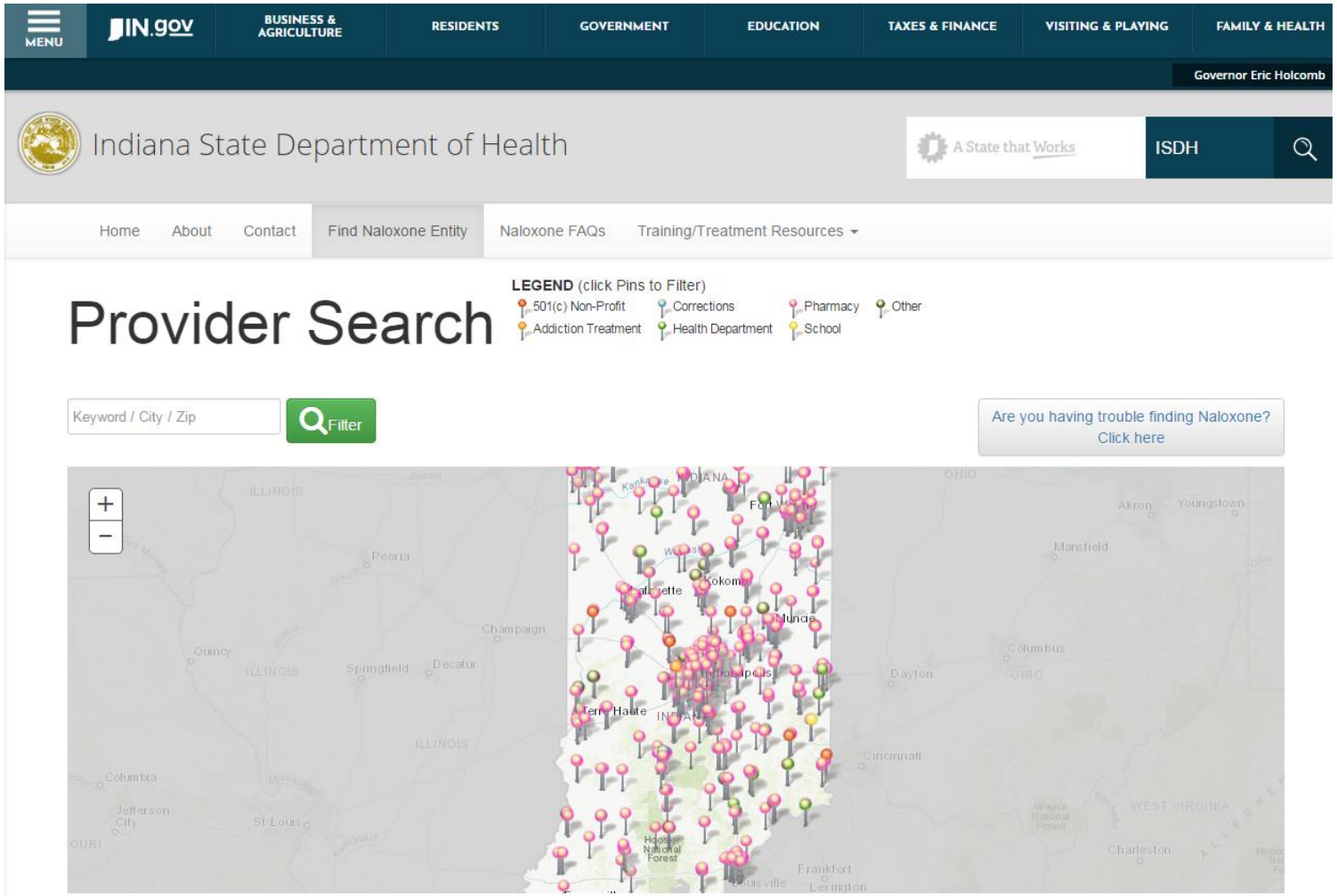
- IC 16-31-12
  - Expands first responder use of naloxone to EMT's, Police Officers and Firefighters
- IC 16-42-27 Aaron's Law
  - Expands the use of naloxone to the public.
    - Statewide standing order removes need for prescriptions. (Standing order from state health commissioner)
    - Must be trained
    - Must alert 911 immediately after use of naloxone
    - Must receive information about addiction services (including MAT)
    - Must register and report annually to optIN



optIN.IN.gov


Home
About
Contact
Find Naloxone Entity
Naloxone FAQs
Training/Treatment Resources
Save a Life.
Help prevent overdose deaths.
Pursuant to Indiana law, a Naloxone entity that seeks to act under the Indiana Statewide Naloxone Standing Order or other standing order or prescription issued by a prescriber for an overdose intervention drug (e.g., Narcan/naloxone), must annually register via this Indiana State Department of Health website and make changes when warranted (e.g. new address or contact information, etc).
Locate Current Naloxone Entities
Register as a New Naloxone Entity
- Current Entities Only -
Update/Submit Annual Registration, Report, or Standing Order

