Commission on Improving the Status of Children in Indiana

August 19, 2015

- *Welcome*
- *Approval of Minutes from Meeting on May 20, 2015*

Dr. Timothy Kelly, (Board Certified in Internal Medicine and Addiction Medicine)

Community Health Network

ADDICTION 101

Timothy Kelly, MD

25% of all US children are exposed to alcohol or other drug abuse/dependence within their families.

Problematic use of alcohol and drugs in the home is linked with:

- Poorer school performance
- Increased risk of delinquency
- Child neglect
- Divorce
- Homelessness
- Violence/abuse

As many as **80%** of incident of family violence are associated with alcohol abuse.

Every 25 minutes someone dies from an overdose of controlled substance medications (presumably opioids).

In 2008, overdoses surpassed MVAs as a cause of death in Indiana.

In 2012, 259 million prescriptions were written for opioids—enough to provide a bottle to every adult in the US.

2 million people are now addicted to pain killers.

Over 500,000 people are now addicted to heroin.

1/3 of Americans say addiction is caused by a lack of will power or self-control.

One is every 12 high school seniors reported nonmedical use of hydrocodone in the past year.

One in 20 reported OxyContin use.

“Injection drug use has fueled an outbreak of HIV in rural Indiana, a nationwide surge in Hepatitis C infections, as well as an increase in the number of babies born addicted to drugs.”

— USA Today 05.24.15

“ There aren’t enough doctors to provide substance abuse treatment. ”

— USA Today 05.24.15

Addiction costs nearly **$468 billion** per year.

Only 2 *cents* of every dollar spent on addiction goes to prevention or treatment. The rest goes to hospital care, jail, courts, et cetera.

Columbia University
Nat'l Center on Addiction and Substance Abuse

Studies clearly show that treatment and prevention are cost effective.

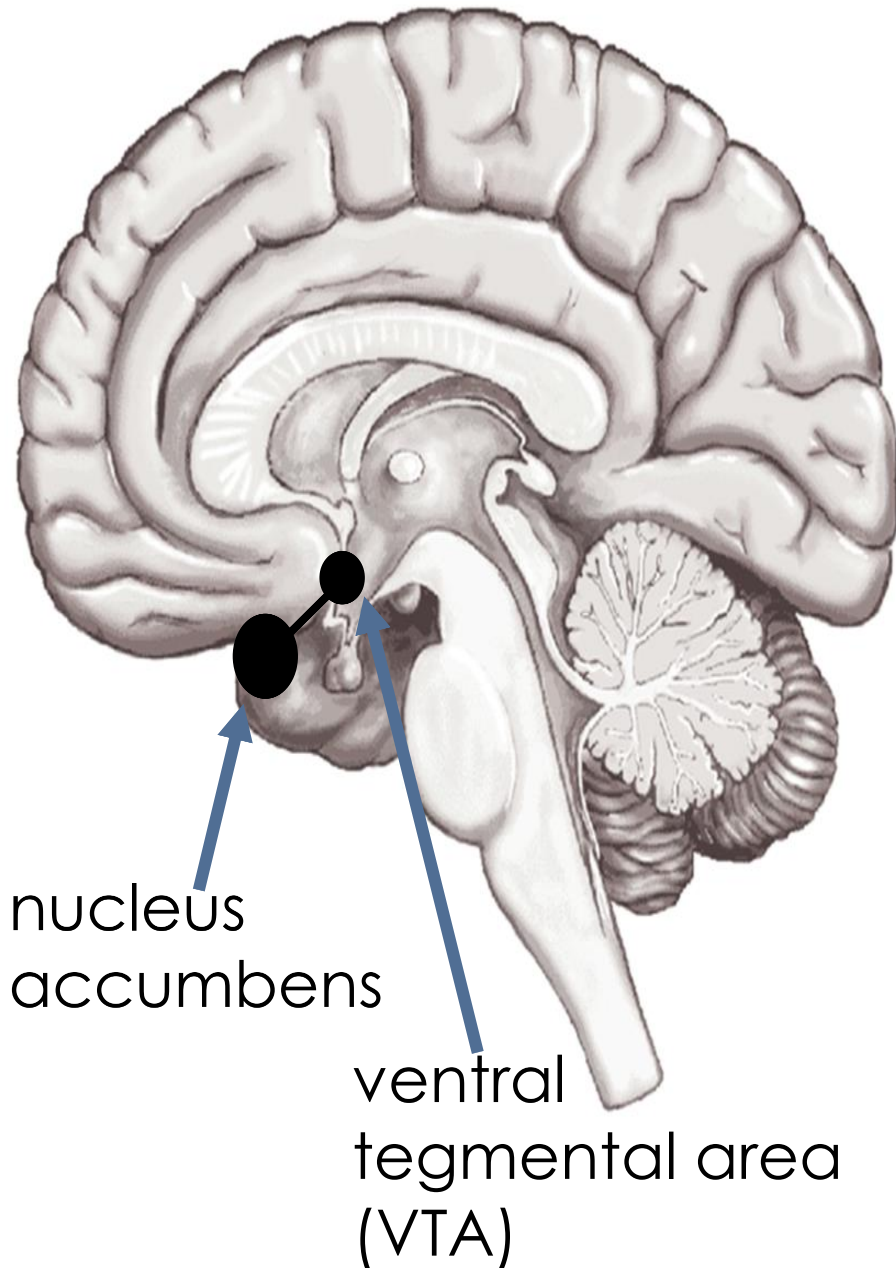
Every dollar invested saves $4-7 in fewer drug related crimes, criminal justice courts, and thefts. (NIDA)

