COMMUNITY ENGAGEMENT AND AWARENESS OF THE HEROIN EPIDEMIC

All labor that uplifts humanity has dignity and importance and should be undertaken with painstaking excellence.

- Dr. Martin Luther King

Kathleen O'Brien, Ph.D.
Chief Executive Director
Opiate Addiction In St. Mary’s County

- Addiction is particularly an issue among 18- to 30-year-olds

- Admissions for treatment of prescription opioid substance use In St. Mary’s increased substantially from 2008 to 2012 (400% increase)*

- Rate of treatment admissions for heroin use more than doubled between 2008 and 2012 (230% increase)

*Data Source: State of Maryland Automated Record Tracking (SMART)

<table>
<thead>
<tr>
<th>Southern Maryland Overdose Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>County</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>St. Mary's</td>
</tr>
<tr>
<td>Calvert</td>
</tr>
<tr>
<td>Charles</td>
</tr>
<tr>
<td>State of Maryland</td>
</tr>
</tbody>
</table>
Heroin is in Your Neighborhood

- Heroin doesn’t discriminate! Heroin will welcome anyone into its grasp!
- Heroin is cheap, potent, and readily available. People who use heroin come from all walks of life, cutting across all socioeconomic boundaries.
- This is not your parents heroin...it can be smoked, snorted and injected.
- Addiction is a brain disease...The virtually uncontrollable compulsive drug craving, seeking and use interferes a persons functioning in the family and society.
- The state’s price tag for heroin, alcohol, and other drug abuse is estimated to be in the billions annually (crime, incarceration, auto accidents, lost wages, medical care...)
- This medical condition demands formal treatment
What Are Opiates

• Opiates are commonly referred to as painkillers. They are derived from opium or synthetic versions of it and used in pain relief. Common opiates include: Vicodin (hydrocodone), Percocet, OxyContin, oxycodone, Fentanyl, Demerol and codeine.

• Almost all young heroin users abuse Rx Painkillers first

• Rx Drugs: Opiates for treating chronic pain, often a gateway to heroin

• Parent and physician should monitor for proper use to prevent physical dependency from forming
What is Heroin

- Heroin is an illegal, highly addictive opiate drug. It is both the most abused and the most rapidly acting of the opiates. Heroin is processed from morphine, a naturally occurring substance extracted from certain varieties of poppy plants. Most street heroin is "cut" with sugar, starch or quinine. Strychnine or other poisons can also be added.

- Street names: boy, white, cheeva, brown sugar, H, Juan, tar

- It can be smoked, snorted or injected.

- Because heroin abusers do not know the actual strength of the drug or its true contents, they are at risk of overdose or death.
Heroin: The Basics

- Use is on the rise nationwide
- Prescription drugs (the most commonly abused substance by teens) besides marijuana are harder to obtain and abuse
- People from all walks of life are giving heroin a try
- Number of teens between 12 and 17 who have tried heroin has increased dramatically

Some Types of Opioids

- Codeine – commonly known for its use in Tylenol 3.
- Hydrocodone – known by the brand names Lortab, Lorco, Vicodin, and Norco.
- Oxycodone – brand names including Percocet, Percodan, and OxyContin.
- Hydromorphone – known most commonly by the brand name Opana.
- Meperidine – known by the name Demerol.
- Fentanyl – powerful opioid known by the brand names Abstral, Actiq, Fentora, and Onsolis.
What Does Heroin Look Like

- Pure heroin: Fine white powder
- Street heroin: gray, tan or brown
- Sometimes a black tar like substance
What Happens When You Use

- First Use: Intense euphoric rush
- Flushed Skin, “heavy arms and legs”, dry mouth, slowed breathing/heart rate
- Nods in and out of consciousness: aka “on the nod”
- Next “fix” to feel normal: “keep the sick off”
- Becomes a vicious cycle of use
The Changing Face of Opiate Addiction

- **1960s**: Predominantly men (82.5% male)
  
  Average age of onset: 16.5
  
  First Opioid of abuse heroin (80%)
  
  Whites and non-whites equally represented

- **2010-2013**: Men and women are equally involved
  
  Average age of onset of heroin use increased to 22.9 years
  
  75% started with prescription opioids
  
  More likely to be from non-urban area (75.2%)
  
  90% white
Please see video clip #2
Why do Some People Develop Addiction?
How do Opiates Work?

Opiates resemble natural chemicals that have binding sites in the brain and the body called opiate receptors.

Opiates act on many places in the brain and nervous system, including:

- The **Limbic System**, which controls emotions. Acting here, opiates can produce feelings of pleasure, relaxation, and contentment.

- The **Brainstem**, which controls things your body does automatically, like breathing. Opiates can effect the brainstem to slow breathing, stop coughing, and lessen the feeling of pain.

- The **Spinal Cord**, which transmits sensations from the body. Opiates also act here to decrease feelings of pain, even following serious injuries.
Brain’s Innate Opioid Receptor System

The opioid receptor system in the brain controls pain, reward and addictive behaviors. The opioid receptors are activated by a family of endogenous peptides like endorphins or dynorphins, which are released by neurons. These opioid receptors can also be activated exogenously by opiates such as morphine, fentanyl or heroin, extremely powerful painkillers but highly addictive.
Causes of Opioid Addiction

• All born with endorphin opioid system that helps us feel pleasure and regulate pain

• Too much opioids taken into body overstimulate the reward center

• With repeated exposure to opioids, the body adapts so that long-term changes happen to the receptors and cells in the brain

• These changes are manifested by tolerance, withdrawal, and memory of overstimulation, all of which drive continued drug use
Receptor Changes

Over time........