Find a naloxone entity on optIN



What Naloxone Does and Doesn't Do

- Naloxone has a shorter half-life than many opioids
- Overdoses with long-lasting opioids like methadone or longer acting prescription pills may even require ongoing intravenous naloxone
- Naloxone does not work for overdoses produced by non-opioids (e.g., benzodiazepines, alcohol, other sedatives)

For these reasons, calling 911 and getting appropriate medical care is important!

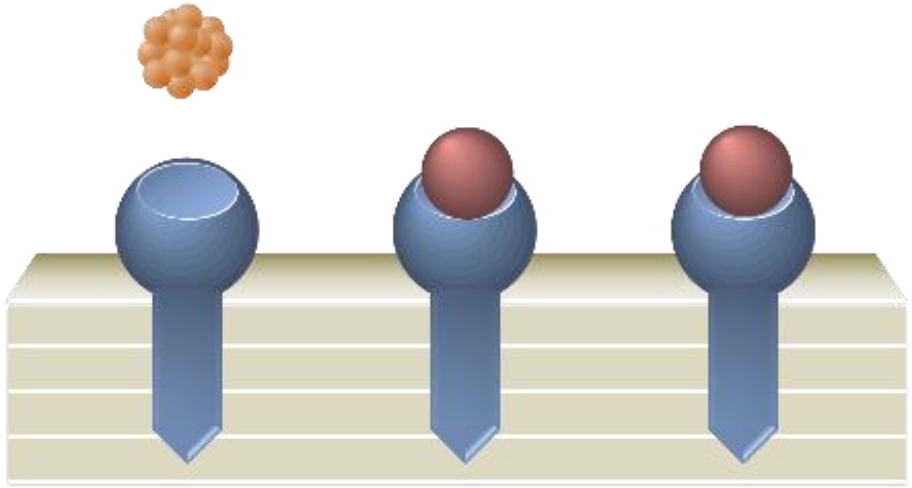
Indiana State Department of Health

IV. RECOGNIZE AND RESPOND TO AN OVERDOSE

Indiana State Department of Health

What is an Opioid?

Opioids are substances that interact with the opioid receptors in the body.



Opioids can be:

- Natural (derived from opium) or synthetic
- Prescription medications or illegal drugs
- Pills, capsules, powder or liquid
- Swallowed, smoked, snorted or injected

Indiana State Department of Health

Examples of Prescription Opioids

Generic Name	Brand Name
Oxycodone	Oxycontin, Percocet, Roxicodone
Oxymorphone	Opana
Hydrocodone	Vicodin, Lorcet, Zohydro, Zortab
Hydromorphone	Dilaudid
Morphine	
Meperidene	Demerol
Codeine	Tylenol 3 & 4
Buprenorphine	Suboxone, Subutex, Zubsolv
Methadone	
Fentanyl	Duragesic

Examples of Illicit Opioids

- **Heroin**
- **Non-pharmaceutical fentanyl**
  - Illicitly produced, synthetic drug
  - Pill form packaged to look like prescription medications
  - Powder form looks similar to heroin
  - Fentanyl may be hundreds of times more potent than heroin.