“ Substance abuse treatment is a really good deal for tax payers, but it shouldn’t have to be. We should do it out of humanity. ”

— Dr. Keith Humphreys
Stanford University, Medical Center

Addiction is a primary chronic disease with genetic psychological and environmental factors contributing to its development and manifestations. The disease is often progressive and fatal. It is characterized by impaired control over alcohol/drugs, preoccupation with alcohol/drugs, use of alcohol/drugs despite adverse consequences, and distortions in thinking, most notably denial.

Each of these symptoms may be continuous or periodic.



The VTA– nucleus accumbens pathway is activated by all drugs of dependence, including alcohol.

This pathway is important not only in drug dependence, but also in essential physiological behaviors such as eating, drinking, sleeping and sex.

Common denominator in at least the acute effects of all drugs of abuse is activation of the brain's Mesolimbic dopamine system.

A key neurophysiological lesion of alcoholism and other addictions occurs in the mesolimbic dopaminergic neural pathway in the brain's ventral tegmentum. In normal individuals, this pathway provides pleasurable reinforcement when hunger or sex drives are satisfied. In addicted individuals, neuronal function in this pathway is regulated by different DNA sequences. Thus the neurophysiological basis of the disease of addiction involves a **hijacking** of the mesolimbic pathway such that it drives addictive behaviors along with or instead of adaptive eating and sexual behaviors. For alcoholics and addicts, the resulting cravings and impulses to drink make it difficult to avoid alcohol/drugs.

Source: Psychiatric Disorders. Section 17, Alcohol Use Disorders. Method of Richard L. Brown, MD, MPH: 2006.

CAUSES

- Genetics
- Early onset use (developmental)
- Environmental factors

Drug addiction manifests as a compulsive drive to take a drug despite adverse consequences. This has been viewed as a bad “choice” and a moral failure.

Chronic drug use changes the brain.

The changes are long-lasting and persist years after drug use has been discontinued, which leads to chronic and relapsing disease.

We have much more knowledge about drugs' effect on the brain and the modulatory role of genetic, developments, and environmental factors. This should result in changes in our approach to prevention and treatment of addiction.

Drugs can be abused for various reasons:

- Experience of pleasure
- Altered mental states
- Improved performance
- Self-medicate a mental disorder
- Curiosity (novelty seeking)
- Risk taking
- Peer pressure

The repeated use of a psychoactive/addictive drug, in vulnerable individuals, can result in addiction, which is characterized by an intense desire for the drug combined with impaired ability to control that urge even in the face of adverse, even catastrophic, consequences (e.g., incarceration, loss of child custody, loss of medical licensure, et cetera).

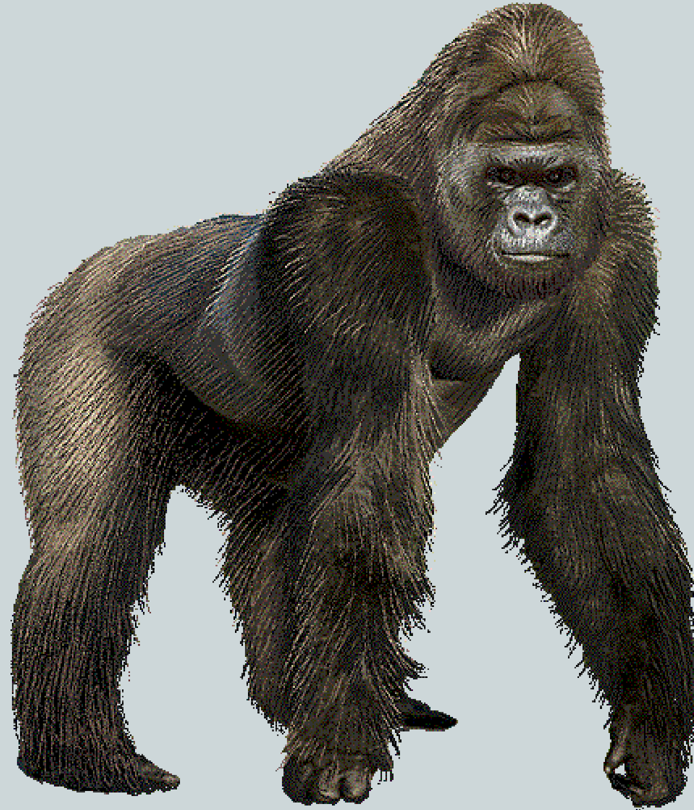
Science (including brain imaging) suggests that addicted individuals suffer from a progressive functional and structural disruption in brain regions that underlie the normal processes of motivation, reward, and inhibitory control.

Although initial drug and alcohol experimentation and recreational use is typically voluntary, once addiction develops, behavioral control becomes markedly disrupted.

