



# Indiana State Trauma Care Committee

**August 21, 2015**



Indiana State  
Department of Health



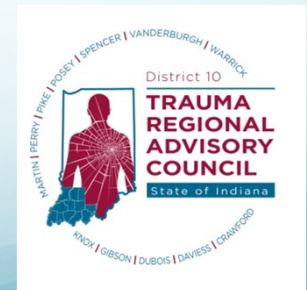
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# An Inclusive Regional Trauma System Plan in District 10: D10TRAC

Stephen Lanzarotti, MD - Co-Chair D10TRAC  
W. Matthew Vassy, MD Co-Chair D10TRAC



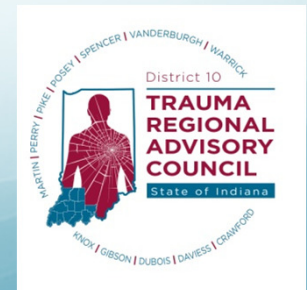
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# Regional Trauma System Plan Development

- Inclusive Trauma Systems emphasize the need and role of various levels of Trauma Centers to cooperate in the care of injured patients to avoid wasting medical resources
- Role of Verified/Designated Trauma Centers in the Development of Regional Trauma Systems.
  - “Meaningful participation in state and regional trauma system planning, development, and operation is essential for all designated facilities within a region.”

Resource: Optimal Care of the Injured Patient 2006 ACS/COT

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# What is a trauma system plan?

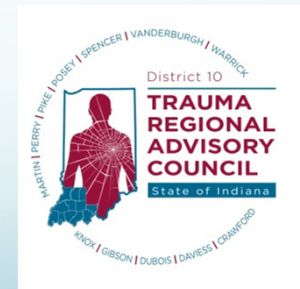
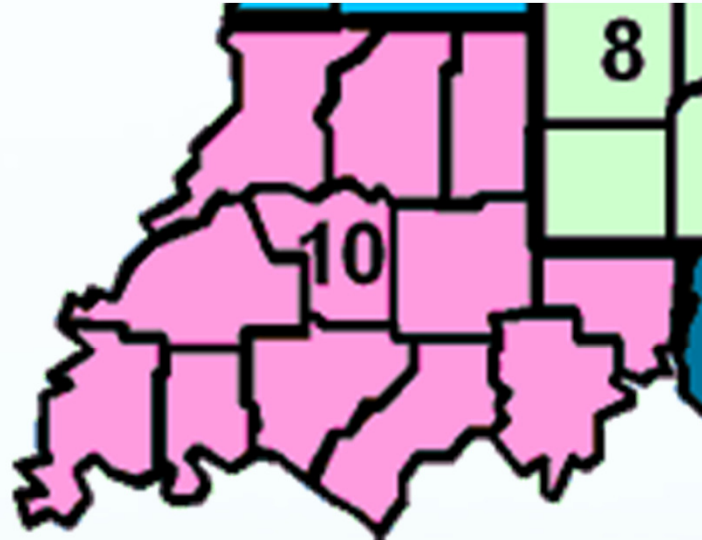
- A trauma system plan is an organized process within a geographical area that guides flow of injured patients to the proper facility for best patient care and best outcomes.
- Local – Evansville
  - Pre-hospital protocols to guide flow of injured patients.
  - Trauma center coordinates with pre hospital services
- Regional – D10TRAC
  - Develop a regional trauma system plan for District 10 in Indiana which is based on standard guidelines set forth by the ACS-COT, for comprehensive trauma and acute care system development.
  - Oversight by ISDH Division of Trauma and Injury Prevention.

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# D10 Demographics

- Population:  
595,893  
(based on 2013 data)
- Counties: 12
- Hospitals: 10
- EMS: 87
- Flight Services: 4



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# Region 10 Hospitals

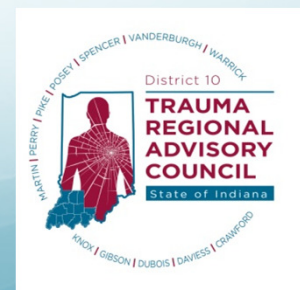
Hospital	County
Daviess Community Hospital	Daviess
Deaconess Hospital	Vanderburgh
Deaconess Gateway	Warrick
Deaconess Women's Hospital	Warrick
Gibson General Hospital	Gibson
Good Samaritan Hospital	Knox
Memorial Hospital and Healthcare	Dubois
Perry County Memorial	Perry
St. Mary's Medical Center	Vanderburgh
St. Mary's Warrick Hospital	Warrick

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# History of Organizational Efforts

- 2005-2007: TPM and TMD visit each hospital in District 10
  - Purpose: update key stakeholders on the progress of the Indiana Trauma Task Force and the development of the Indiana Trauma System Plan.
  - Distributed the yellow/green book, copies of minutes from the Indiana Task Force meetings, and templates to implement transfer agreements with the Level II Trauma Centers in Evansville and Level I Trauma Centers in Indianapolis.
  - Stakeholders were asked to consider participating in the regional trauma system plan with a goal of becoming a Level III or Level IV trauma center.
  - Emphasis: Trauma System Rather than Trauma Center
    - Right patient, right place, right time
    - Participation in an inclusive system to provide care of injured patients and meeting the needs of each rural community.

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# Critical Success Factors

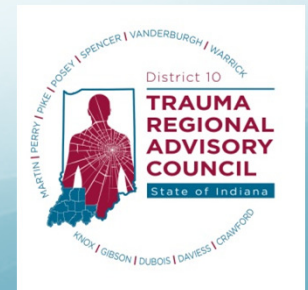
- April 2011: First organized meeting of District 10 Regional Trauma System Plan Task Force
  - Overview of Regional Trauma System Plan development based on the TX model
- July 2011: Level IV Trauma Center - Dr. Barnes, TMD and Robin Leidecker TPM, Livingston Hospital Level IV Trauma Center
- October 2011: Level III Trauma Center - Dr. Anthony Borzotta, TMD, Bethesda North Level III Trauma Center, Cincinnati, OH



# Meeting Logistics

- Rotate location throughout the District
- Ask hosting hospital to present a trauma case of their choice
- IDPH comes to answer questions and present data from District
- Cover hot topics in trauma care

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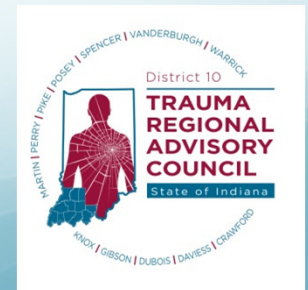
# Evolution of D10TRAC

- 2012 Quarterly Meetings:
  - Emphasis on state registry participation, drafting of by-laws
  - By-Laws Steering Committee
  - Formation of D10TRAC Executive Committee
  - Nomination of Officers
  - Special Committees
  - Case study presentations with education/PI emphasis

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# Voting Members:

- One representative from each district hospital (9 hospitals)
- Six representatives from Emergency Medical providers
  - One from an urban county (Vanderburgh)
  - One from rural county with hospital (Perry, Daviess, Dubois, Knox, Warrick, Gibson)
  - One from rural county without hospital (Martin, Crawford, Spencer, Posey, Pike)
  - Air Transport, hospital based
  - Air Transport, non hospital based
  - EMS medical director



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# Evolution of D10TRAC

- 2013 Quarterly Meetings:
  - One on one mentoring with each hospital to facilitate state registry participation
    - All hospitals reporting late 2013 to trauma registry
  - Logo, Mission Statement, Website
  - EMS Virtual Access proposal
  - Fluid Management Discussion
  - Education Subcommittee Survey
  - District 10 PI – ED LOS

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# Evolution of D10TRAC

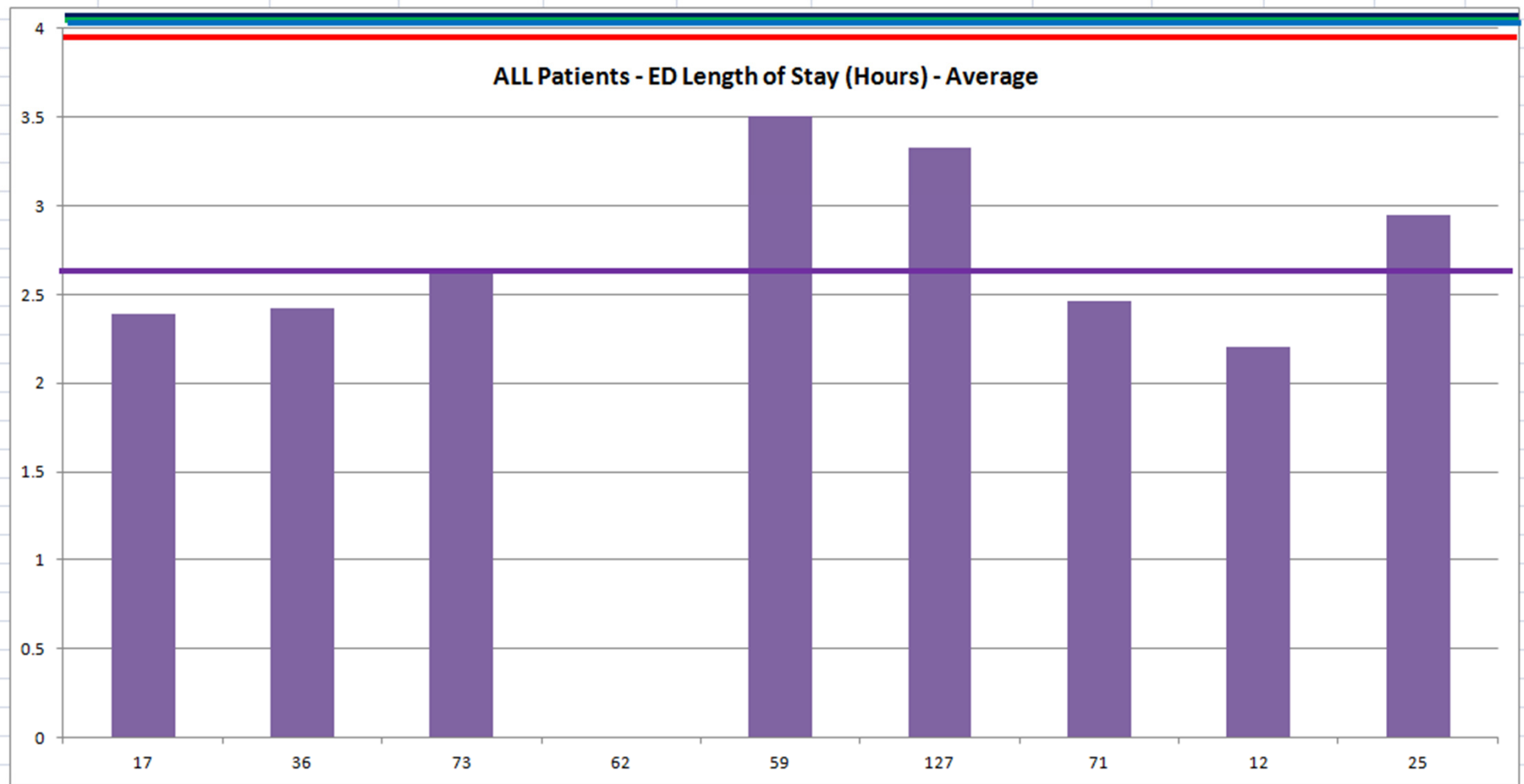
- 2014-2015 Quarterly Meetings:
  - Data Review
  - District 10 PI – ED LOS
  - Pediatric Trauma: unique population, need for specialized services
  - Case Study from hosting facility
  - Education Subcommittee
  - Balanced Resuscitation, Anticoagulant Reversal Agents, Tourniquet Use
  - Ad hoc membership: Rehabilitation


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# District 10 Data Highlights