Indiana State Department of Health

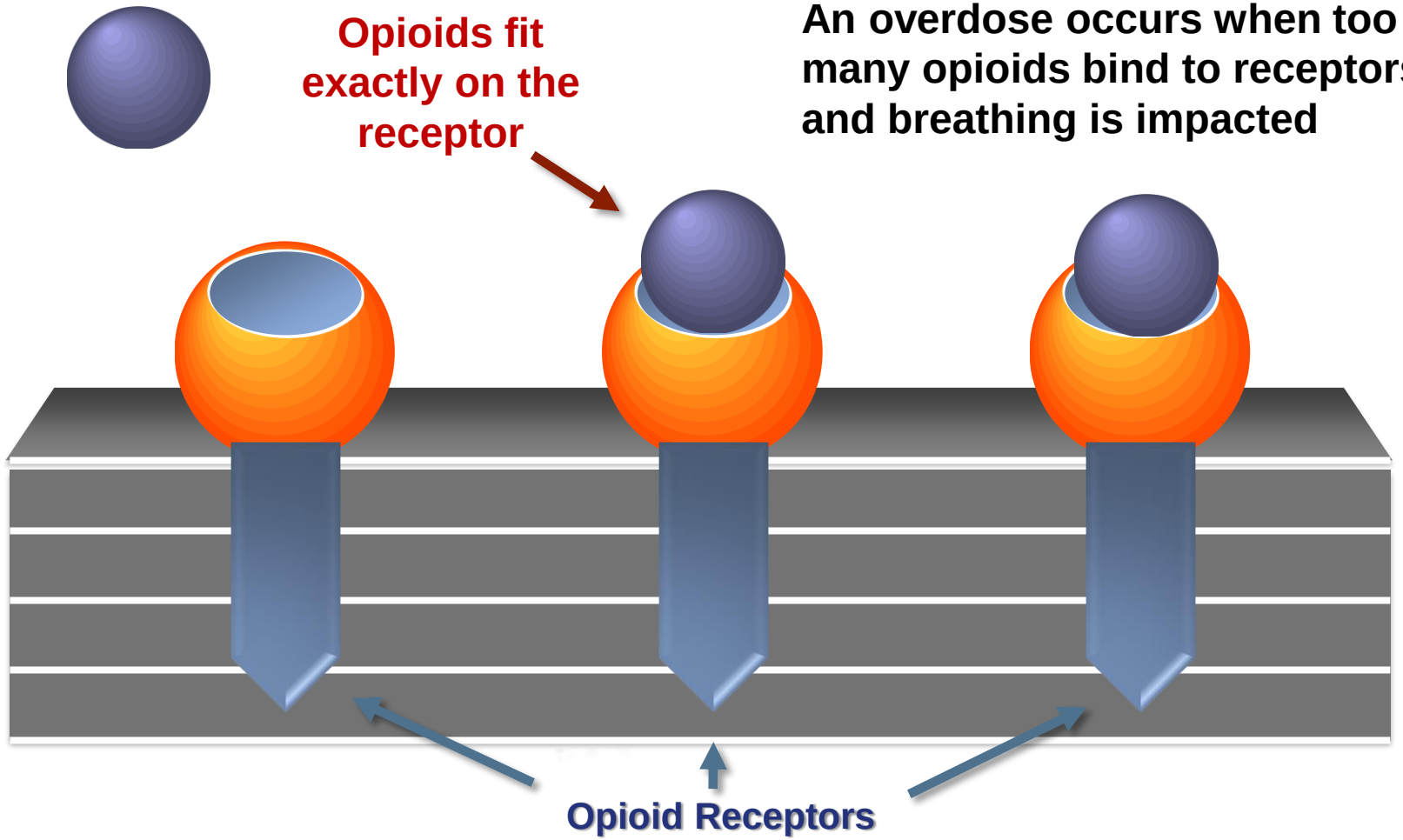
What is an Opioid Overdose?

Opioid overdose happens when a toxic amount of an opioid — alone or mixed with other opioid(s), drugs and/or substances — overwhelms the body's ability to handle it.

Many opioid-related overdoses result from mixing prescription painkillers or heroin with benzodiazepines (benzos), cocaine and/or alcohol.