DEVELOPMENTAL ISSUES

Normal adolescent behaviors (risk taking, novelty seeking, and heightened sensitivity to peer pressure) increase the likelihood of experimenting with legal and illegal drugs. This in part reflects incomplete development of brain regions (such as myelination of the frontal lobe regions) that are involved in executive control and motivation.

Drug use in adolescence seems to result in different brain changes than those that occur during adulthood.



Do 800 lb. gorillas respond to pop guns?

Patients with substance use disorders receive poorer quality care than patients with any other common chronic condition. Most patients do not receive treatment and medications are particularly under-utilized.

Patient-centered care and decision-making are essential for high quality mental health and substance use disorder treatments.

4 EFFECTIVE INDIVIDUAL BEHAVIORAL TREATMENTS

1. Cognitive behavioral
1. Behavioral couples
1. 12-Step facilitation
1. Motivational enhancement

ADDICTION TREATMENT

- Developed outside mainstream medicine
- Disease of addiction largely treated like an acute disorder
- Got beat up by managed care
- Developed into "camps"– 12-step, biological, or medication-oriented
  - For example: AA, methadone clinics

CURRENT CHALLENGES

- Lack of physicians, nurses
- Training deficiencies
- High turnover

SUD
Severe

SUD
Moderate

SUD Mild

Hazardous Use

Prevention

Chronic care model...

Chronic care management model is a long-term, proactive strategy involving multidisciplinary teams. The ultimate goal is to teach the patient and his/her family to acquire the motivation skills and supports necessary for ongoing self-management of this chronic disease.

Rather than providing reactive, acute care episodes of expensive hospital care following a disease relapse, the CCM is proactive, innovative, and more effective. It is more appreciated by patients and caregivers and does not appear to cost more than traditional care.

TOOLS FOR RECOVERY

Accountability

Medications (for alcohol, opiates, nicotine)

Mutual Support 12-Step Groups

Counseling

Lifestyle (exercise, eat right, avoid smoking)

Service Work

Spirituality

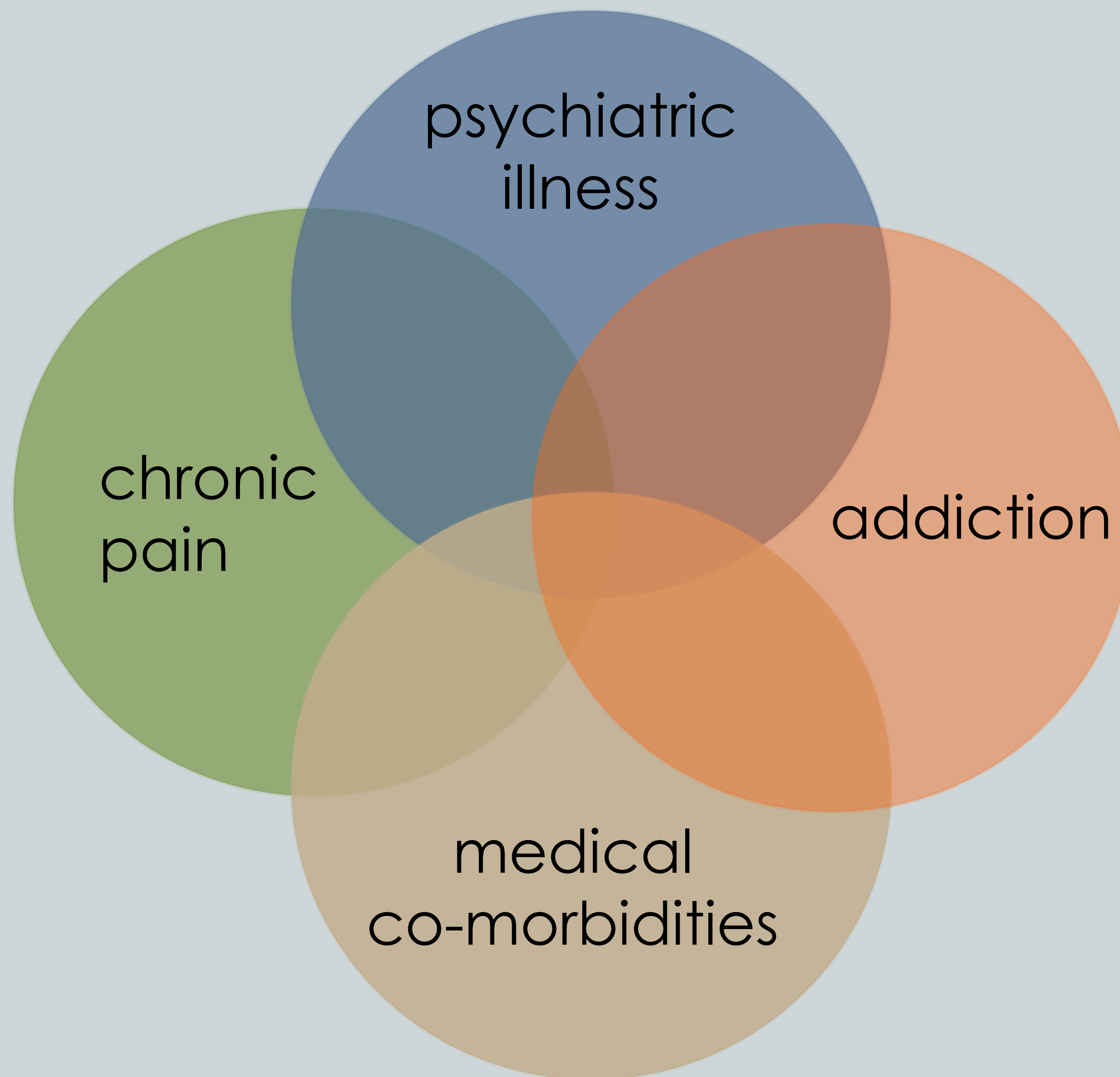
Positive Social Support Network

"THE PERFECT STORM"

