INTRODUCTION

• Deputy Kent Krause
  • Waukesha County Sheriff’s Office
  • Deputy Sheriff since September 2013
  • Third Shift Patrol (2245-0700 hours)
  • Field Training Officer
  • Drug Recognition Expert – IACP Certification - 2015
  • WI State Certified Instructor for Standardized Field Sobriety Tests (SFSTs)/ Operating a Motor Vehicle While Impaired (OMVWI) and Firearms – Handgun and Rifle
  • Also instruct Advanced Roadside Impaired Driving Enforcement (ARIDE)
COURSE OBJECTIVES

• Describe the frequency of traffic crashes due to drowsy driving
• Identify the impact of illegal and prescription drugs on traffic crashes
• Identify the role of Law Enforcement in assessing impaired drivers
DROWSY DRIVING CRASHES

• Per National Highway Traffic Safety Administration (NHTSA) – in 2017 there were 795 fatalities due to drowsy driving related crashes

• 4,111 fatalities from 2013-2017

• 91,000 crashes nationwide in 2017
  • Resulted in 50,000 estimated injuries

• Most crashes are between midnight and 6am
  • Single occupant, high rate of speed with no signs of braking
  • Most commonly on rural roads and highways
COMMON SYMPTOMS OF ALCOHOL INFLUENCE

Blood Alcohol Concentration

0.03
Slowed Reaction

0.05
Impaired Judgment

0.08
Impaired Vision

0.10
Poor Coordination
Lack of sleep mimics blood alcohol concentration

- 24 hours without sleep: 0.10%
- 21 hours without sleep: 0.08% (legal limit in all states)
- 18 hours without sleep: 0.05%
• Sleep deprivation crashes not always reported or properly reported to law enforcement
  • People don’t want to admit they fell asleep while driving
• Law Enforcement may look at sleep deprivation as impairment – similar effects of alcohol/ drug use at face value
  • Cognitive impairment
  • Deficits in motor skills
  • Often used as defense for impaired driving
• Dr. Citek – sleep deprivation does not mimic alcohol intoxication on SFSTs
• More validated impairment clues observed with higher BAC vs higher sleep deprivation levels
• Sleep deprivation does not affect motor skills in same matter as alcohol
ALCOHOL AND DRUG CRASHES

WI ALCOHOL CRASHES
Jan 1-Aug 29, 2019

WI DRUG CRASHES
Jan 1-Aug 29, 2019
ALCOHOL VS DRUG IMPAIRMENT

• Alcohol Impairment
  • Easily recognizable
    • Odor
  • Trained at Basic Law Enforcement Academy (24 hours SFST course out of 720 hours)
  • Legal to use
  • Generally accepted
  • PBT

• Drug Impairment
  • Harder to detect
    • May or may not be an odor
    • Eyes – Pupils, Sclera, and conjunctiva
  • Trained at Basic Law Enforcement Academy (8 hours out of 720 hours)
  • Advanced Training – ARIDE and DECP (DRE School)
  • May be Rx, OTC or recreational – illegal & synthetics
  • Issues with chemical testing
  • Legality in other states – becoming more accepted
  • Need to wait for blood results to confirm
STANDARDIZED FIELD SOBRIETY TESTS

• Three test battery, validated by NHTSA through lab and field studies

• Horizontal Gaze Nystagmus Test
  • Nystagmus – Involuntary jerking of the eyes
  • Cannot control this – cannot practice this – the eyes never lie
  • Equal pupil size, equal tracking and resting nystagmus
  • Lack of smooth pursuit, distinct and sustained nystagmus at maximum deviation & the onset of nystagmus prior to 45-degrees
  • Need 4 total clues

• Walk and Turn Test
  • Instructional Stage and Stance – Two clues – Loses balance and starts too soon
  • 7 clues during walking stage – Arms for balance, