

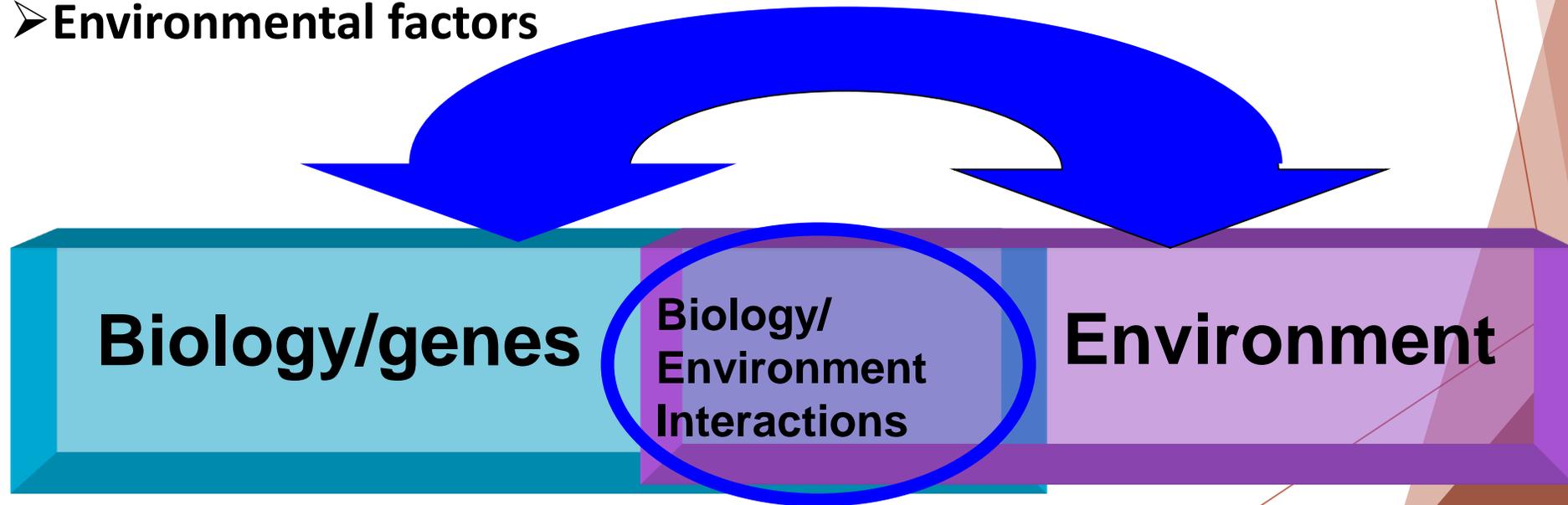
# Minimizing Risk of Developing a Substance Use Disorder

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# Why do young people take drugs?

## Risk Factors

- Family history/genetics
- Mental health disorder
- Environmental factors



# Illinois

- 1 of 16 states in which more people die of drug overdoses than car accidents.
- Heroin is the most commonly cited drug among drug treatment admissions in Illinois.
- The highest rate of Emergency Room admissions are due to misuse of heroin and prescription opioids.

Source: Illinois Department of Public Health; CDC/statistics 2014

# Mental Health

**50% of youth with a substance use disorder also have a mental illness** (National Alliance on Mental Illness)

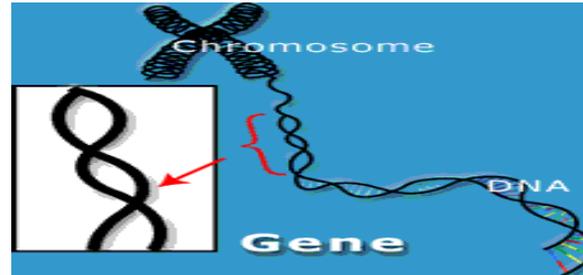
- Mental health problems are common;
- Often develop during adolescence;
- Affects a person's thinking, emotional state and behavior

# U.S. Youth with a Mental Disorder During Adolescence (Age 13-18)

	Prevalence (%)	With severe impact (%)
<b>Anxiety disorders</b>	<b>31.9</b>	<b>8.3</b>
<b>Behavior disorders</b>	<b>19.1</b>	<b>9.6</b>
<b>Mood disorders</b>	<b>14.3</b>	<b>11.2</b>
<b>Substance use disorders</b>	<b>11.4</b>	<b>n/a</b>
<b>Overall prevalence (with severe impact)</b>		<b>22.2</b>