- Liberalization of opioid therapy for chronic pain
- Newer, more potent opioid drugs—smorgasbord of choices
- Demand on Primary Care
- Societal attitudes
- Parents and health care providers often naïve
- Healthcare providers were told addiction is rare, typically <1% (actually 30-40%)
- Minimal screening/evaluation for addiction

“Red Flags”

- Smoking
- Family history of addiction
- Personal history of substance abuse, active or recent use of illicit drugs, excessive use of alcohol
- Major psychiatric disorder, personality dysfunction
- The patient insists on being on multiple classes of controlled substances
- Allergic or can’t tolerate or not interested in in non-addictive medications/approaches
- Lots of chaos, never seems to really improve, pain and anxiety always high
- Reports or appearance of intoxication
- Requires high doses, always feels need for higher dose
- Preadolescent sexual abuse
- Poor family support
- Poor reliability, missed appointments, lost or stolen scripts/pills
- Multi-sourcing
- Use of street names for drugs (ex. “eats” pills instead of takes them, “hydros,” “percs”)
- Lack of objective findings, vague or unsubstantiated diagnosis

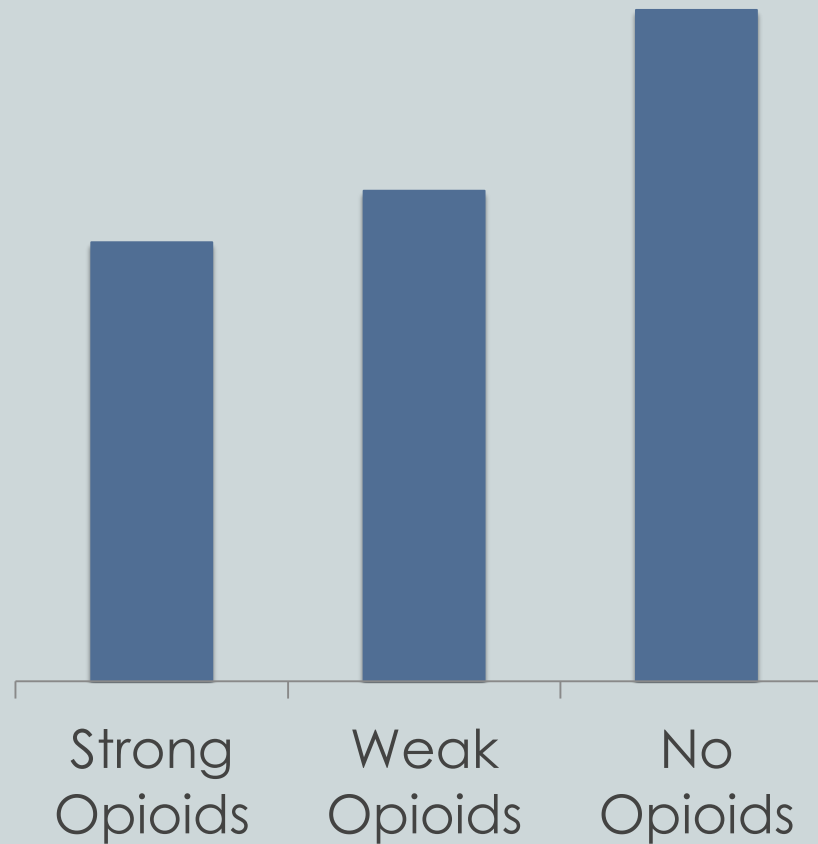

psychiatric
illness
chronic
pain
addiction
medical
co-morbidities

Why use opioids in the first place???

TO IMPROVE FUNCTION!!!

(and relieve pain.)

Quality of Life Scores According to Chronic Pain Status and the Use of Opioids



Clinical Journal of Pain 6, no. 9 (November/December 2010).

And now, a word about sedatives:

DON'T!!

Benzodiazepines, "Muscle Relaxers," Soma, Ambien, etc. in Chronic Pain Patients

- Cognitive impairment
- Depression of mood
- Viseo-spatial impairment (falls)

Results in worsening internal pain perception, worsening function capacity

Ciccone, DS, et al. J Pain Symptom Management, 2000.