Indiana State Department of Health

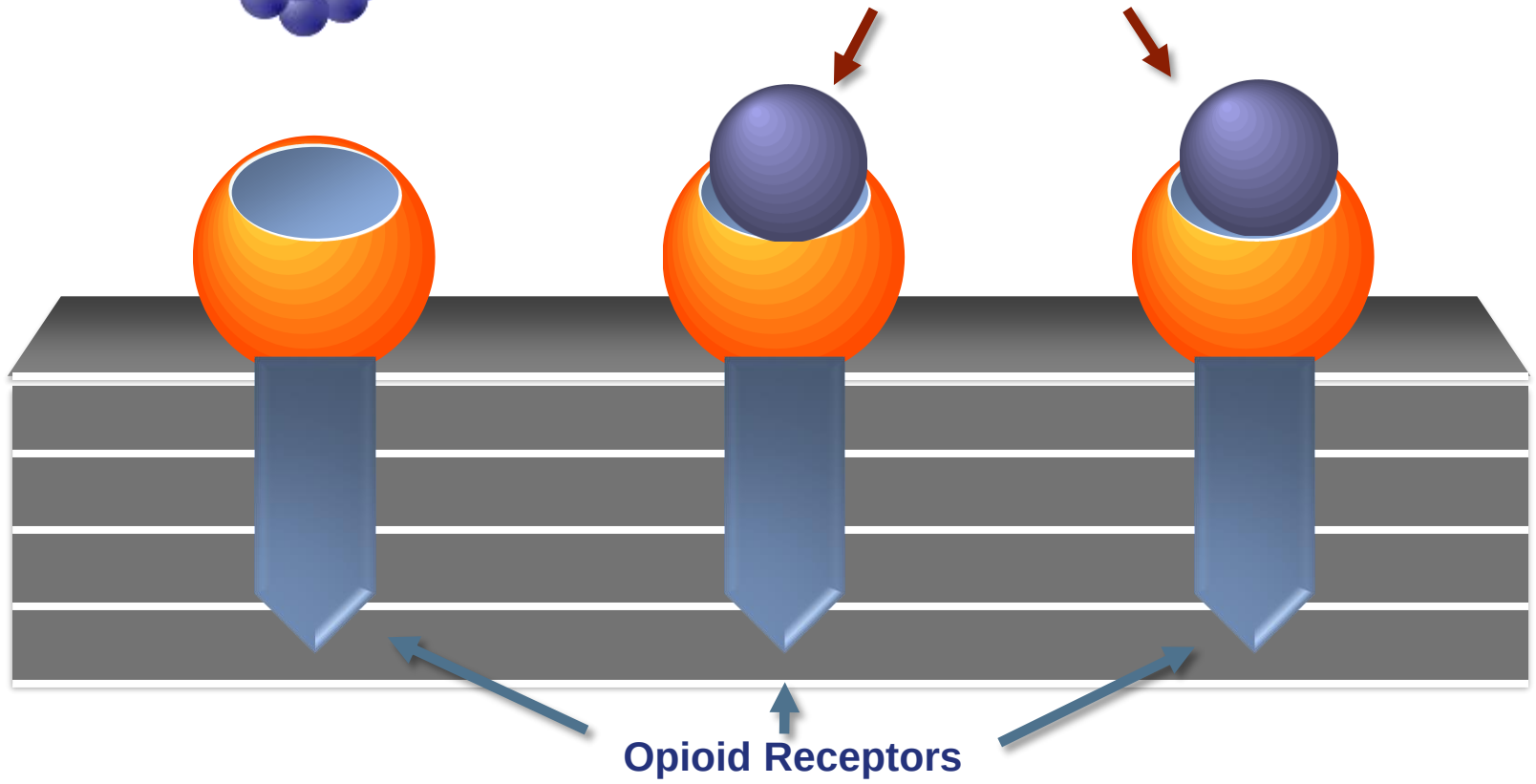
Simulation of an Overdose



Naloxone Reversing an Overdose

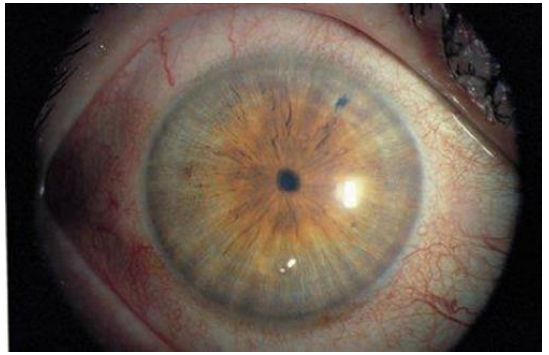
Naloxone

Naloxone has a stronger affinity for the receptor than the opioids and knocks them off for a period of time



Recognizing an Opioid Overdose

- Slow breathing (fewer than one breath every five seconds) or no breathing
- Pinpoint pupils
- Vomiting
- Face is pale and clammy
- Blue lips, fingernails or toenails
- Slow, erratic, or no pulse
- Snoring or gurgling noises while asleep or nodding out
- No response when you yell the person's name or rub the middle of their chest with your knuckles



Responding to an Opioid Overdose

1. Rouse the person
2. Call 911
3. Begin rescue breathing
4. Use naloxone and continue rescue breathing
5. Put the person in the recovery position
6. If no response after three minutes, use an additional dose of naloxone

Indiana State Department of Health

Step 1: Rouse and Stimulate

Noise – Shake person's shoulders and yell:

"[Name!] Are you all right? Wake up!"