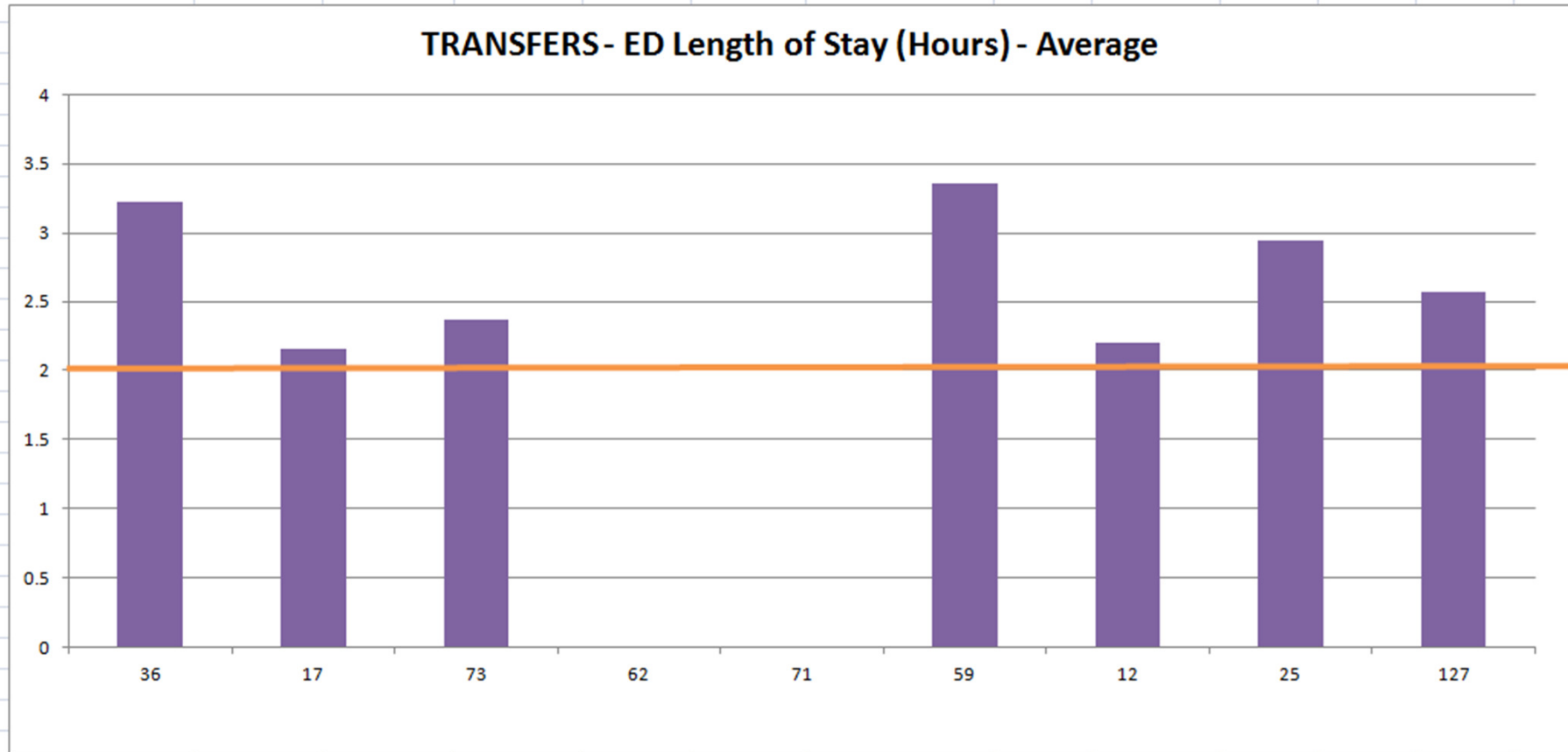
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	Indiana Average	4.03 hours
	Trauma Center Level I & II Average	3.91 hours
	Trauma Center Level III Average	4.23 hours
	Non-Trauma Center Average	4.1 hours
	District 10 Average	2.6 hours

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# transfer patients ONLY



Indiana Goal

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# District 10 Data Report - Highlights

- 8,052 incidents reported to the state
  - 995 came from District 10
- ED LOS (hours)
  - < 1 hour = 13% (vs. 5% Statewide)- Up 3% from Q3's (10%)
  - 1-2 hours = 51% (vs. 30% Statewide)- Stayed the same
  - 3-5 hours = 31% (vs. 41% Statewide)-Down 1% from Q3's (32%)

64% of the cases in D10

# District 10 Highlights

- ICU LOS (Days)
  - No ICU = 66% (vs. 82% Statewide)
  - 1-2 Days = 22% (vs. 8% Statewide)
  - 3-7 Days = 9% (vs. 7% Statewide)
- Hospital LOS
  - No Hospital Stay = 16% (vs. 18% Statewide)
  - 4-7 Days = 37% (vs. 34% Statewide)



# Future D10TRAC Trauma System Planning and Development

- D10TRAC management guidelines and protocols
- Data driven system performance improvement initiatives
- Prepare/assist member organizations in attaining trauma designation at the level appropriate for the resources in their area
- Trauma system funding-when applicable, approve and distribute funding to trauma care providers according to legislative rules.

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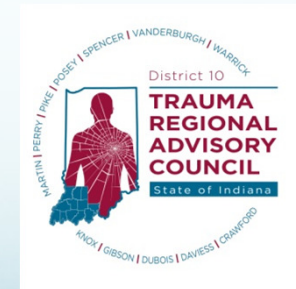
# Future D10TRAC Trauma System Planning and Development

- Increase public awareness of the methods to access the trauma and acute care system and injury prevention programs in District 10.
- Enhance communication between pre-hospital health care providers and hospitals to facilitate the transport of patients to appropriate trauma facilities and utilization of the most efficient mode of transport.
- Provide education and certification programs for trauma care providers throughout region based upon identified needs (PIPS program, educational survey)

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# D10TRAC: What is the goal ?

- An inclusive trauma system for care of the injured patient in southern Indiana
- Provision of technical assistance and education to regional hospitals and providers for the purposes of improving system performance



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# Summary


- Inclusive Trauma Systems require:
  - Ongoing evaluation of Local, Regional, State System plans
  - Leadership
  - ISDH
  - ACS-COT
  - Level I, II Trauma Centers
- The trauma system consists of a variety of discrete components interacting in an organized manner to accomplish defined goals.



# Questions?

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# Trauma Registry Implementation Research Collaborative Update

**Dr. Peter Jenkins**

IU Health – Methodist Hospital



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# Designation Subcommittee Update

**Dr. Gerardo Gomez, MD, *Trauma Medical Director***  
Eskenazi Health



Indiana State  
Department of Health



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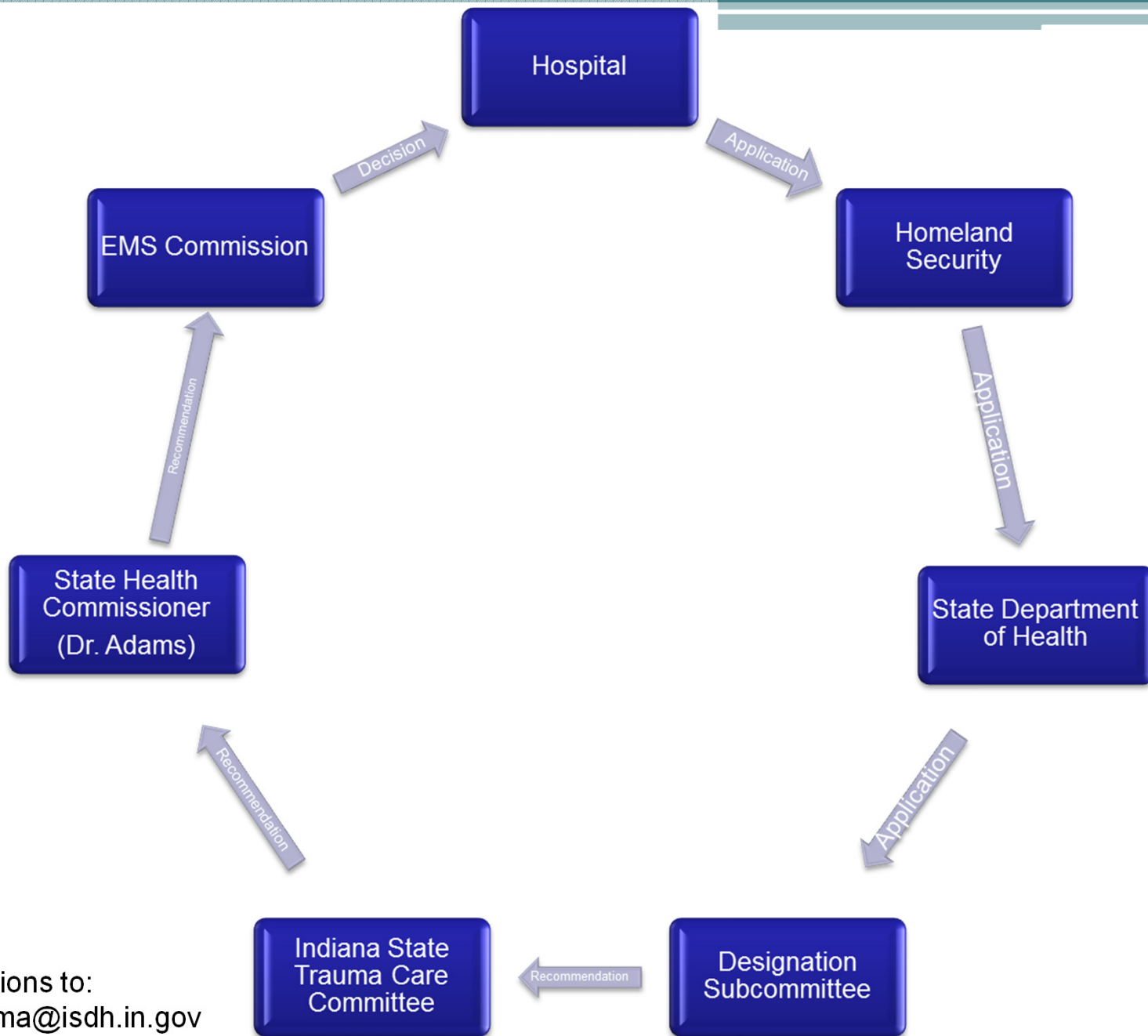
# Designation Subcommittee Update

August 21, 2015

Gerardo Gomez, MD, FACS  
Committee Chair

Dr. R. Lawrence Reed, Dr. Lewis Jacobson, Spencer Grover,  
Wendy St. John, Jennifer Mullen, Lisa Hollister, Amanda  
Elikofer, Katie Hokanson, Ramzi Nimry, Missy Hockaday, Teri  
Joy, Art Logsdon, Judy Holsinger, Jennifer Conger, Dr. Emily  
Fitz, Dr. Matthew Sutter.

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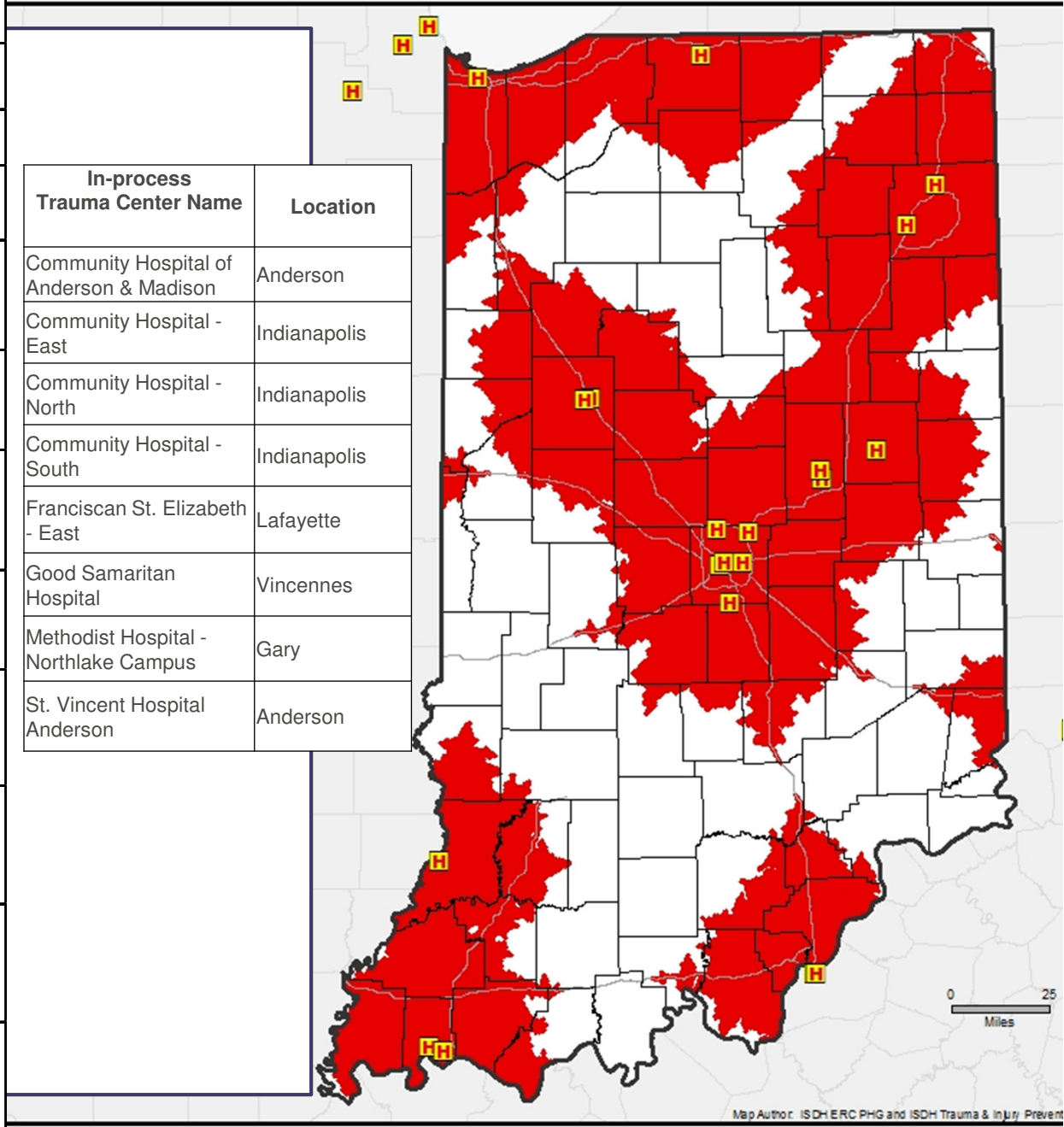
# 2015 Committee Meetings