Merikangas, K. R., He, J., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., ... Swendsen, J. (2010). Lifetime Prevalence of Mental Disorders in US Adolescents: Results from the National Comorbidity Study-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, 49(10), 980–989. <http://doi.org/10.1016/j.jaac.2010.05.017>

# Risk of Developing a Substance Use Disorder



## Environment - ACEs

- ▶ Adverse childhood experiences that harm children's developing brains so profoundly that the effects show up decades later;
- ▶ Cause much of chronic disease, most mental illness, and are at the root of most violence.
- ▶ CDC-Kaiser Adverse Childhood Experiences Study, a groundbreaking public health study that discovered that childhood trauma leads to the adult onset of chronic diseases, depression and other mental illness, violence and being a victim of violence. Substance use disorder is a chronic disease!

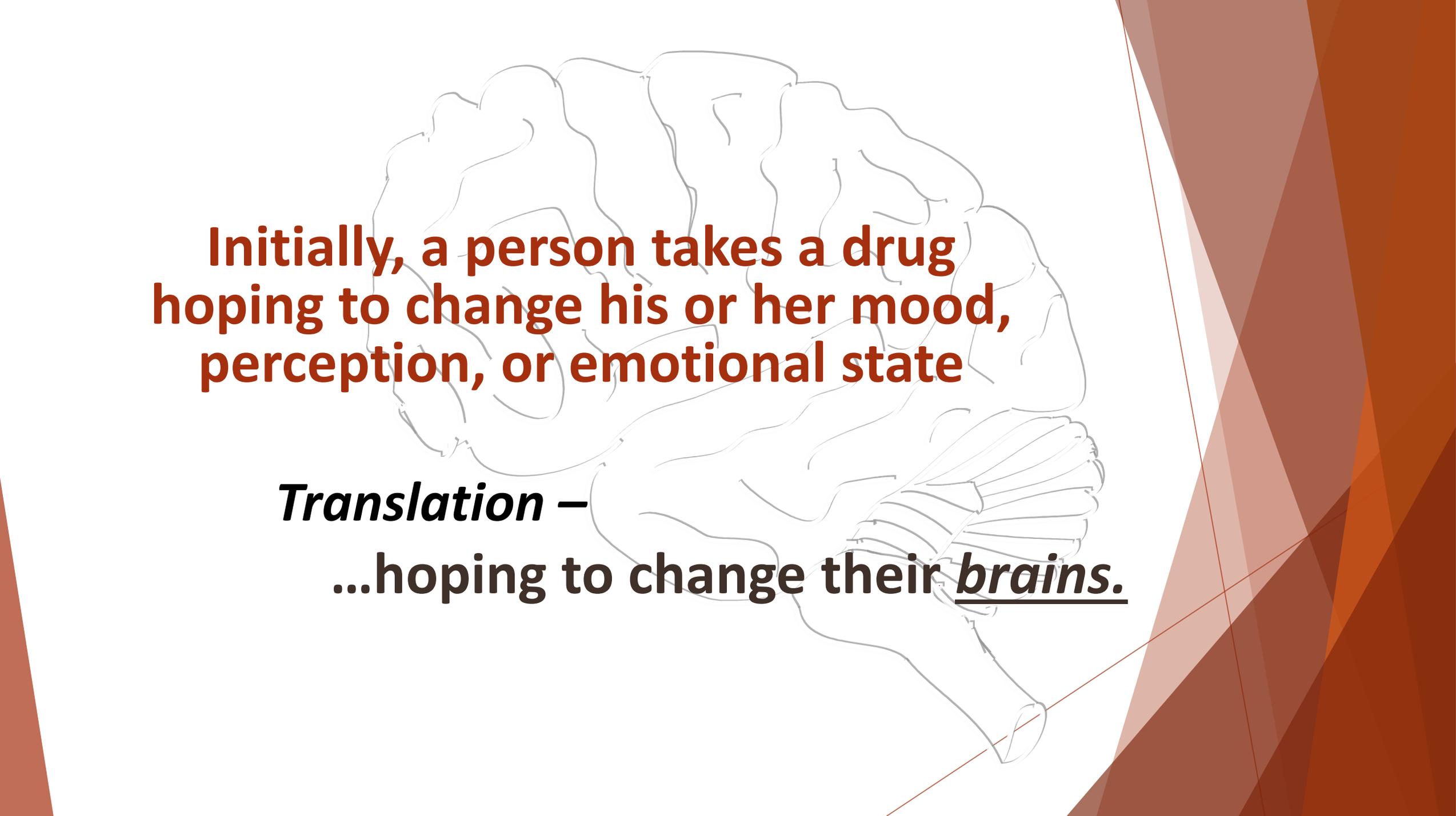
<https://www.cdc.gov/violenceprevention/cestudy/>