Pain – If no answer, do a sternum rub: Make a fist and rub your knuckles firmly up and down the breastbone.

Step 2: Call 911

Tell 911 operator:

- Where you are
- What you observe

Tell emergency responder onsite:

- Drugs/substances the person used
- Naloxone administered – how much & when

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Step 3: Rescue Breathing

Make sure nothing is in the person's mouth that could block his or her breathing. If breathing stops or slows, begin rescue breathing as follows:

First Step: *Tilt their head back, lift chin, pinch nose shut.*

Second Step: *Give one slow breath every five seconds. Blow enough air into their lungs to make their chest rise.*

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Step 4: Use naloxone and continue rescue breathing

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How do you administer Naloxone?

There are four ways to give naloxone.

Follow the instructions for the type you have.

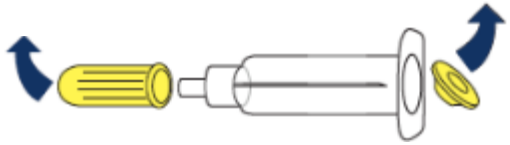
1. **Assembly required nasal spray**
2. **Ready-to-use nasal spray** (Narcan)
3. **Auto-injector** (Evzio)
4. **Injectable naloxone** (recommended administration by trained EMS)

Intranasal Narcan®

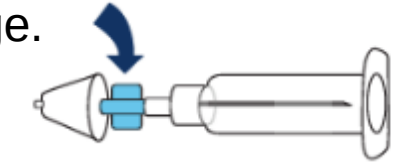
- Ensure EMS have been called and are on the way
- Open the medication package by pulling back the foil surrounding the device.
- Tilt individual's head back.
- Insert the tip of the nozzle into one nostril until your fingers are against the bottom of the person's nose.
- Press the plunger firmly to give the entire dose into one nostril.
- Place individual in recovery position.
- Repeat dosage as needed until individual is revived or EMS is on site.

Nasal spray (assembly required)

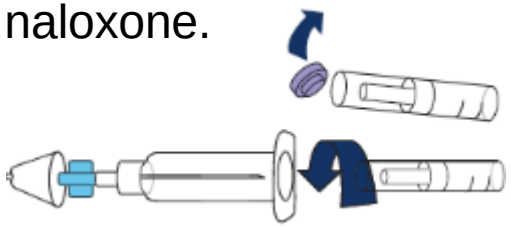
1. Remove the two colored tabs from the delivery syringe



2. Screw the white atomizer cone onto the top of the delivery syringe.



3. Remove the cap off the capsule of naloxone.



4. Gently screw the capsule of naloxone into the barrel of syringe.

5. Insert white cone into nostril; give a short, strong push on the end of capsule to spray naloxone into nose: **ONE HALF (1 ML) OF THE CAPSULE INTO EACH NOSTRIL.**

6. If no response in three minutes, give a second dose.

Intranasal naloxone for infants or small children

- Use one quarter dose of the liquid, one time, in each nostril.
- Repeat as needed in five minutes if the ambulance has not arrived and the child is still unresponsive.