- January 28, 2015
- April 20, 2015
- July 2, 2015
- August 13, 2015
  
- Meeting minutes available on-line:
  - <http://www.state.in.us/isdh/25400.htm>

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ACS Verified Trauma Center Name	Location	Adult Designation	Pediatric Designation
Deaconess Hospital	Evansville	Level II	
Eskenazi Health	Indianapolis	Level I	
IU Health Arnett Hospital	Lafayette	Level III	
IU Health Ball Memorial Hospital	Muncie	Level III	
IU Health Methodist Hospital	Indianapolis	Level I	
Riley Hospital for Children at IU Health	Indianapolis		Level I
Lutheran Hospital of Indiana	Fort Wayne	Level II	Level II
Memorial Hospital South Bend	South Bend	Level II	
Parkview Regional Medical Center	Fort Wayne	Level II	Level II
St. Mary's Medical Center of Evansville	Evansville	Level II	Level II
St. Vincent Indianapolis Hospital	Indianapolis	Level II	

In-process Trauma Center Name	Location
Community Hospital of Anderson & Madison	Anderson
Community Hospital - East	Indianapolis
Community Hospital - North	Indianapolis
Community Hospital - South	Indianapolis
Franciscan St. Elizabeth - East	Lafayette
Good Samaritan Hospital	Vincennes
Methodist Hospital - Northlake Campus	Gary
St. Vincent Hospital Anderson	Anderson



# In-process Indiana Trauma Centers

Facility Name	“In the Process” Date*	1 Year Review Date**	ACS Consultation Visit Date	ACS Verification Visit Date
IU Health – Ball Memorial	08/16/2013	N/A	06/2013	05/15-05/16, 2014
Franciscan St. Elizabeth East	12/20/2013	02/20/2015	02/12-02/13, 2015	<i>Tentative:</i> September 2015
St. Vincent Anderson	12/20/2013	02/20/2015	11/12-11/13, 2014	<i>Tentative:</i> November 2015
IU Health – Arnett	02/14/2014	N/A	04/30-05/01, 2013	04/29-04/30, 2014
Community Hospital Anderson	06/20/2014	08/21/2015		<i>Tentative:</i> May 2016
Good Samaritan	06/20/2014	08/21/2015	05/19-05/20, 2015	TBD
Community East	08/20/2014	10/30/2015	TBD	TBD
Community North	08/20/2014	10/30/2015	TBD	TBD
Community South	08/20/2014	10/30/2015	TBD	TBD
Methodist Northlake	08/20/2014	10/30/2015	TBD	TBD

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## Next Steps:

- Review the Triage and Transport Rule

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# The Value of Incorporating Trauma-Informed Approaches into Care and Services

Indiana State Trauma Care Committee  
August 21, 2015

**Michelle Hoersch, MS**

Office on Women's Health – Region V  
U.S. Department of Health and Human Services

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## Region V Focus on Trauma

### **Vision**

To equip every health and social service provider and institution with the knowledge, resources and support to provide services that are gender-responsive and trauma-informed so as to provide the best possible care for trauma-affected individuals

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# Functional Definition of Trauma

**Trauma occurs whenever an external threat overwhelms a person's coping resources.**

- Non-consensual
- Victim is in discomfort, fear, feels intimidated
- Bodily integrity (or that of someone else) is threatened

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# SAMHSA's Definition of Trauma

## The 3 E's

- Event
- Experience
- Effect

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# Effects of Trauma

- ▶ Inability to cope with the normal stresses of daily life
- ▶ Difficulty trusting others
- ▶ Difficulty managing emotions
- ▶ Memory and attention deficits
- ▶ Behavior changes
- ▶ Altered neuro-physiology
- ▶ Health impairment
- ▶ Vulnerability

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# How common are traumatic exposures?

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# The Epidemic of Trauma

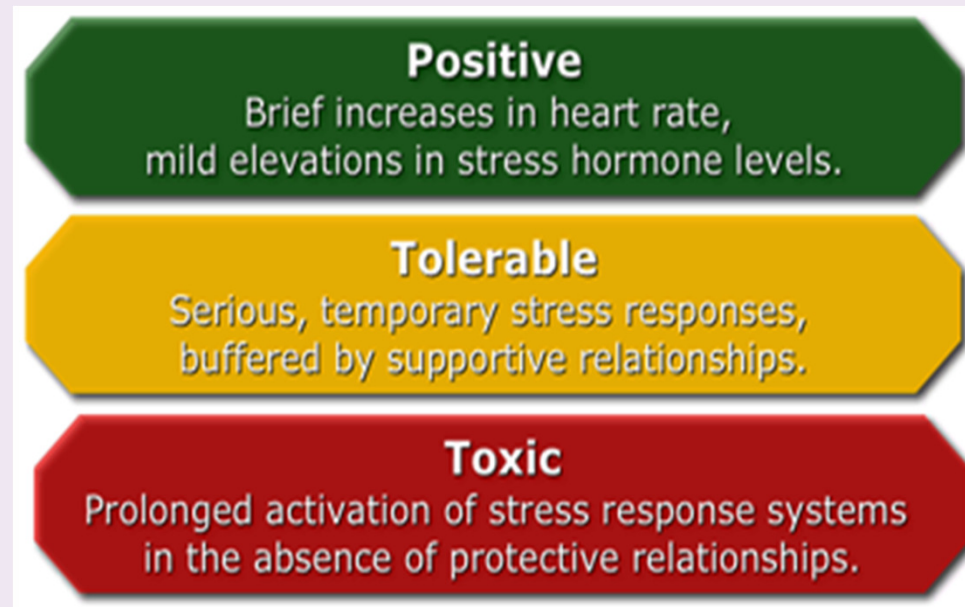
- ▶ Rape and Sexual Assault
- ▶ Child Abuse and Neglect
- ▶ Intimate Partner Violence
- ▶ Child Sexual Abuse
- ▶ Street Violence
- ▶ Historical Trauma
- ▶ Poverty
- ▶ Military Sexual Assault
- ▶ Human Trafficking
- ▶ 1 in 6 women
- ▶ 6 million children a year
- ▶ 1 in 3 women
- ▶ 2 in 10 girls; 1 in 10 boys
- ▶ Over 40% witness violence
- ▶ Millions of Americans
- ▶ Everyday Toxic Stress
- ▶ 1 in 3 women sexually assaulted
- ▶ Estimated 35.8 million worldwide

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# Toxic Stress and Trauma



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# Prevalence of Trauma in the U.S.

Very common that an individual will have exposure to multiple traumatic events during their lifetime.

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Stressor activates the Amygdala



HPA Axis

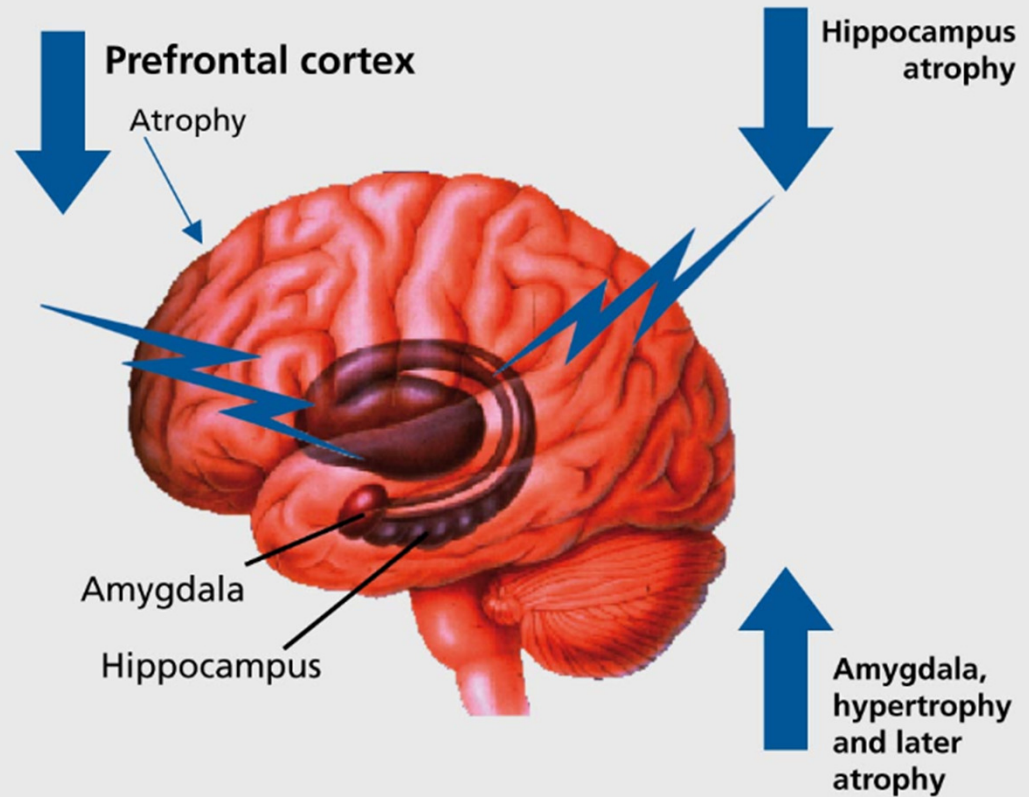


Release of Cortisol



Heart races  
Blood goes to muscles  
Digestion shuts down  
Memory impacted

### The brain under stress: structural remodeling



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# Impact of Trauma on the Brain and Behavior

## Amygdala

- Triggers release of cortisol
- Involved in many emotions and motivations, particularly those related to survival
- Involved in the processing of emotions such as fear, anger, and pleasure
- Responsible for determining what memories are stored and where they are stored in the brain