To Improve Outcome and Lower Liability

- Develop guidelines to follow
- Learn to screen for alcohol and drug abuse problems
- Establish upper limit of dosing
- Be firm, have a pre-rehearsed response
- Use written care agreements
- Keep track of red flags in specific area in your chart
- Consider controlled substance medication as a ***trial***
- Use urine screens

- Use statewide prescription monitoring systems (INSPECT)
- Stop chronic opiates in response to red flags
- Observe universal precautions
- Trust your instincts
- Avoid simultaneous and chronic use of multiple classes of controlled substances
- Focus on FUNCTION
- Get the family involved and get their feedback concerning function periodically

Heroin 1870s

It is a trade name of the Bayer Corporation.

Real name: Diacetylmorphine

Heroin is a prodrug.

Diacetylmorphine (Inactive)

6 Monoacetylmorphine (Active)

Morphine (Active)

MYSPACE
MYSPACE
MYSPACE

$ THE $
RECESSION
$ THE $
RECESSION
$ THE $
RECESSION
$ THE $
RECESSION

TWILIGHT

CASH MONEY

Heroin

- Easily accessible
- Plentiful supply
- Cheaper
  - pill can be $20-25
  - bag can be about $10

Over the last 4-5 years, heroin deaths increased **45%**.

Demographics of heroin addiction have changed:

- rural areas, suburbia, youth
- death rates highest among the poor

Overdose death rates have more than tripled since 1990.

Overdose death rates highest among the poor, whites, Native Americans, Alaskan natives

CDC considers prescription drug addiction an epidemic,

in the US 1991-2010

stimulants 5 million → 45 million

opioids 75 million → 210 million

Indiana ranked **17th** in overdose deaths.

1 in 5 Indiana adolescents admit to abusing pills.

Reasons for Epidemic

- "Spike in heroin use can be traced to prescription pads."
- Doctors criticized for undertreating pain
- Doctors not trained in addiction or pain management and often naïve. No screening.
- Emphasis on patient satisfaction
- "Move patients through" –economic pressure
- Pharmaceutical marketing often deceptive. Many choices ("smorgasbord")
- Mixing multiple classes of controlled drugs

Reasons for Move to Heroin

- Crackdown on “pill mills”
- Cost, availability
- New law
- “Inspect” system
- Newer drugs more difficult to snort/inject

Opiates

There is genetic polymorphism of the opiate system. Not everyone responds the same.

	antagonist	partial agonist	agonist
	Naltrexone Naloxone	Buprenorphine Talwin Stadol Nubain	Heroin Morphine Oxycodone Hydrocodone Fentanyl Methadone
activity at receptor	–	+	+ +
antagonism + affinity	+ + +	+ +	+/–

Heroin complications:

Overdose– **60%** of heroin overdoses occur after a period of being clean

Hepatitis
HIV
Endocarditis
Abscess/Cellulitis
Nephropathy

Treatment

- Medication assisted treatment
  - Methadone
  - Buprenorphine
  - Naltrexone

- “Win-win”

  ↑ recovery rates

  ↑ patient retention

- Supported by…

WHO (World Health Organization)

United Nations

Hazelden

Cleveland Clinic

ASAM

& many others

“Detox from opioids without pharmacologic support afterwards remains the dominant model of treatment despite decades of experience and evidence to the contrary.”

– ASAM

“ The first few weeks following detoxification are the most dangerous phases of opioid dependence, with a significant risk of overdose and death. Pharmacologic assistance to prevent overdose is essential during this period. ”

“ It is imperative that either agonist or antagonist is offered to individuals who want to stop using opiates. ”

Addiction is a treatable disease and is extremely common.

We are in an epidemic and people are dying at an alarming rate (including people in the prime of their lives).

If you can’t relate to people with addiction, consider one or more behaviors or traits you have struggled with in your life.

When one person gets better, the lives of 5 or 6 other people (who you will never meet) improve.

Many people want to get better but lack an effective or realistic strategy and/or access to care.

In 2013, 316,000 people tried and failed to get treatment.

The governor of Vermont doubled the state budget to deal with the opioid addiction epidemic and there were not enough providers to meet the demand.

CDC Expert Commentary

Heroin: The Epidemic That Knows No Boundaries

Jane Bisbee, Indiana Department of Child Services, and Sharon Pierce, President & CEO, The Villages

Representative Christina Hale and Dr. John Parrish-Sprowl, Director, IUPUI Global Public Health Communications

Underreporting and Adolescent Sexual Assault in Indiana

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Global Health Communication Center

Indiana University
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Background

- Indiana has the 2nd highest rate of forced sexual intercourse among high school females in the nation
- Approximately 1 in 5 will be sexually assaulted in this state by the age of 18
- We have many good people and programs in place, but we are not making progress

Background

- Indiana does not aggregate the data necessary for tracking adolescent sexual assault-making it difficult to formulate policy and programs effectively
- Underreporting contributes to the problem
  - Leads to understating the problem
  - Leads to de facto protection (and tacit support) for perpetrators
  - Leads to disconnect between victims and services

Background

- This study is focused on the issue of underreporting
- It is well known that feelings of shame, guilt and fear might lead someone to not report being a victim of sexual assault. If the person somehow finds the courage to report even while experiencing such devastating feelings, it is important that the process be one that is both encouraging and affirming.