# Adverse Experiences

- ▶ Physical, sexual and verbal abuse
- ▶ Physical and emotional neglect
- ▶ A family member who is: depressed or diagnosed with other mental illness; addicted to alcohol or another substance; in prison
- ▶ Witnessing a mother being abused
- ▶ Losing a parent to separation, divorce or other reason
- ▶ Witnessing a sibling being abused, witnessing violence outside the home, witnessing a father being abused by a mother, being bullied by a classmate or teacher

# ACEs Adverse Childhood Experiences

- ▶ ACEs don't occur alone...if you have one, there's an 87% chance that you have two or more.
- ▶ ACE score of 0 to 10. Each type of trauma counts as one, no matter how many times it occurs. Like a cholesterol score for childhood trauma.
- ▶ With an ACE score of 4 you are twice as likely to be smokers and seven times more likely to be alcoholic. Increases the risk of emphysema or chronic bronchitis by nearly 400 percent, and suicide by 1200 percent.
- ▶ People with high ACE scores are more likely to be violent, to have more marriages, more broken bones, more drug prescriptions, more depression, and more autoimmune diseases.
- ▶ An ACE score of 6 or higher you are at risk of lifespan being shortened by 20 years.



**Initially, a person takes a drug  
hoping to change his or her mood,  
perception, or emotional state**

***Translation –***  
**...hoping to change their brains.**

# Substance Use

- ▶ 1 in 4 teens reports having misused or abused a prescription drug at least once in their lifetime.
- ▶ Two-thirds (66 percent) of teens who report abuse of prescription pain relievers are getting them from friends, family and acquaintances.
- ▶ Nearly 80 percent of people who inject heroin start by abusing Rx drugs.
- ▶ While some teens abuse medicine to party and get high, many are using medicine to manage stress or regulate their lives. Many teens are abusing pain relievers, tranquilizers and over-the-counter cough medicine to cope with academic, social or emotional stress.
- ▶ Teens don't see this behavior as risky.

# What are Opioids?

- ▶ Opioids are natural or synthetic substances that act on the brain's opiate receptors.
- ▶ Opioids dull pain (physical and emotional) and relieve anxiety.
- ▶ Opioids are depressants and at high levels they can repress the urge to breathe.
- ▶ The way opioids are consumed influence how long it lasts in the body and how potent it is.
- ▶ Fentanyl is one of the most powerful legal pain killers available at 30 to 50 times more potent than heroin.

*He was prescribed opiates for pain. No one ever told us how highly addictive these drugs were.*

*Paul K., parent*

*Partnership for Drug Free Kids*

# How long do opiates last in the body?

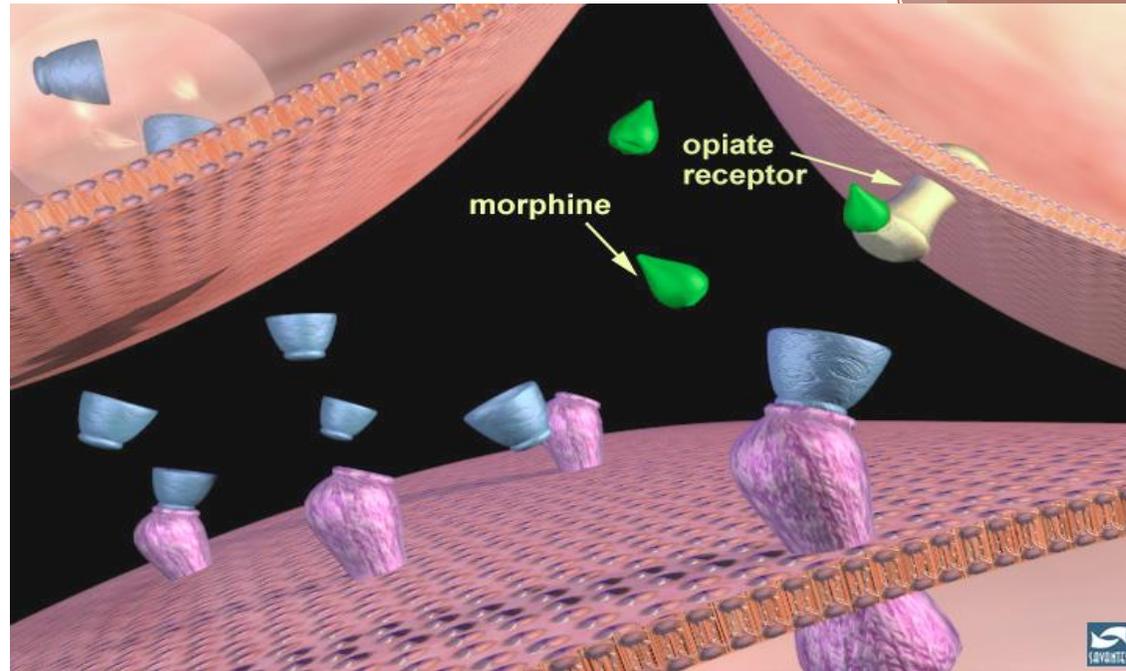
Drug	Duration	Potency
Methadone	24hr	++++
Heroin	6-8hrs	+++++
Oxycotin	3-6hrs	+++++
Codeine	3-4hrs	+
Demerol	2-4hrs	++
Morphine	3-6hrs	+++
Fentanyl	2-4hrs	++++ ++++