## Hippocampus

- Involved in the storage of long-term memory

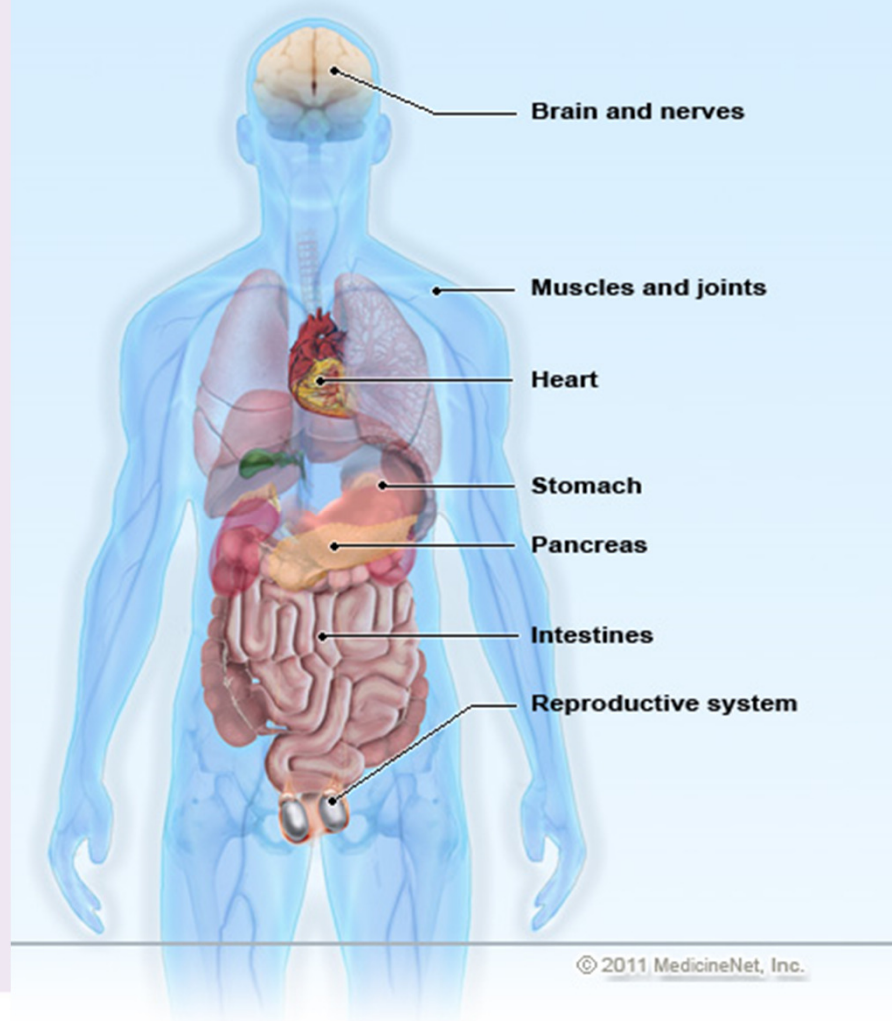
## Prefrontal Cortex

- Involved in planning complex cognitive behavior, personality expression, decision making, and moderating social behavior

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## Areas of the body affected by stress



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# Allostatic Load

- ▶ The “**wear and tear on the body**” which grows over time when the individual is exposed to repeated or chronic stress
- ▶ Physiological consequences of fluctuating or heightened neural or neuroendocrine response that results from repeated or chronic stress
- ▶ Frequent activation of the body's stress response, essential for managing acute threats, can in fact damage the body in the long run.

McEwen and Stellar, 1993

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# The Impact of Trauma is dramatically underestimated

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# Behavioral Aftermath

- ▶ Difficulty trusting others
- ▶ Isolation
- ▶ Missing work, classes, appointments
- ▶ Using alcohol or drugs as a way to cope

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# Psychological Aftermath

- ▶ Disbelief, numbness, or shock
- ▶ Shame, guilt, or self-blame
- ▶ Anxiety, sadness, or anger
- ▶ Confusion or helplessness
- ▶ Fear of lack of safety
- ▶ Difficulty concentrating

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# Long Term Consequences

- ▶ Mental Health
- ▶ Physical Health
- ▶ Behavioral Health
- ▶ Early Mortality

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# Why?

## What's the relationship among trauma and poor health outcomes?

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## The Adverse Childhood Experience (ACE) Study

- Over 17,000 Kaiser patients having routine health screenings volunteered to participate in the study.
- Data continues to be analyzed
- Staggering proof of the health, social, and economic risks that result from childhood trauma

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# What is an ACE?

## 10 types of childhood trauma measured in the ACE Study

### Five are personal:

- Physical abuse
- Verbal abuse
- Sexual abuse
- Physical neglect
- Emotional neglect

### Five are related to other family members:

- A parent who's an alcoholic
- A mother who's a victim of domestic violence
- A family member in jail or prison
- A family member diagnosed with a mental illness
- The disappearance of a parent through divorce, death or abandonment

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## ACE Scores

- Number of categories (not events) is summed
- 2 out of 3 experienced at least one *category* of ACE
- If any one ACE is present, there is an 87% chance *at least* one other category of ACE is present

ACE Score	Prevalence
0	33%
1	25%
2	15%
3	10%
4	6%
5 or more	11%*

**\*Women are 50% more likely to have a score >5.**

Anda, Robert F. M.D., & Felitti, Vincent J. M.D. (July 2011).  
*Adverse Childhood Experiences and their  
Relationship to Adult Well-being and Disease: Turning Gold  
into Lead. [PowerPoint slides]*

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## The Philadelphia Urban ACE Study

- The Institute for Safe Families examined the prevalence and impact of ACEs in Philadelphia, an urban city with a socially and racially diverse population.
- 1,784 adults completed the Philadelphia Urban ACE Survey
- Found a higher prevalence of ACEs than found in previous studies
  - 33.2% of Philadelphia adults experienced **emotional abuse**
  - 35% experienced **physical abuse** during their childhood
  - 35% of adults grew up in a household with a **substance-abusing** member
  - 24.1% lived in a household with someone who was **mentally ill**
  - 12.9% lived in a household with someone who served time or was sentenced to **serve time in prison**

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## The Philadelphia Urban ACE Study

Survey also examined the **stressors that exist in the communities** where people live. The study found:

- 40.5% of Philadelphia adults **witnessed violence** while growing up, which includes seeing or hearing someone being **beaten, stabbed or shot**.
- 34.5% reported experiencing **discrimination** based on their race or ethnicity
- 27.3% reported having felt **unsafe in their neighborhoods** or not trusting their neighbors during childhood
- Over 37% of Philadelphia respondents reported **four or more ACEs**

The findings suggest the **need for services that address the unique environmental stressors experienced in urban neighborhoods** to mitigate their impact on individuals and prevent ACEs.

<http://www.instituteforsafefamilies.org>

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## ACE Study Findings

As the number of ACEs increase, the risk for health problems increase in a strong and graded fashion.

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## Adverse Childhood Experiences ACEs have a strong influence on:

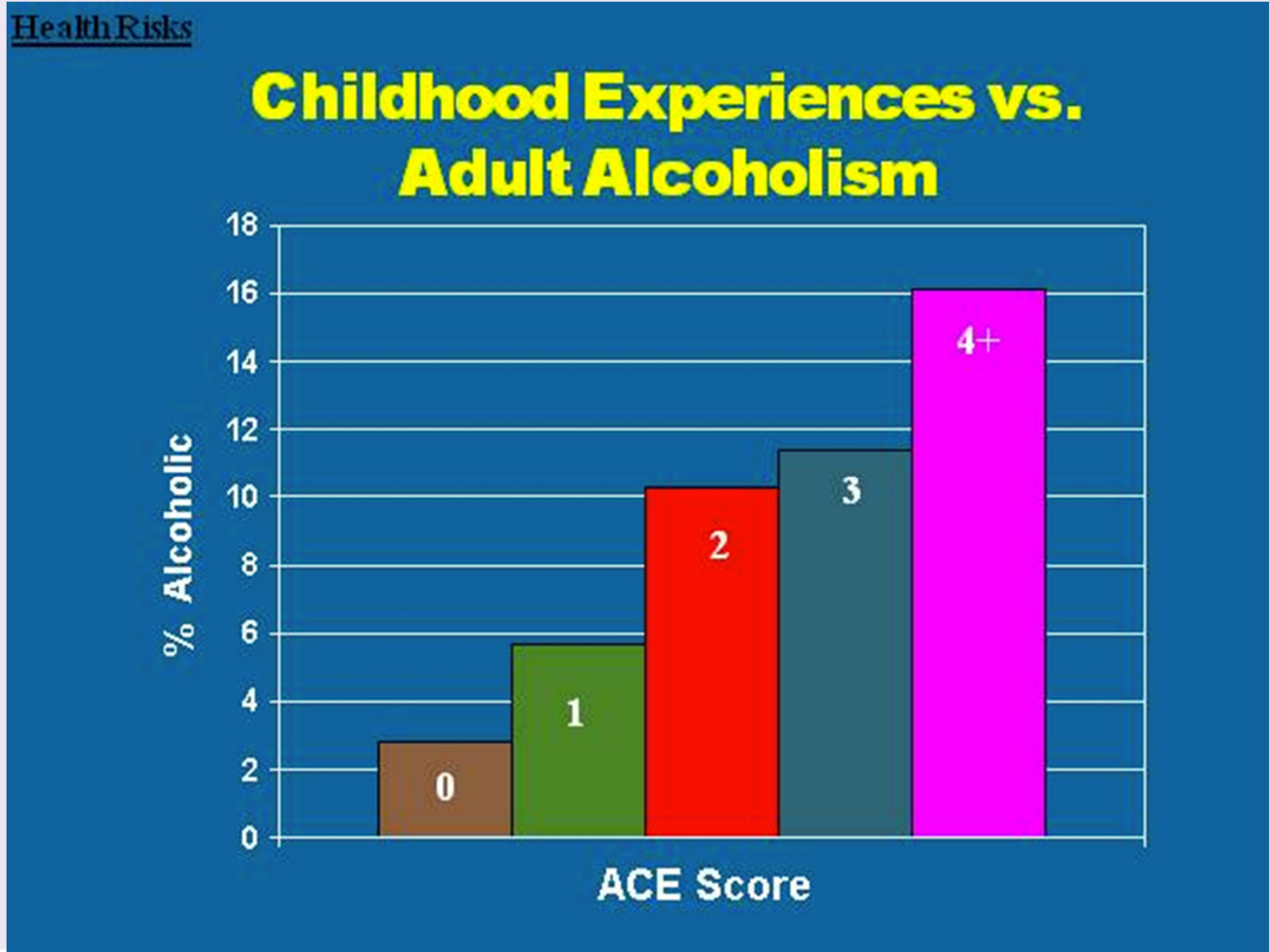
- Adolescent health
- Teen pregnancy
- Smoking
- Alcohol abuse
- Illicit drug abuse
- Sexual behavior
- Mental health
- Risk of revictimization
- Stability of relationships
- Performance in the workforce