Background

Should the reporting process prove too difficult, unnecessarily unpleasant, or even retraumatizing, the victim is less likely to report, leaving him or her to silently suffer with the aftereffects of the assault. This, in effect, both helps protect the perpetrator and leaves the victim disconnected from assistance. This may or may not influence a perpetrator’s choice to assault in any given instance, but a dysfunctional reporting process certainly does not contribute to any sense of deterrence. While silence may the best protection for perpetrators, it can and often does have serious long-term negative consequences for victims.

Methodology

- The CDC-Kaiser Permanente Adverse Childhood Experiences (ACE) survey
- A survey of teachers (TS) focused on their observations and interactions regarding students and sexual assault
- Focus groups with people who work with adolescents, including teachers, forensic nurses, and staff from afterschool programs
- Individual interviews with service providers and physicians
- GIS mapping of Indiana Criminal Justice Institute (ICJI) reimbursement for sexual assault services data

Results

- 25.6% of respondents in our ACE survey reported that, prior to age 18, someone had touched or fondled their body in a sexual manner, with 85 % of them saying that it was against their wishes.
- Only 18.4% of those who indicated that they had been sexually assaulted reported this to a doctor, nurse, or other health care professional, much less to law enforcement.
- Underreporting is high and a significant part of the problem

Results

- 29.5% reported a person who lived in their home was involved (20.9% was a relative)
- 51.4% of assaults were from a family friend or person who they knew and who didn't live in their household
- 75% of assaults were from someone they trusted
- Family based solutions will prove inadequate to address this issue

Results

- 62.5% involved verbal persuasion or pressure to get them to participate in sexual experiences
- 10.5% involved in threats to harm them if they didn't participate
- 34.2% were being physically forced or overpowered to make them participate
- 28.9% were being given alcohol or drugs
- Inappropriate and unhealthy ways of relating lead to sexual assault

Results

- Schools are a logical and likely locus for reporting
- Teachers generally understand their duty to report
- For many reasons they are often reluctant to get involved

Results

- Teachers are reluctant to talk about this topic (especially males)
- The process of reporting is often not clear to students or teachers
- Both students and teachers may be reluctant to report for fear of repercussions from doing so (Teachers know they have a legal duty to report)
- Some teachers see the system as reactive but think it should be proactive (we require reporting of the crime but not education regarding it)
- Support resources are often either insufficient or nonexistent to facilitate the best handling of the situation

Results

- Teachers are often told not to talk about the topic of assault and abuse
- Male teachers are often afraid to have such conversations with female students
- Students are often willing to have the hard conversations if given the space to do so
- Teachers observe abuse from within adolescent couples due to the general way in which students learn to relate to one another

Results

Except their Sex Ed programs in public schools tell them don't have sex until you're married and just abstain. So they're not even getting those messages of – they're getting a message you're a sexual being, but then they're being told in our Sex Ed programs, they're abstinence programs. And obviously, they're not abstaining; 11% of our high school population has had a baby this year or they're pregnant. So they're not abstaining. So what kind of message are we communicating in our education about healthy relationships, about healthy bodies? But we still have this significant issue, so are we giving young people the information and the tools that they need to be able to keep themselves safe from that.

--Quote from one teacher

Results

- Social media add complexity to an already difficult problem
- Policy and procedure has not kept up with technology, but adolescents have done so

Results

And I think, you know undoubtedly, as I think about how our kids communicate, social media definitely plays a big role in probably scaring kids from reporting it because once it gets out or once there's a conversation, somebody's going to try to belittle that person and then once that happens, once the first shred of any conversation, whether it be right or wrong, it's going to get blown out of proportion and stories are going to get added, things are going get deleted, truths are going to be hidden, and lies are going to be added. And so, you know, it used to, you know, you think about it worrying about maybe just your community or maybe your block knowing about what happened to you. Now it's, you know, that the state knows about you and the country knows about you with the way that social media goes and so I mean there's a whole traumatization of who you are as a person by people who honestly are thousands of miles away from you and have no clue about who you really are.

--Quote from one teacher

Results

So I don't know the statistics for how many of the sexual assaults in Indiana that gets us to the second from the top of the list happen towards young woman or how many happen towards young men, but here’s what I notice with young women reporting, right. So let's talk about sexting and sending nude photographs. Well, what’s happened is the young women are hesitant to come and tell us that this is going on, that they sent a nude picture to one guy and he sent it to 120 guys and now 250 guys or maybe 700 or it’s out on the internet because what’s happened is our prosecutor has said well you sent it so you can be charged, too. And so this is a crime against them. Sure they sent an innocent picture – it’s not really innocent, right? They’re in middle school. But they sent a picture to a boyfriend who said I love you, please send me a naked picture of yourself, you’re just amazing, and so she did. But he went out immediately and sends it to a bunch, but our prosecutors in our town made all of them equal, and said if you’re going to come and tell me about this sexual assault – sending this nude photograph – you could be charged with disseminating child pornography as well.