• Changes happen in the shape of opioid receptors with chronic, prolonged exposure

• These changes alter the way nerve cells in the brain act

• These changes may be irreversible (or at least long-term)

• May be why so many people relapse after detox or after years of not using
The limbic system contains the reward or pleasure center of the brain.
1. Neurotransmitter binds to receptor on second cell. This binding excites the second cell into action.

2. The reward center in the limbic system contains thousands of nerves and many different neurotransmitters.

3. All substances of abuse target the reward center and hijack it.
The Reward Center and Endorphins

- Endorphin
- Opioid receptor
- Dopamine receptor
- Dopamine

Reward center activation
The Reward Center and Opioids

Heroin

Dopamine

Opioid receptor

Dopamine receptor

Euphoria!
Why is euphoria from drugs a bad thing?

- Overwhelms natural process for feeling pleasure

- The brain remembers the intense pleasure brought about by drugs. These memories drive continued use and implicated in relapse
Short Term and Long Term Consequences of Use

**Short Term**
- Slowed Breathing and heart rate
- Clouded thinking
- Drowsiness /sedation
- Nausea /vomiting
- Hypothermia/cold sweats
- Coma/death form lack of oxygen to the brain

**Long Term**
- Collapsed veins; infected blood vessels, kidneys, lungs or heart valves
- AIDS, Hepatitis, contagious infections form needle sharing
- Respiratory Illness
- Muscular weakness/ Paralysis
- Immune system breakdown
Some Warning Signs of Use
Look for more than one or a pattern

**Physical:** change in eating habits and unexplained weight loss or gain; inability to sleep; red or watery eyes, smaller than normal pupils, blank stare, sniffing, scratching at skin, excessive sweating, tremors or shakes; cold, sweaty palms, nausea or vomiting.

**Emotional:** loss of interest in the family or activities, secretiveness or paranoia, lack of motivation, energy or self-esteem, not telling truth/evasiveness or dishonesty; moodiness, irritability, nervousness

**Other:** changes in grades or attendance, changes in friends, changes in appearance, a pattern of lost money or property, missing items from the medicine cabinet.

• Secretive meetings
• Hang-up phone calls
• Sickness, loss of appetite
• Blackouts/Memory Loss
• Long sleeves in warm weather
• Money disappearing, financial difficulties
Intervention Steps

- Know the Risk Factors
- Look for Signs
- Don’t believe the common myths and excuse or ignore risky behavior: For example:
  “It’s just a phase”. “He is just experimenting”.
- Ask and be direct: “I have noticed for the last two weeks that you have been overly tired and irritable. We need to talk”. 
Substance Abuse Workplace Data

• 67.9 percent of all adult illegal drug users are employed full or part time, as are most binge and heavy alcohol users.¹ Studies show that when compared with non-substance users, substance using employees are more likely to:
  
  • Be involved in a workplace accident and potentially harm others
  
  • File a workers’ compensation claim.
  
  • One worker in three knows of drug sales in the workplace.

Sources: National Institute on Drug Abuse

   American Council for Drug Education
Potential Signs of Workplace Substance Misuse

- Absenteeism and on the job absenteeism: The worker takes longer and more frequent breaks, comes in late, and will often be 'missing in action'.

- High accident rate: They become clumsy and unfocused, and will disregard standards.

- Difficulty concentrating and confusion.

- Inconsistent work patterns, e.g. becoming unable to take initiative or work independently.

- Reduced knowledge/technical skills: They no longer stay on top of their game.

- Change in behavior and attitudes: They may behave inappropriately, become emotional, or be withdrawn, with poor relationships in the workplace.

- Lower job quality and quantity of output.
Reduce the Demand: Treat

Goal: Expand and improve access to treatment for persons who are addicted.

Strategy:
• Enhance access to care through expanded same day access at multiple locations
• Work with hospitals to improve bed to bed transfer for residential treatment
• Train primary care physicians/nurses and the SBIRT to increase identification and referrals for treatment
• Encourage physicians to participate in medication assisted treatment
• Seek funding to open 10 unfunded beds in our ICF 3.7D
• Expand availability of more sober housing opportunities
• Collaborate with stake holders toward integration of addiction into the traditional medical model
• Create strong connections between treatment and recovery to support sobriety
Tackling the Problem

• Don’t Ignore the Problem
• Legally Sound Substance Abuse Workplace Policy/Plan
• Include Random Drug testing of Employees
• Employee Education
• Supervisor Education
• A Plan to Assist the Employee with the Right Intervention
St. Mary’s County Collective Response

Who:
Multiple agencies representing public health, education, law enforcement, substance abuse prevention and treatment, Social Services and the business community.

Our Aim:
Promote life saving and life restoring strategies to address heroin addiction and its impact on our community.

Strategies:
• Reduce the supply
• Reduce the demand
  • Prevent
  • Treat
  • Support
• Protect
• Advocate
Advocate for Change

Goal: activate necessary educational, legislative and participatory platform to be engaged.

Strategies:

• Engage local, State and Federal Public Officials
• Brief local leaders – ongoing
• Engage State legislators
• Briefed Congressman Hoyer, update his staff
• Continue to engage candidates at local and state level

Involvement of family members and consumers
• faces and voices of recovery
• Support “PABA” Parents Affected by Addiction

• Community Awareness
  • Drug Summit
  • Youth Summit
Walden Behavioral Health

Local and Regional Behavioral Health Service Provider

- Crisis Hotline and Trauma Services
- Outpatient and Intensive Outpatient Services
- Anchor: Regional Substance Abuse Detox and Inpatient Services
- Compass & Northstar: Long Term Residential Services
- Mental Health and Psychiatric Services
- Beacon of Hope: Adult Recovery Wellness Center. The Cove: Adolescent Recover Wellness Center
What Now?

Be Informed
Be Vigilant
Talk About It
Collaborate
Act
Advocate