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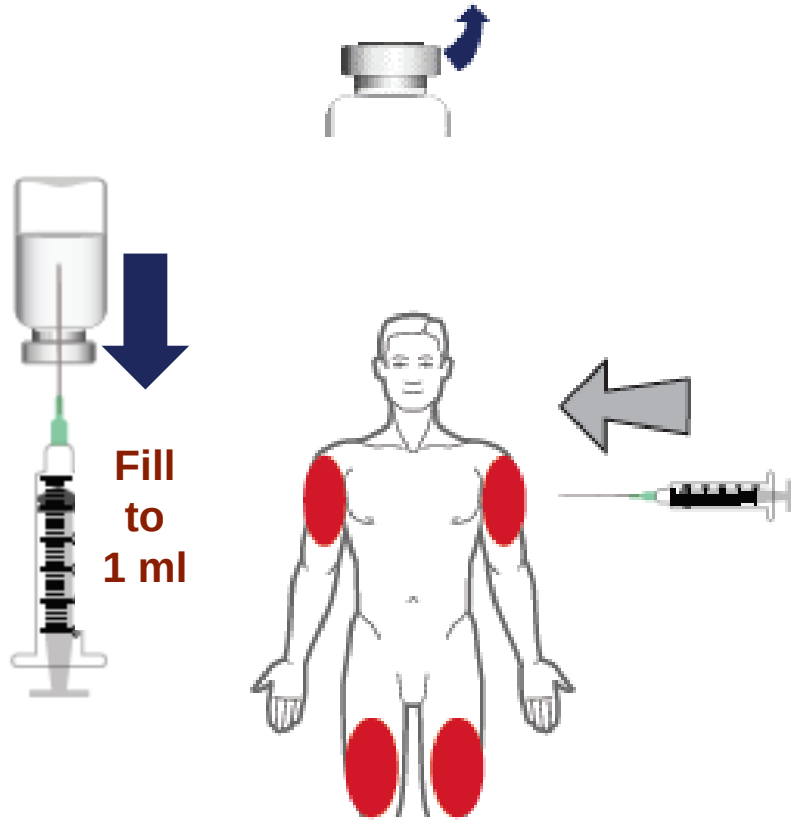
EVZIO

- Pull naloxone auto-injector from case.
- Device will now provide voice-prompt guidance.
- Grasp firmly and pull off red safety guard.
- Place black end against patient's outer thigh.
- Press firmly against patient's outer thigh and hold in place for five seconds.
- Remove auto-injector and dispose in sharps container.

Injectable naloxone

(recommended administration by trained EMS)

1. Remove cap from naloxone vial and uncover the needle.
2. Insert needle through rubber plug with vial upside down. Pull back on plunger and draw up 1 ml of naloxone.
3. Insert the needle into the muscle of the upper arm or thigh, through clothing if needed, and push on the plunger to inject the naloxone.
4. Repeat the injection if no response after three minutes.



Step 5: If breathing resumes, put the person on their side.

If the person begins to breathe on his or her own, put on side so he or she doesn't choke on vomit.

Continue to monitor breathing and perform rescue breathing if respirations are fewer than 10 breaths a minute.

If vomiting occurs, manually clear person's mouth and nose.

Step 6: An additional dose of naloxone should be used.

If the person doesn't respond after three minutes, an additional dose of naloxone should be used.

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What am I going to see after administering naloxone?

If they were overdosing on an opioid:

- Respiratory rate will increase
- Blue color will improve
- Increased consciousness

After receiving naloxone, a person **may**:

- Feel physically ill or vomit
- Feel withdrawal symptoms (unpleasant but not life-threatening)
- Become agitated and upset
- Have a seizure (this is rare)

Continue Care

- Stay with the person until medical help arrives.
- If person cannot sit up, put him/her in recovery position.
- Keep person calm.
- Encourage person not to take more opioids.
- If overdose happens again, give another dose of naloxone.

V. RISK FACTORS AND PREVENTION

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Heroin use is part of a larger substance abuse problem.

Nearly all people who used heroin also used at least 1 other drug.

Most used at least 3 other drugs.

Heroin is a highly addictive opioid drug with a high risk of overdose and **death** for users.

People who are addicted to...

ALCOHOL	MARIJUANA	COCAINE	Rx OPIOID PAINKILLERS
are	are	are	are
2x	3x	15x	40x

...more likely to be addicted to heroin.

SOURCE: National Survey on Drug Use and Health (NSDUH), 2011-2013.

Overdose Risk Factors and Prevention

1. Mixing Drugs

   "Avoid mixing opioids with other drugs or alcohol. If prescribed an opioid and a benzodiazepine by a prescriber, take only as directed."

2. Tolerance

   "If you are using opioids after a period of abstinence, talk to your prescriber first."