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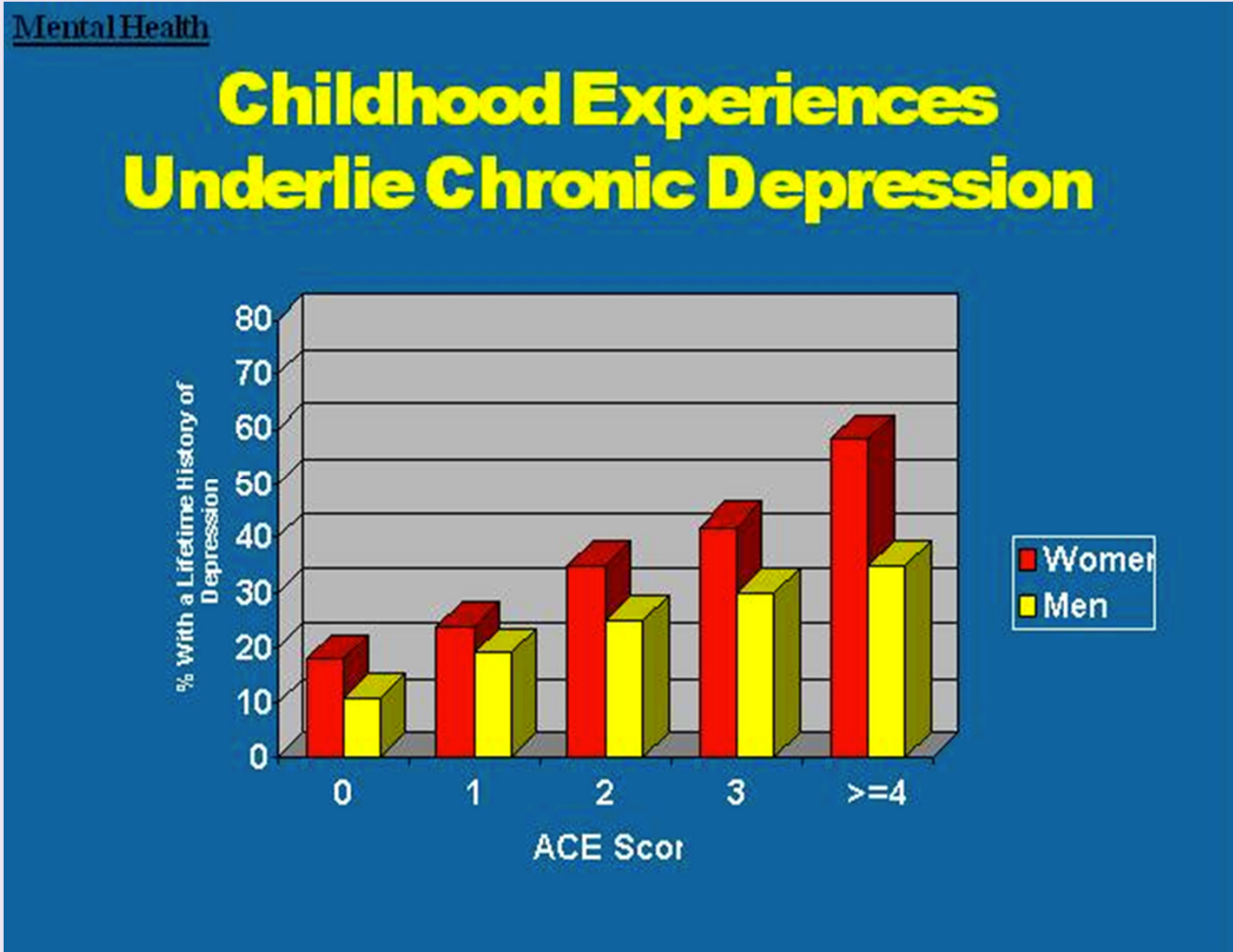
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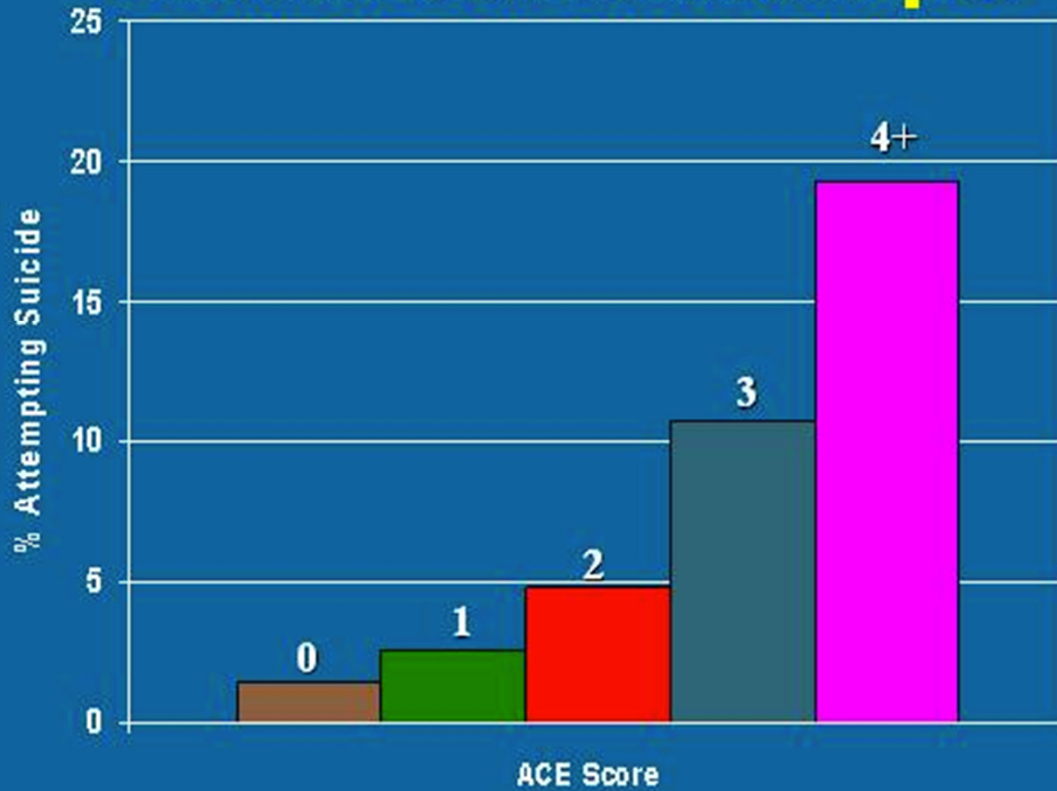
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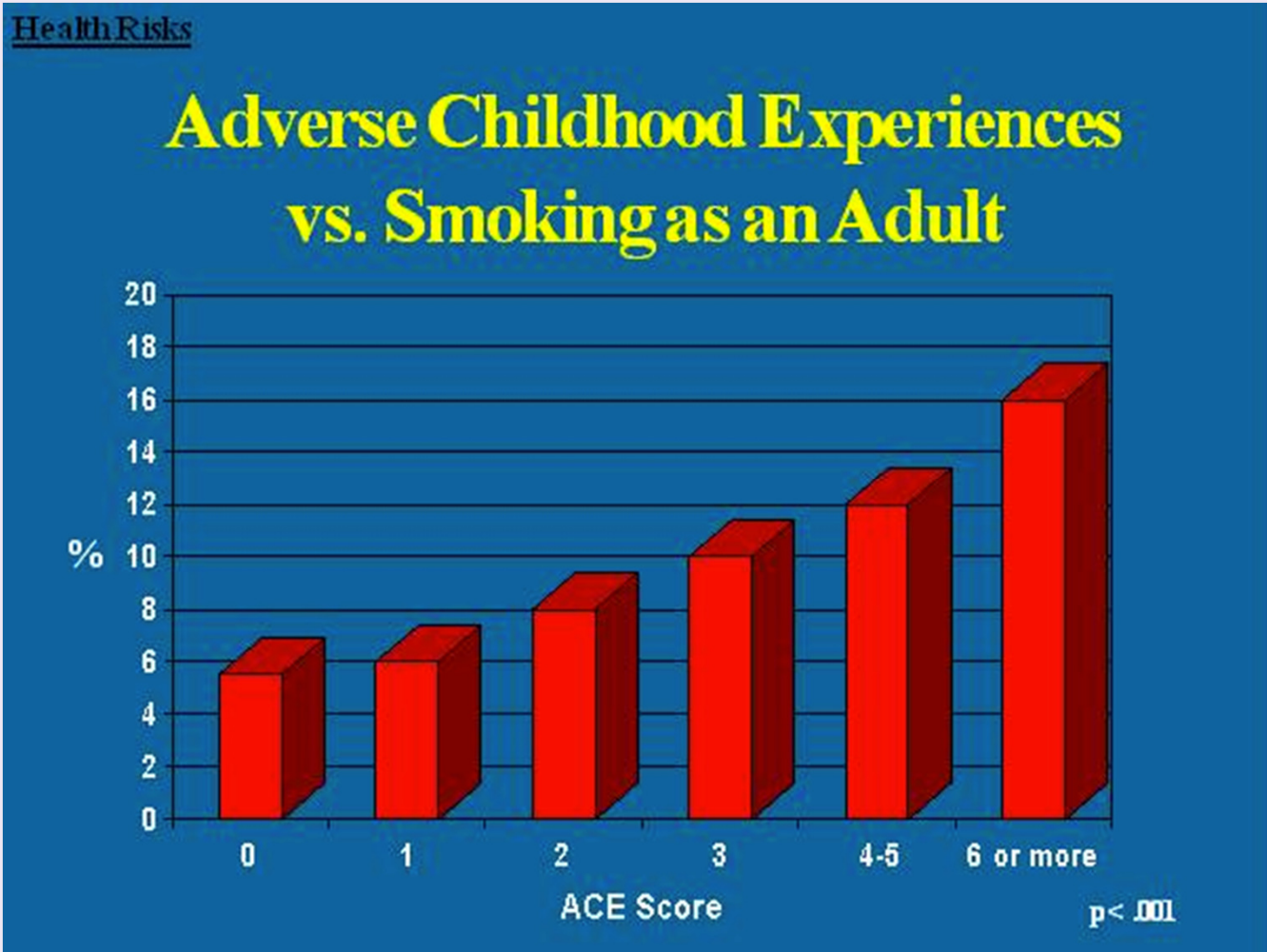
Mental Health

## Childhood Experiences Underlie Suicide Attempts



Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





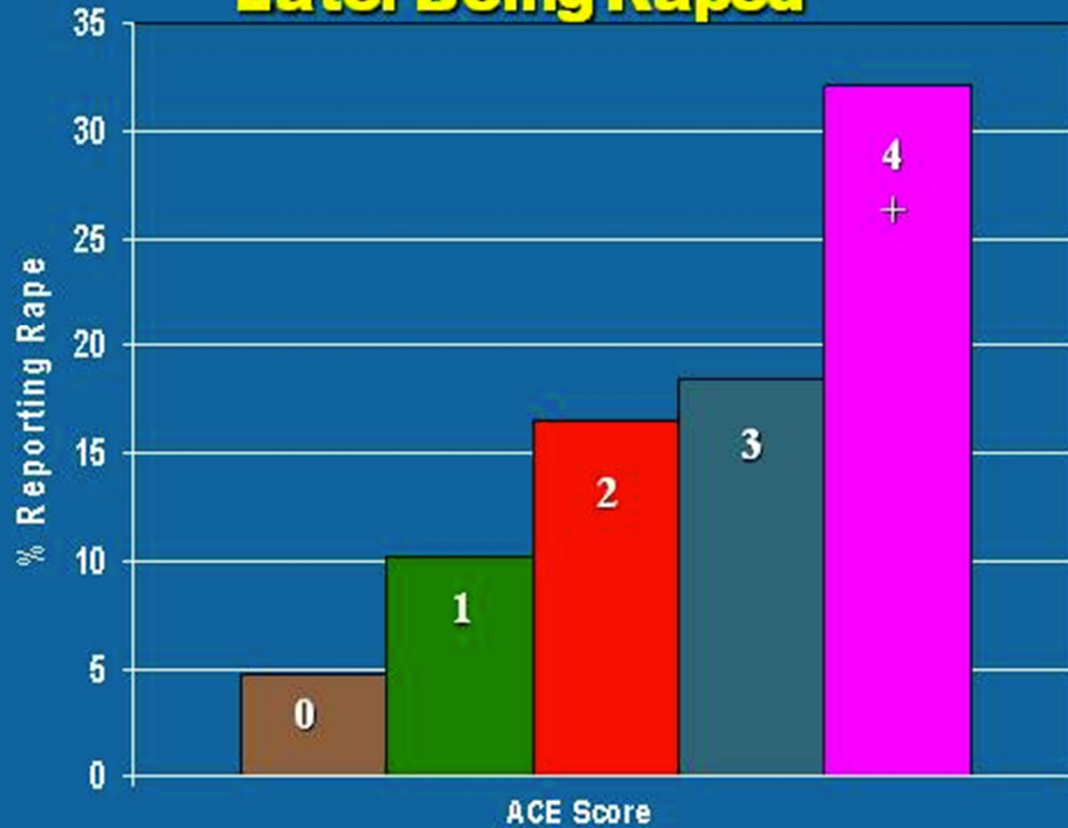
Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





Well-being

# Childhood Experiences Underlie Later Being Raped

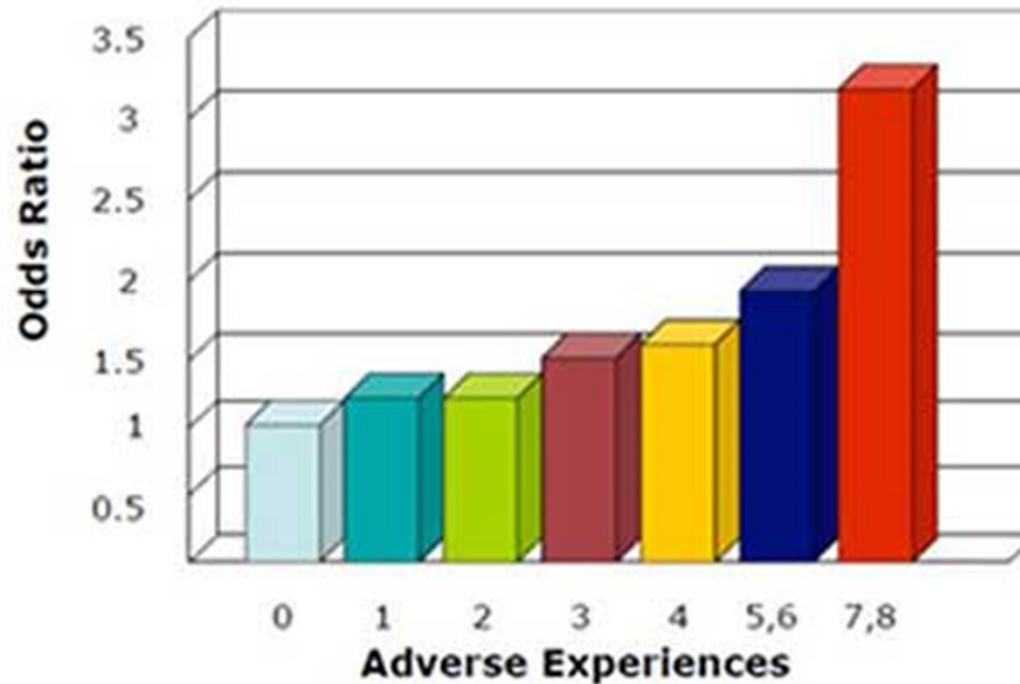


Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





## Risk of Adult Heart Disease Increases with more Adverse Childhood Experiences



Source: Dong et al., 2004

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





## The ACE Score and Risk Factors for HIV/AIDS

The risk factors for transmission of HIV, are well known.