--Quote from one teacher

Results

- Mapping of ICJI data demonstrate that this is a Statewide problem, not simply regional, urban, or rural

Incidents per County (2013)

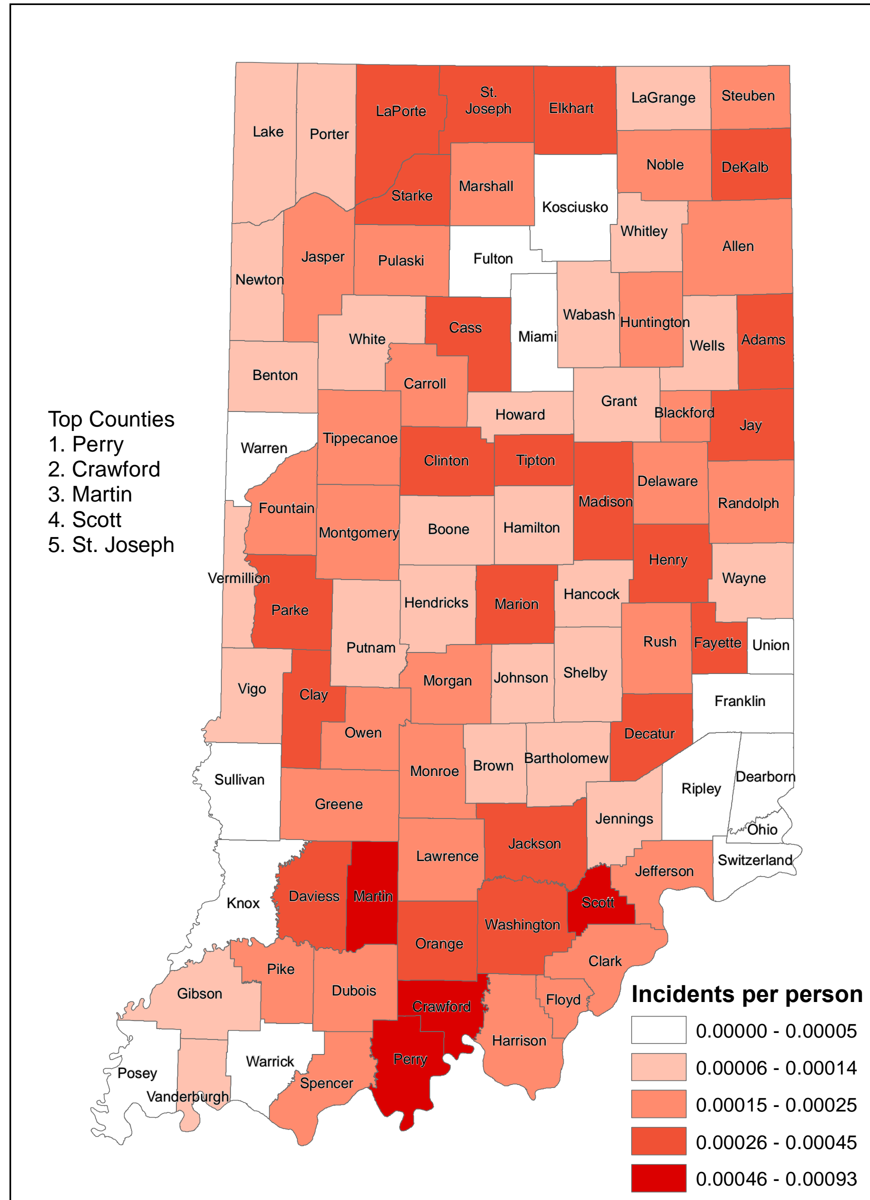
Top Counties
1. Marion (293)
2. St. Joseph (119)
3. Allen (78)
4. Lake (60)
5. Elkhart (59)

Lake 60
Porter 15
LaPorte 28
St. Joseph 119
Elkhart 59
LaGrange 4
Steuben 6
Noble 9
DeKalb 11
Starke 6
Marshall 10
Kosciusko 4
Whitley 3
Allen 78
Newton 1
Jasper 5
Pulaski 2
Fulton 1
Wabash 2
Huntington 7
Wells 3
Adams 13
White 3
Cass 10
Miami 2
Benton 1
Carroll 4
Howard 6
Grant 7
Blackford 3
Jay 7
Warren 0
Tippecanoe 39
Clinton 9
Tipton 4
Madison 37
Delaware 29
Randolph 6
Fountain 3
Montgomery 7
Boone 8
Hamilton 18
Henry 14
Wayne 5
Vermillion 1
Parke 5
Hendricks 17
Marion 293
Hancock 6
Putnam 3
Rush 3
Fayette 8
Union 0
Vigo 13
Clay 8
Morgan 10
Johnson 14
Shelby 5
Franklin 0
Owen 5
Decatur 7
Monroe 21
Brown 1
Bartholomew 8
Ripley 0
Dearborn 0
Sullivan 1
Greene 7
Jennings 3
Ohio 0
Lawrence 10
Jackson 15
Switzerland 0
Jefferson 6
Knox 1
Daviess 9
Martin 6
Scott 14
Washington 9
Orange 8
Clark 26
Pike 2
Gibson 3
Dubois 8
Floyd 14
Crawford 7
Harrison 6
Perry 18
Vanderburgh 17
Posey 1
Warrick 1
Spencer 4