Overdose Risk Factors and Prevention

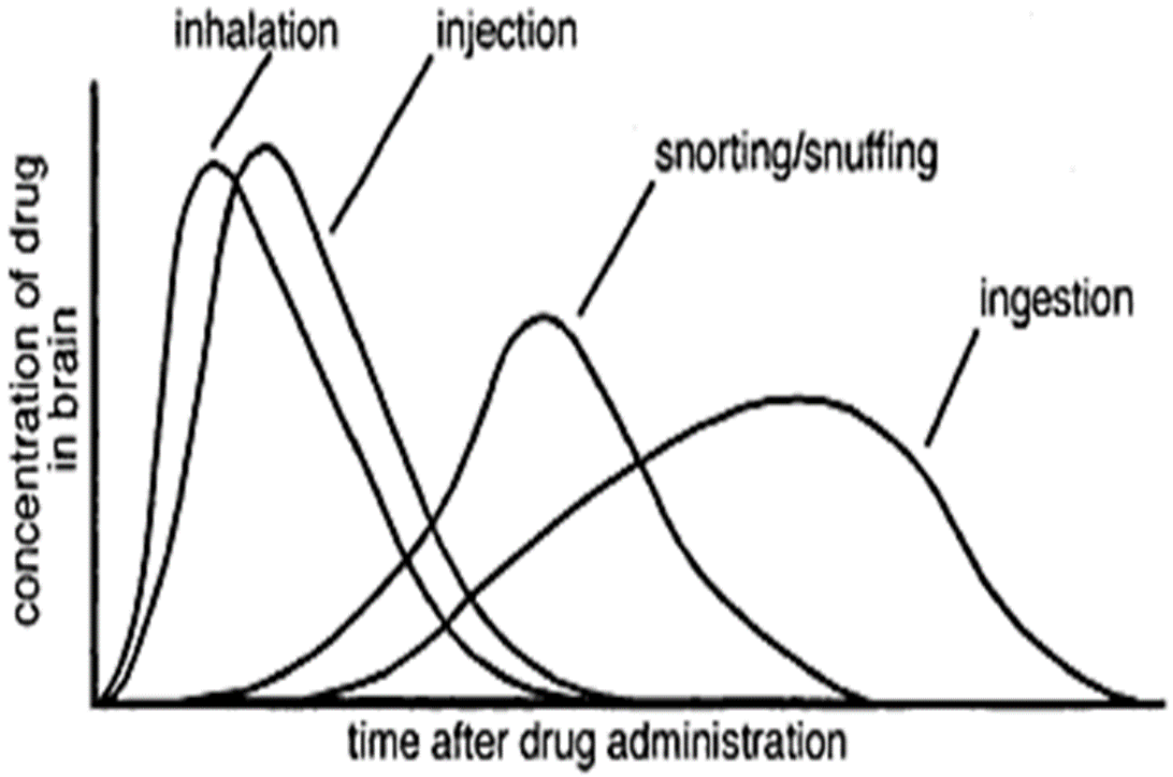
3. Physical Health

   "If you have questions about an opioid prescribed to you, please talk to your prescriber or pharmacist."

4. Previous Overdose

   "To prevent a fatal overdose, teach your family and friends how to recognize and respond to an overdose."

Overdose Risk Factors and Prevention



5. Route of administration

   If injected or inhaled, a substance will peak faster.

6. Environmental factors

   Environmental factors include using in a stressful situation and uncertain supply or availability of opioids.

VI. TREATMENT AND RECOVERY

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Indiana 2-1-1

- Call 2-1-1 to connect with treatment help
- Through a partnership with Indiana 2-1-1 and OpenBeds, people seeking treatment for substance use disorder can be immediately connected with available inpatient or residential treatment services.
- Or visit www.in.gov/fssa/addiction to locate addiction treatment resources in Indiana