Less well known is that ACEs are a major hidden “engine” underlying these preventable risk factors for the transmission of HIV.

- Injected drug use
- 50 or more lifetime sexual partners
- Ever having a sexually transmitted disease (including AIDs)

All increase dramatically as the ACE Score increases

Anda, 2001

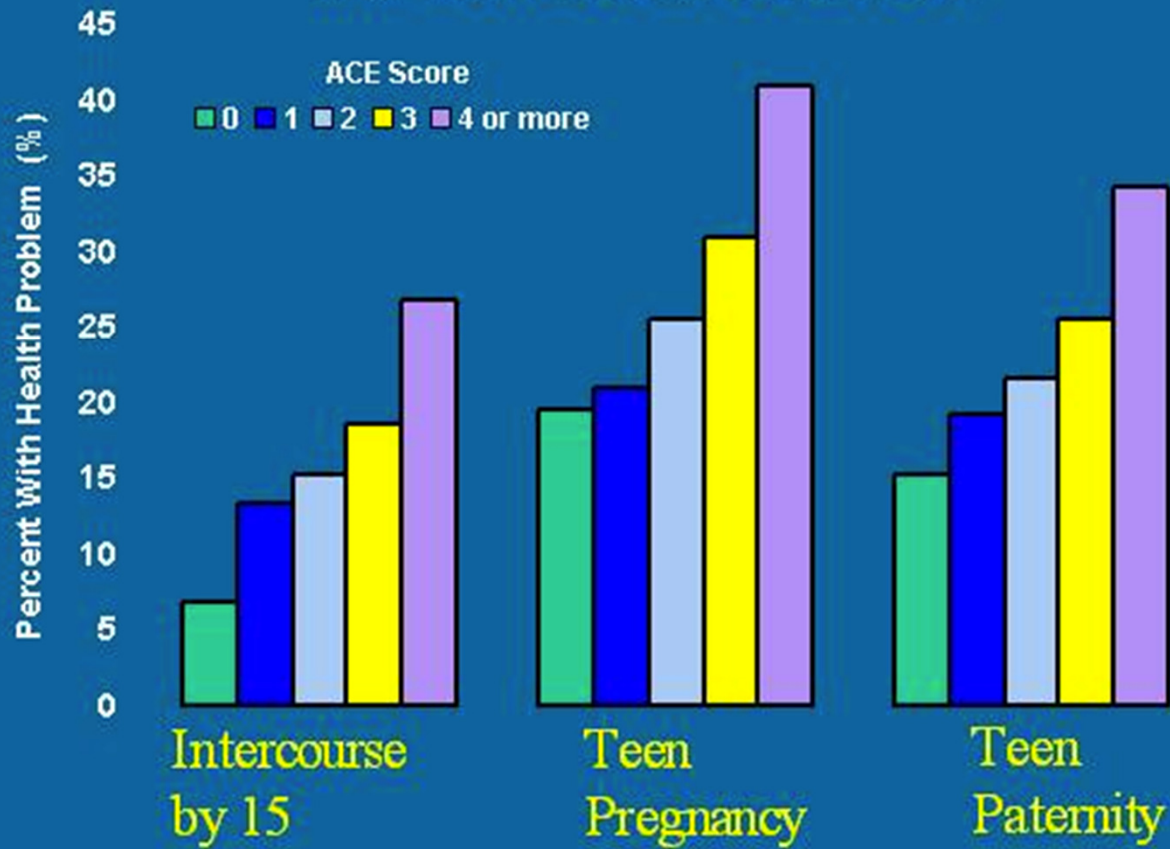
Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





Social function

### ACE Score and Teen Sexual Behaviors



Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





## IV Drug Use

- The relationship of IV drug use to adverse childhood experiences is powerful and graded - it is a perfect dose-response curve.
- A male child with an **ACE Score of 6** has a **4,600% increase** in the likelihood of later becoming an IV drug user when compared to a male child with an ACE Score of 0.

Felitti, German ACE article

Email questions to:  
indianatrauma@isdh.in.gov





## ACE Study Findings

There is a 250% increase in the odds of having a sexually transmitted disease between individuals with an ACE Score of 4 compared to those with an ACE Score of 0.

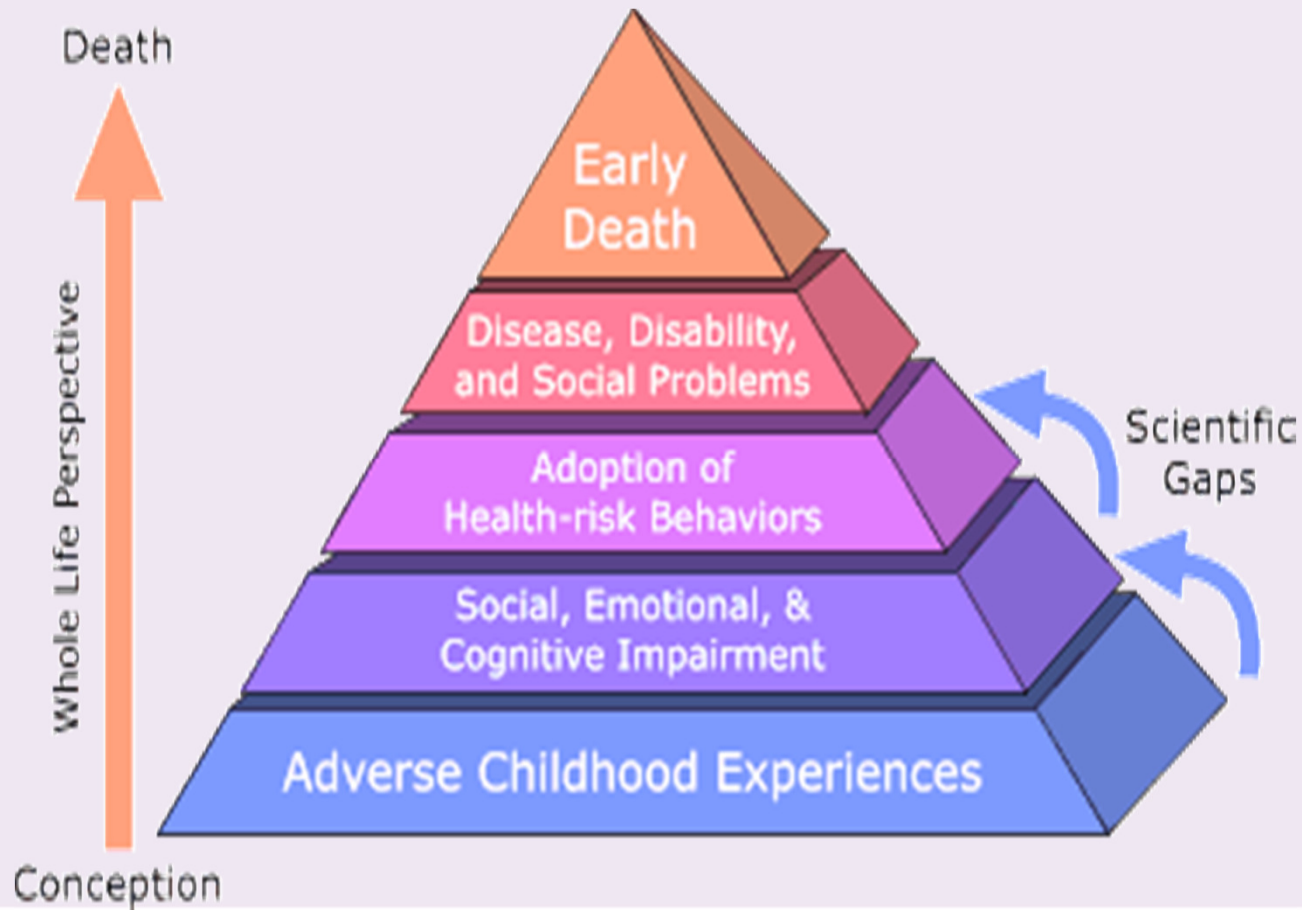
<http://www.cestudy.org/>

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# The ACE Pyramid



Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)



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# High Risk Behavior or Coping?

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)







**A quote from Dr. Felitti:**

**“It’s hard to give something up  
that almost works.”**

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





## In Summary, the ACE Study indicates...

Adverse childhood experiences are the most basic and long lasting determinants of health risk behaviors, mental illness, social malfunction, disease, disability, death, and healthcare costs.

Anda, Robert F. M.D., & Felitti, Vincent J. M.D. (July 2011). *Adverse Childhood Experiences and their Relationship to Adult Well-being and Disease: Turning Gold into Lead.*

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)



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**What does this look like  
in the clinical or social  
service setting?**

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# Utilization of Medical Services

Survivors have higher utilization of medical services and report a greater number of physical health problems

Sources: Kartha et al., 2008; Lesserman, et al., 2006; Letourneau, Holmes, & Chasendunn-Roark, 1999; Nicolaidis, et al., 2004; Sadler, et al, 2000; Sledjeski, Speisman & Dierker (2008)

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# Utilization of Preventive Care

Trauma survivors are less likely:

- ▶ To obtain regular mammograms
- ▶ To obtain regular cervical cancer screenings
- ▶ To attend regular dental appointments

Sources: Farley, Golding, & Minkoff (2002); Farley, Minkoff, & Barkan (2001), Farley & Patsalides (2001)

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





## Secondary Victimization

- ▶ Also known as the “Second Rape” or “Retraumatization”
- ▶ Victimization which occurs, not as a direct result of the criminal act, but through the response of institutions and individuals to the victim

Sources: Campbell & Wasco (2005); Campbell & Raja (2005); Campbell, Wasco, Ahrens, et.al, (2001)

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# The Results of Secondary Victimization

- Actually *increases* symptoms
- Keeps patients/clients from seeking or benefitting fully from the care they need

Sources: Campbell & Wasco (2005); Campbell & Raja (2005); Campbell

Email questions to: Wasco, Ahrens, et.al, (2001); Ullman & Filipas, 2001  
indianatrauma@isdh.in.gov





## Specific Examples

- Physical Exams
- OB/Gyn
- Sleep clinics
- Ophthalmology
- ER visits
- A Surgical Procedure
  - Feeling out of control during sedation
  - Strangers present while unconscious

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)







# What Helps to Create Favorable Outcomes?

- ▶ No prior trauma history
- ▶ Resiliency
  - Social support
  - A sense of life purpose
  - A feeling of mastery
  - Religious coping
- ▶ **Trauma-informed care and services**

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# Trauma-Informed Care

Words, actions, and policies  
have the ability to hurt or heal

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





## What is Trauma-Informed Care?

Every part of a service, agency or institution from front desk staff, administrators, to care providers is assessed and potentially modified to include a basic understanding of how trauma impacts the life of an individual seeking services and provides services so as to prevent retraumatization and optimize opportunity for the individual to benefit from care and services.