Incidents
- 0
- 1 - 8
- 9 - 17
- 18 - 35
- 36 - 110
- 111 - 293

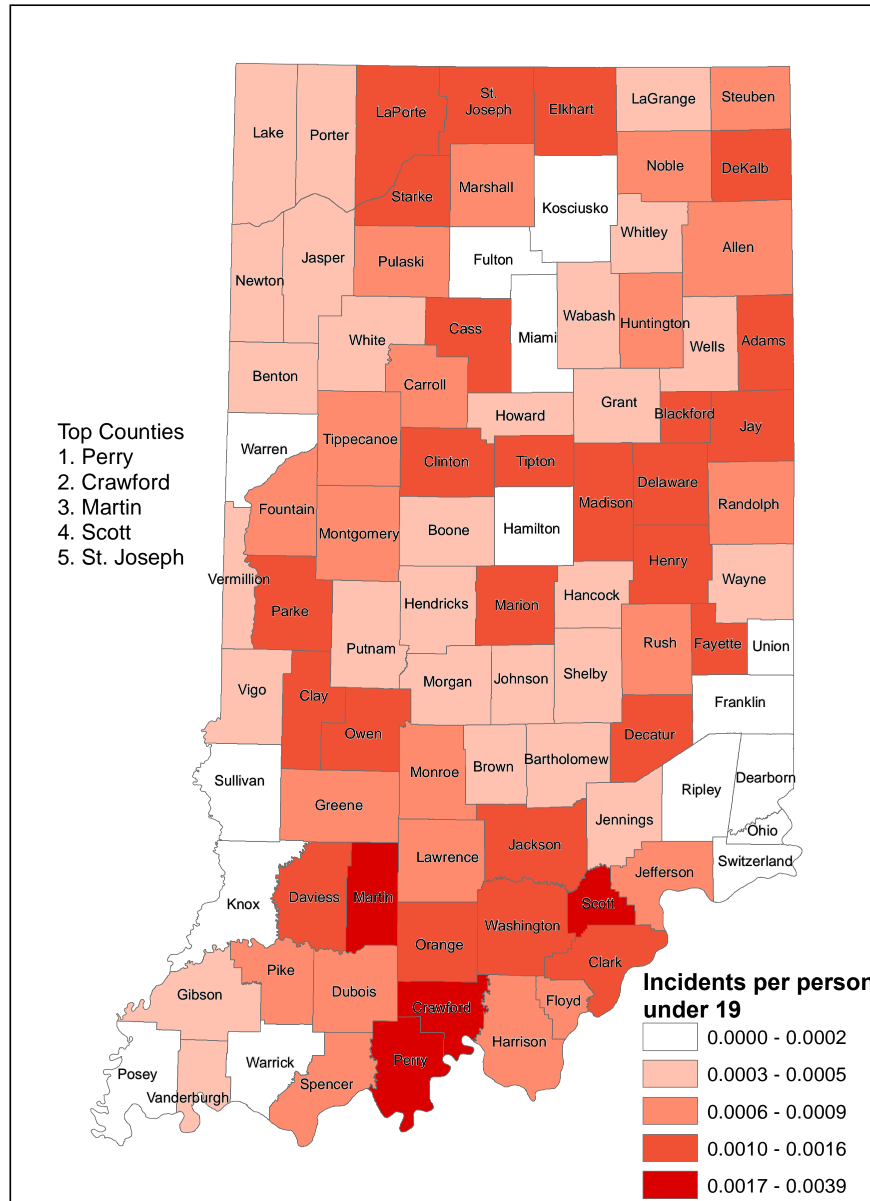
Data obtained from: Indiana Criminal Justice Institute
Map created by: Samuel Cooper

Incidents per Capita (2013)



Data obtained from: Indiana Criminal Justice Institute
Map created by: Samuel Cooper

Incidents per Person Under 19 (2013)



Data obtained from: Indiana Criminal Justice Institute
Map created by: Samuel Cooper

Recommendations

- Create a process and repository for all data relating to adolescent sexual assault in the state. This effort should be proactive, ongoing and integrative. It should include law enforcement, ICJI, and other relevant data sources to provide a comprehensive picture of adolescent sexual assault across the state.
- Teachers should be given better training regarding both the short and long-term consequences of sexual abuse and assault, how to recognize the signs, how to have reporting conversations that encourage adolescents to disclose, and how to get them connected to necessary support services.
- Students need a multi-year curriculum that focuses on how to develop and maintain healthy relationships, and addresses the full range of issues that young people face as they enter into such relationships, including choices about sexual activity, managing conflict, and dating violence.

Recommendations

- Indiana needs to develop a coherent and comprehensive policy that assists victims of sexual assault when social media are involved.
- The state should explore a policy that includes restorative justice models as an option in adolescent sexual assault cases. This could encourage reporting and successful mitigation of consequences in many cases.
- Schools and afterschool programs need trained adults to facilitate discussions with adolescents related to sexuality and relationships. Students need to learn to have informed, frank and thoughtful discussions around this topic.

Donald Travis, Deputy Director, Juvenile Justice Initiatives and Support, Indiana Department of Child Services

- ***Open Discussion***
- ***Next Meeting**: **November 18, 2015***

  Indiana Government Center South, Conference Room A
- ***2016 Meeting Dates***

  February 17, 2016

  May 18, 2016

  August 17, 2016

  November 16, 2016

Website

The website to view all documents handed out at Commission meetings and the webcast of today's meeting can be found at www.in.gov/children.