# Why Heroin?

- ▶ Parent permissiveness and lax attitudes toward abuse and misuse of Rx medicines, coupled with teens' ease of access to prescription medicines in the home, are key factors linked to teen medicine misuse and abuse.
- ▶ Recent studies have linked prescription opioid drugs to the increase in heroin addiction.
- ▶ Prescription opioids too expensive - turn to heroin, less expensive, more pure, and more accessible.
- ▶ From 2002 to 2011, 80 percent of heroin users reported previous abuse of opioids compared to 1 percent of heroin users who had not. Additionally, heroin use was 19-times greater among individuals who reported prescription pain reliever use than among those who have not used prescription pain relievers.
- ▶ The National Surveys on Drug Use and Mental Health found 77 percent identified using non-medical opioids prior to engaging in heroin use.

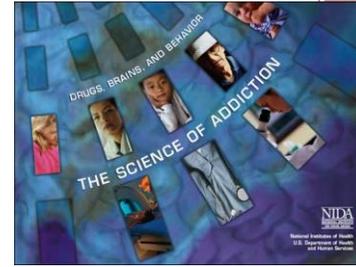
# Naloxone

## Opioid Antagonist



- *Temporarily* blocks the effects of opioids, giving the person the chance to breathe
- Naloxone works in 1 to 3 minutes and lasts 30 to 90 minutes
- Naloxone can **neither** be abused nor cause overdose, only contraindication is known sensitivity, which is rare.

# Opioid use disorder



“Addiction is defined as a **chronic, relapsing** brain disease that is characterized by compulsive drug seeking and use, despite harmful consequences.”

“Addiction is **similar to other diseases**, such as heart disease.”

“It is considered a **brain disease** because drugs change the brain—its structure and how it works.”

## Addiction Defined

# Free Narcan Nasal Spray High School Program

- ▶ The National Association of School Nurses (NASN) developed Naloxone in Schools Toolkit which is a non-branded educational program created to increase awareness of opioid-related risks among students, educators, families and communities as well as to provide proper opioid overdose protocols. The school nurse is a leader in student health and has the education and expertise to assist the community and school leadership with a needs assessment for opioid-related risk reduction policies.
- ▶ [www.narcan.com/pdf/NARCAN-for-High-Schools.pdf](http://www.narcan.com/pdf/NARCAN-for-High-Schools.pdf)

# Resources

- ▶ <http://drugfree.org/medicine-abuse-project/>
- ▶ ADAPT webpage. <http://www.narcannasalspray.com/>
- ▶ NIDA National Institute on Drug Abuse and Addiction  
[www.drugabuse.gov](http://www.drugabuse.gov)
- ▶ [www.stopoverdoseil.org](http://www.stopoverdoseil.org)
- ▶ Center for Disease Control  
<https://www.cdc.gov/drugoverdose/opioids/fentanyl.html>
- ▶ SAMHSA <http://www.samhsa.gov/topics> Naloxone: Frequently Asked Questions
- ▶ <http://www.drugabuse.gov/publications/research-reports/heroin/letter-director>
- ▶ <https://www.nasn.org/Home/ArticlesHomePage/tabid/464/ArticleId/994/Naloxone-in-Schools-Toolkit>

# Contact Information

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