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# Trauma-informed Services

## Trauma-informed services:

- Take the trauma into account
- Avoid triggering trauma reactions and/or retraumatizing the individual
- Adjust the behavior of counselors, other staff and the organization to support the individual's coping capacity
- Allow survivors to manage their trauma symptoms successfully so that they are able to access, retain and benefit from the services

(Harris & Fallot)

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





## “Universal Precautions”

- ▶ Exposure to trauma is pervasive
- ▶ The impact of trauma is dramatically underestimated

**Therefore, assume EVERYONE has a trauma history.**

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# Trauma-Informed Care

Paradigm shift from...

*What's wrong with you?*

to

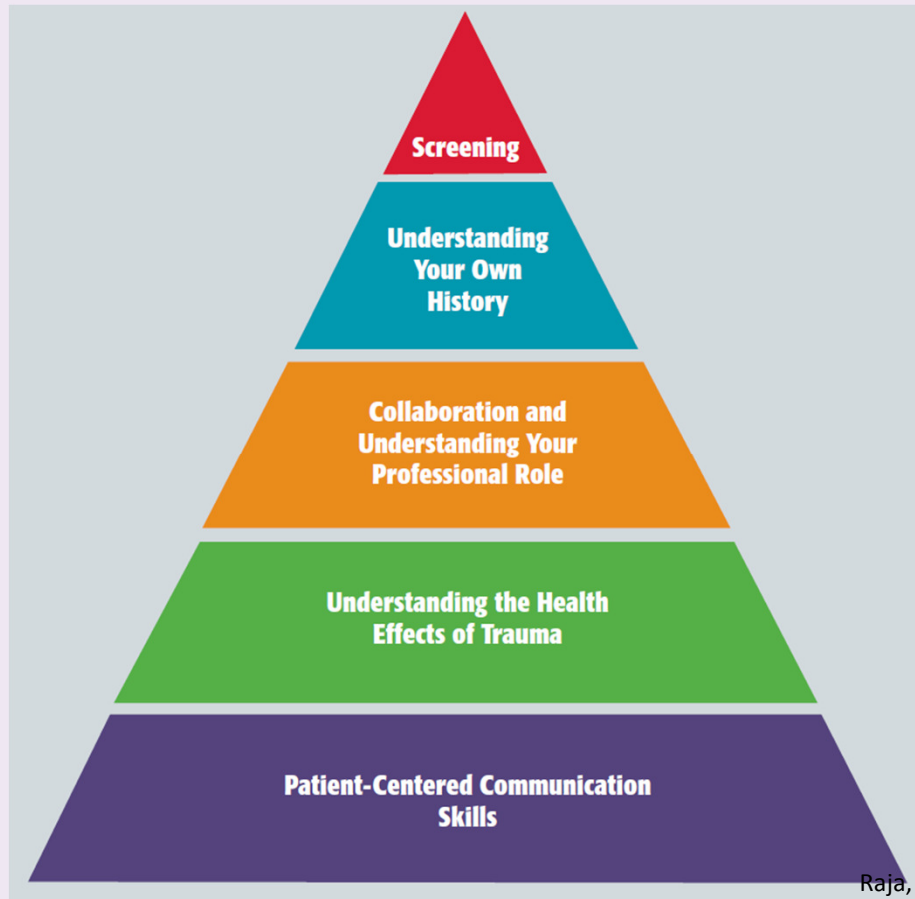
**What happened to you?**

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# The Trauma-Informed Care Pyramid



Raja, S., Hoersch, M., et al. (2014). *JADA*

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# Trauma-Informed Care

## Addressing “high-risk” behavior

- ▶ Be aware of your own feelings about behavior and actively and intentionally set them aside for this encounter.
- ▶ Ask “what role does (insert behavior) play in your life?”
- ▶ Acknowledge the legitimacy of their response.
- ▶ Is there anything else that might be almost as effective, but perhaps better for you?
- ▶ If yes, explore how to make a plan by first helping to adopt alternative coping mechanisms, and then helping to decrease more dangerous activities
- ▶ Always provide a “warm hand off” where possible.
- ▶ Check in on progress

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)







# Trauma Stewardship

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)



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# Success Stories

Colorado

Wisconsin

Truman Medical College

Head Start

Tarpon Springs, FL

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# Training Health Care Providers

## Trauma-Informed Care for Health Care Providers: On-line Clinical Cases

- To increase knowledge and skills in trauma-informed care
- Interactive case-based learning
- Free-standing cases allow providers to self-tailor CMEs
- Evidenced-based

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# Trauma-Informed Care for Health Care Providers: On-line Clinical Cases

## Introductory Cases

- ▶ Preventive care visit
- ▶ Acute care visit
- ▶ Chronic disease management

## Subsequent Cases

- ▶ Prenatal
- ▶ Obstetric
- ▶ Post-partum
- ▶ Pelvic exams with STI testing
- ▶ ER
- ▶ Hospitalization
- ▶ Ophthalmologic care
- ▶ Pain clinic
- ▶ Sleep clinic
- ▶ Office Procedures – biopsies cardiac imaging
- ▶ Surgical care
- ▶ Women Veterans
- ▶ Incarcerated and recently released
- ▶ Elderly
- ▶ LGBTQ
- ▶ Pediatric

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# Women and Trauma Federal Partners Committee

## Building a Trauma Informed Nation: Moving from Conversation to Action

Webcast Event and local stakeholder convenings  
September 29-30, 2015

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# Resources

- ▶ National Center for Trauma-Informed Care  
<http://beta.samhsa.gov/nctic>
- ▶ ACEStudy.org
- ▶ ACEStoohigh.com
- ▶ Wisconsin Department of Health Services –Trauma-informed Care Website  
[www.dhs.wisconsin.gov/tic/principles.htm](http://www.dhs.wisconsin.gov/tic/principles.htm)

Email questions to:  
indianatrauma@isdh.in.gov





# Questions and Comments

Email questions to:  
[indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# Contact Info

**Michelle D. Hoersch, MS**

Office on Women's Health - Region V

U.S. Department of Health and Human Services

312-353-8122

[michelle.hoersch@hhs.gov](mailto:michelle.hoersch@hhs.gov)

[www.womenshealth.gov](http://www.womenshealth.gov)

Email questions to:  
indianatrauma@isdh.in.gov







# PI Subcommittee Update

**Dr. R. Lawrence Reed**, *Trauma Medical Director*  
IU Health – Methodist Hospital



Indiana State  
Department of Health



Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)

# INDIANA STATE TRAUMA CARE COMMITTEE

## Performance Improvement Subcommittee Report

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)

8/24/2015

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# PI Subcommittee Members

- Merry Addison
- Lynne Bunch
- Annette Chard
- Christy Claborn
- Kristi Croddy
- Dawn Daniels
- Amy Deel
- Emily Dever
- Bekah Dillon
- Amanda Elikofer
- Spencer Grover
- Jodi Hackworth
- Missy Hockaday
- Lisa Hollister
- Michele Jolly
- Sean Kennedy
- Roxann Kondrat
- Paula Kresca
- Lesley Lopossa
- Jeremy Malloch
- Carrie Malone
- Kelly Mills
- Jennifer Mullen
- Regina Nuseibeh
- Tracy Spitzer
- Wendy St. John
- Amanda Rardon
- Dr. Larry Reed
- Mary Schober
- Lana Seibert
- Lisa Smith
- Chuck Stein
- Latasha Taylor
- Cindy Twitty
- Chris Wagoner
- Lindsey Williams

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)

8/24/2015

# IDSH Staff PI Subcommittee

- ▣ Katie Hokanson
- ▣ Ramzi Nimry
- ▣ Jessica Skiba
- ▣ Camry Hess
- ▣ Murray Lawry
- ▣ Art Logsdon

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)

8/24/2015



# PI Subcommittee

- ▣ Met on 8/11/2015
  - 23 attendees (6 present, 17 by phone)
- ▣ Review of goals:
  1. Increase the number of hospitals reporting to the Indiana Trauma Registry
  2. Decrease the average ED LOS at non-trauma centers
  3. Increase EMS run sheet collection

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)

8/24/2015

# Goal #1: Increase Number of Hospitals Reporting to the ITR

- ▣ For Quarter 1 2015: 94 hospitals reporting
- ▣ Trauma Registry Training events
  - 2015 Trauma Tour with pre-session refresher courses: 6 attendees over the first 5 trauma tour events
- ▣ Trauma Center Mentor Program
  - Confirmation of mentorship still in place
- ▣ Discussion of specific hospitals

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)

8/24/2015

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# Hospitals Not Reporting

- District 1:
  - Jasper County Hospital
  - St. Mary Medical Center Hobart
- District 2:
  - IU Health Goshen Hospital
- District 3:
  - Adams Memorial Hospital
  - Bluffton Regional Medical Center
  - St. Joseph Hospital (Fort Wayne)
  - VA Northern IN Healthcare System
  - Wabash County Hospital
- District 4:
  - None
- District 5:
  - Community Westview Hospital
  - IU Health West Hospital
  - Richard L. Roudebush VA Medical Center
  - St. Vincent - Carmel Hospital
  - St. Vincent - Fishers Hospital
  - St. Vincent - Peyton Manning Children's Hospital

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)

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# Hospitals Not Reporting

- ▣ District 6
  - None
- ▣ District 7
  - None
- ▣ District 8
  - St. Vincent – Dunn Hospital
- ▣ District 9
  - St. Vincent – Jennings Hospital
  - Kentuckiana Medical Center
- ▣ District 10
  - None

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)

8/24/2015

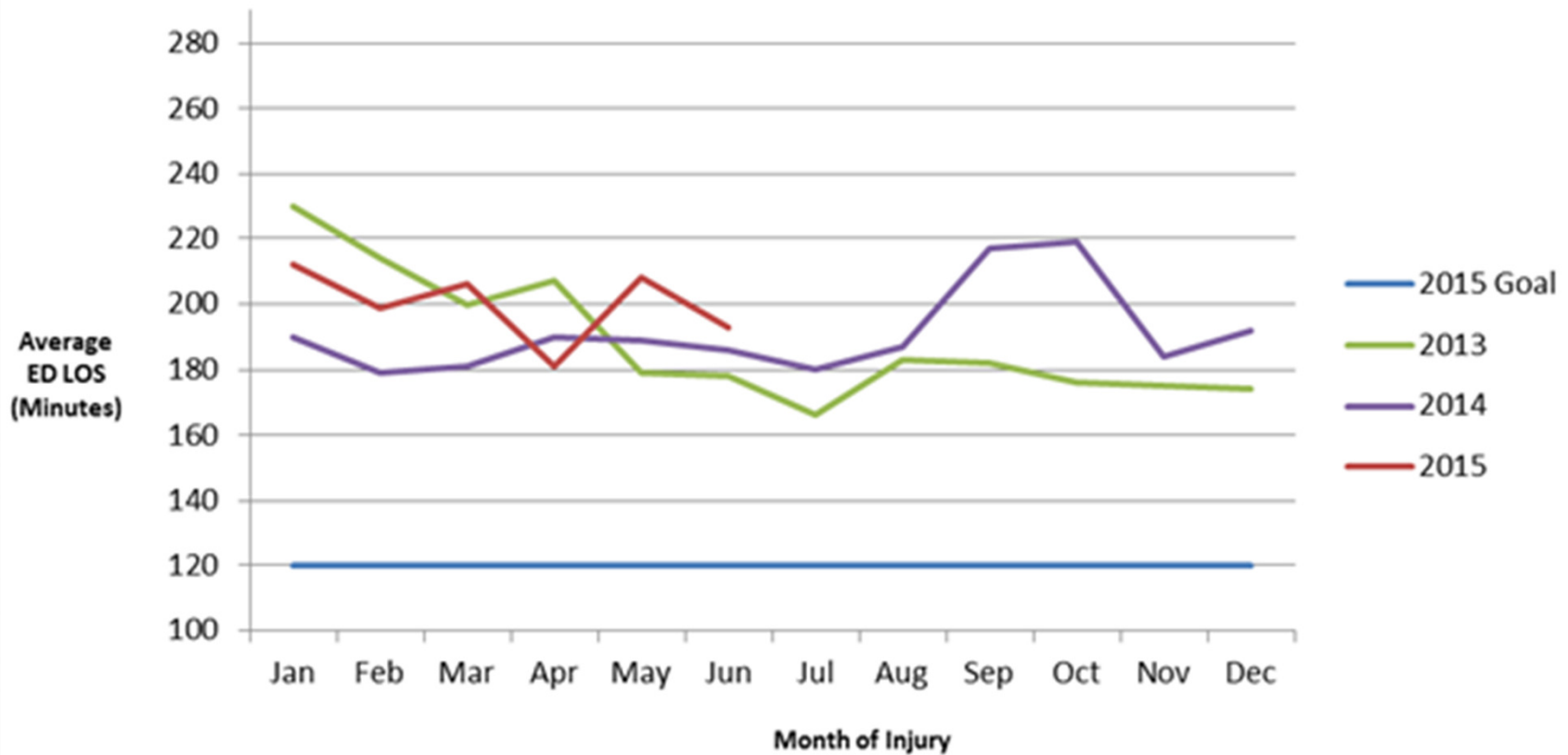


# Goal #2: Decrease mean ED LOS at non-trauma center hospitals

June 1, 2014 to June 30, 2015		
<i>Total # of Patients Transferred:</i>	7072	
Measure	# of Patients	Avg ED LOS (Minutes)
Initial Hospital: Shock Index > 0.9	974	186
Initial Hospital: GCS Total Score ≤ 12	366	148
Initial Hospital: ISS ≤ 15	6233	199
Initial Hospital: ISS > 15	566	178
June 1, 2014 to June 30, 2015		
<i>Total # of **CRITICAL** Patients Transferred</i>	1614	
<i>Min</i>	0	
<i>Max</i>	1814	
<i>Average</i>	182	
<b>**CRITICAL**</b> GCS ≤ 12, Shock Index >0.9, ISS > 15		
June 1, 2014 to June 30, 2015		
Body Region	# of Patients	
<i>Extremity</i>	2435	
<i>External</i>	2200	
<i>Head</i>	1715	
<i>Chest</i>	836	
<i>Face</i>	476	
<i>Abdomen</i>	426	