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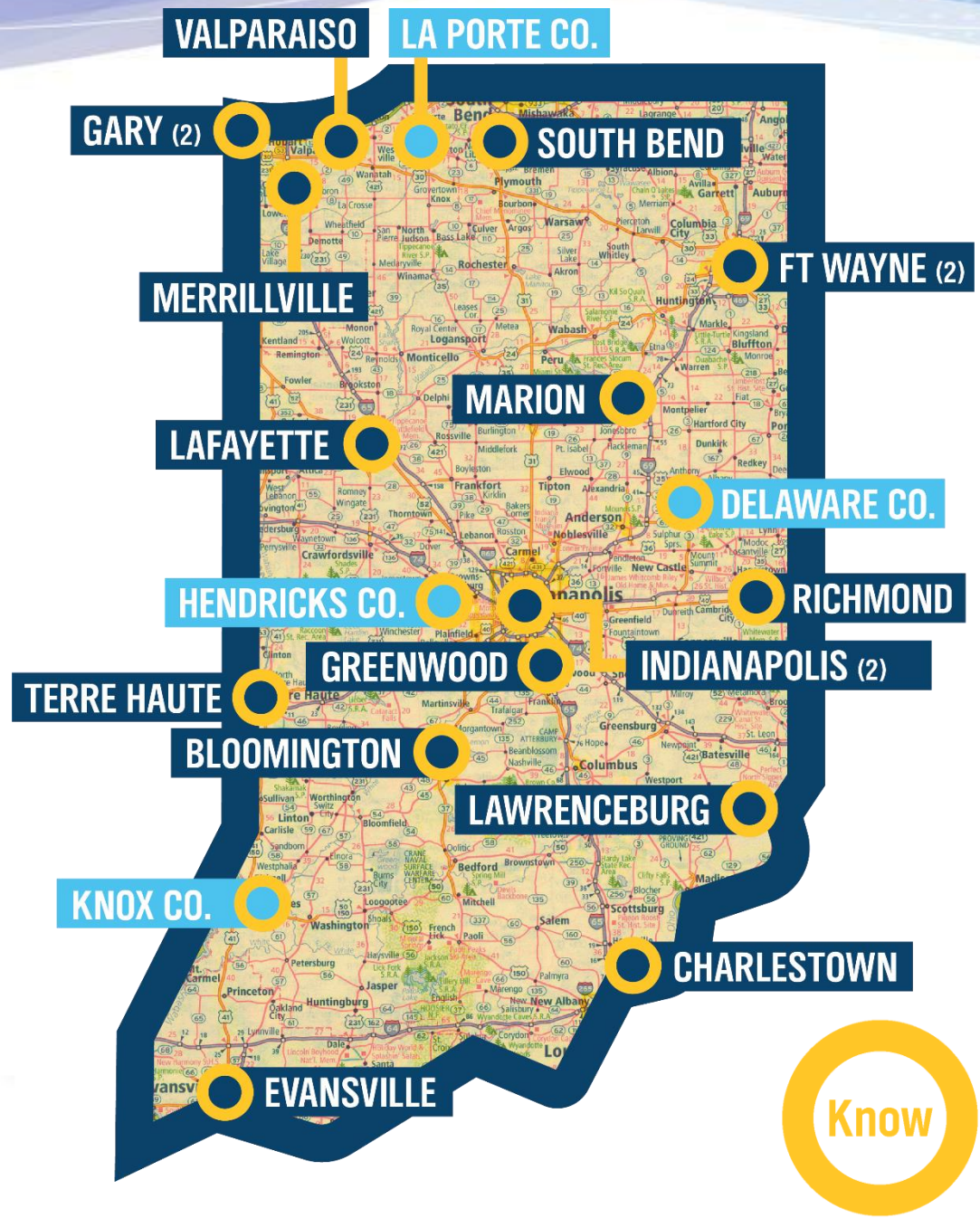
Medication-assisted Treatment

- Combination of medication, counseling and cognitive behavioral therapy
- Methadone, buprenorphine, naltrexone
- Opioid agonists: fulfill the brain's need for illicit opioids
- Opioid antagonists: stop opioids from reacting in the brain

Opioid Treatment Programs in Indiana



- 18 CURRENT OTP'S
- 4 NEW LOCATIONS AWARDED IN 2019

#KnowTheOFacts

Know the facts.

Methadone

- Long-acting synthetic opioid agonist
- Prevents withdrawal symptoms
- Reduces craving
- Blocks effects of illicit opioids

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Buprenorphine

- Synthetic opioid antagonist
- Blocks opioids from binding to receptors
- Prevents euphoria and sedation
- Reduces/eliminates withdrawal symptoms associated with opioid dependence

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Naltrexone

- Synthetic opioid antagonist
- Blocks opioids from binding to their receptors
- Prevents euphoric effects
- Must abstain from opioid use for 7-10 days prior to starting
- No mind-altering effect following detoxification
- No potential for misuse

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Counseling and cognitive behavioral therapy

- Individual and group counseling sessions
- Learn/practice positive drug-free thoughts/behaviors
- Referrals to other services

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Questions?

CONTACT:

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Thanks for joining!

Feel free to invite new attendees for the next meeting in January 2020!

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