# Goal #2: Decrease mean ED LOS at non-trauma center hospitals

Average ED LOS (Minutes) for Patients Transferred from ED at non-trauma center hospitals



## Goal #2: Decrease mean ED LOS at non-trauma center hospitals

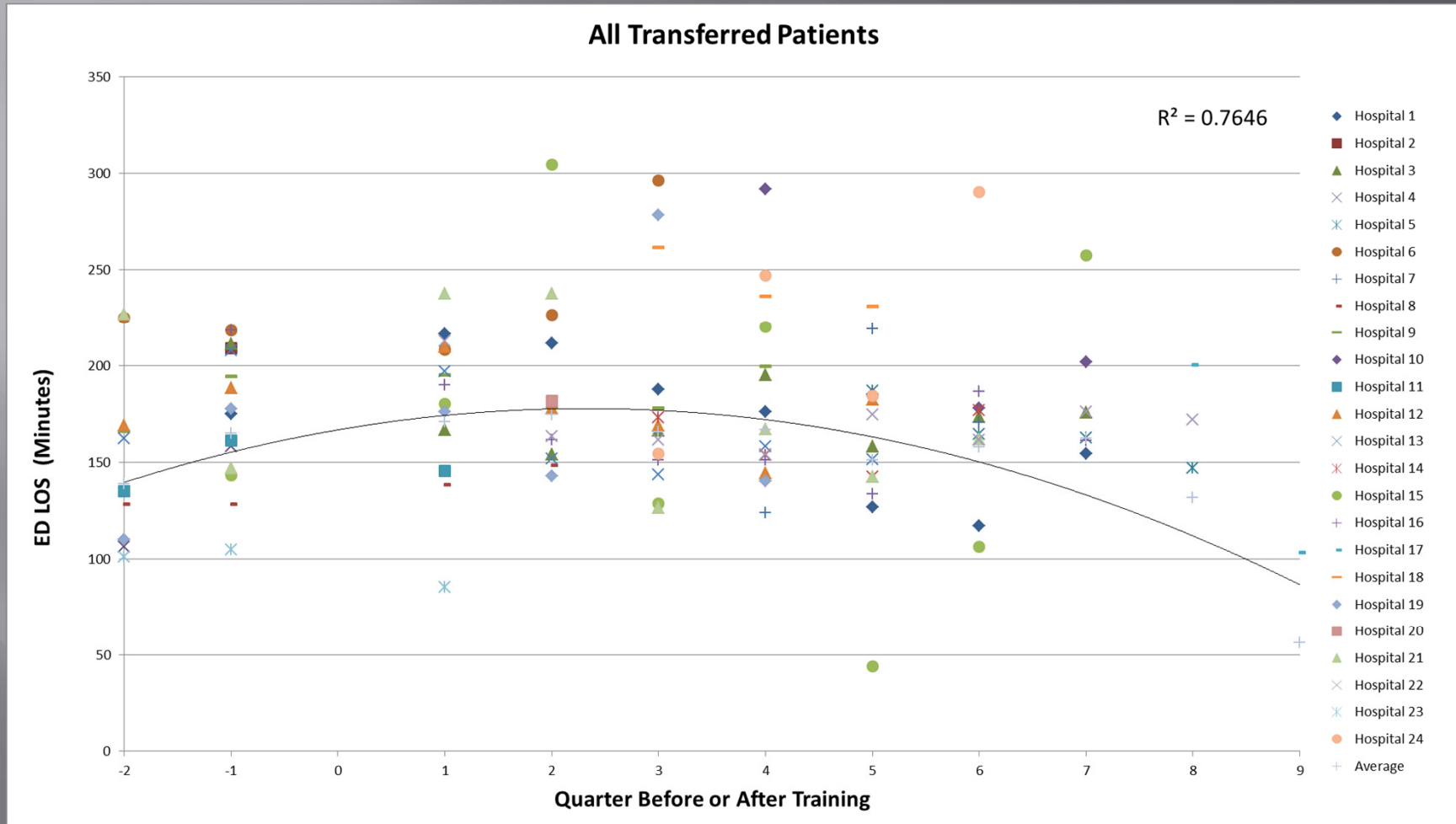
- ▣ Review of current ED LOS reveals some data quality issues:
  - ED LOS < 0 hours
  - ED LOS > 24 hours
- ▣ Feedback to hospitals regarding timely transfers
  - Letter sent to facilities June 15
- ▣ Impact of RTTDC on ED LOS

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)

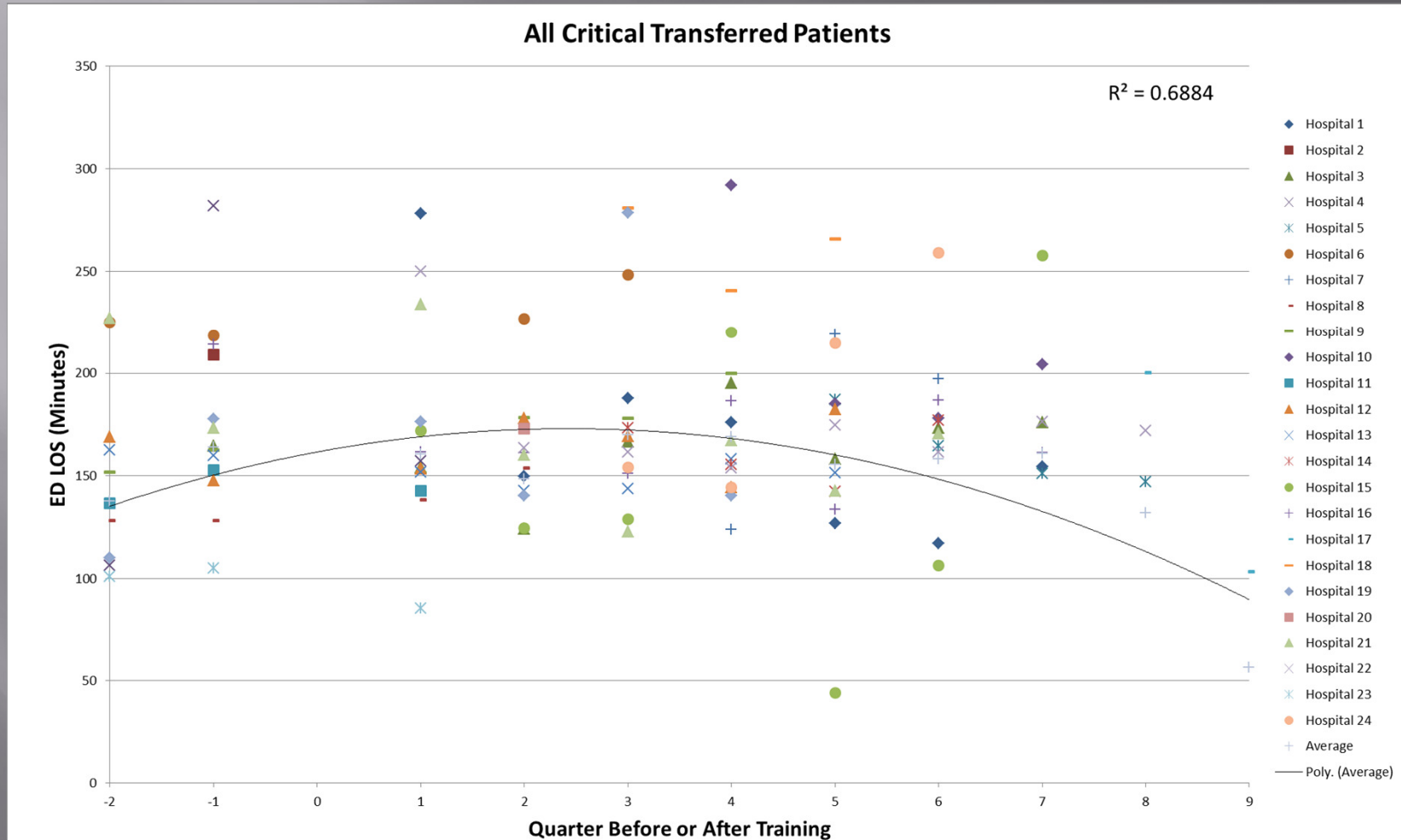
8/24/2015

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# Goal #2: Decrease mean ED LOS at non-trauma center hospitals



# Goal #2: Decrease mean ED LOS at non-trauma center hospitals





## Goal #3: Increase EMS run sheet collection

- ▣ Please send Katie a list of EMS providers not leaving run sheets
  - E-mail sent to Mike Garvey & Lee Turpen on 3/25/2015 & 2/18/2015 listing EMS providers not leaving run sheets
- ▣ Mike Garvey encouraged EMS providers to leave run sheets at April 17 EMS Commission meeting
- ▣ Sent list of hospital contact information for EMS providers to know where to send run sheets
- ▣ Seeking to provide list to EMS Commission at their next meeting

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)

# Metrics Assessment

- ▣ ED LOS vs ICU LOS: Added patients with ICU LOS >0 but did not have ED disposition = ICU
- ▣ Compared 2013 ITR data to NTDB data
- ▣ Evaluation of Triage & Transport Rule
  - ▣ Seeking to use data to evaluate adherence to Rule by EMS providers: Katie & Dr. Walthall
- ▣ Identifying double transfers: new Linking Software
- ▣ Data quality dashboard for linking cases

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)

8/24/2015

# New Issues

- ▣ EMS Commission member asked for consideration of separating isolated hip fracture cases from all patients ED LOS calculations
  - We recommend not adopting this practice
- ▣ Regional PI: Illinois model
  - Regular district meetings
  - Review of specific cases
  - Confidential discussions protected by Medical Studies Act
  - Discussions & conclusions (w/o identifiers) included in meeting minutes

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)





# Trauma Registry Data Report

**Camry Hess, MPH, *Database Analyst***

**Ramzi Nimry, *Trauma System PI Manager***

**Division of Trauma and Injury Prevention**



Indiana State  
Department of Health



Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)



# ISDH Updates

**Katie Hokanson, *Director***

Division of Trauma and Injury Prevention



Indiana State  
Department of Health



Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)



# 2015 Trauma Tour Wrap-Up

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)



Indiana State  
Department of Health

# 2015 Trauma Tour Details

- Trauma Registry Refresher Training: 14 attendees
- Trauma Tour:
  - 292 attendees
  - 47 vendors
- New questions from attendees:
  - How do we talk to our patients about the need to go directly to a trauma center?
  - How can we educate the general public/new EMTs/new staff about the differences in levels of trauma centers?

# Blue Sky Project



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# Questions?

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)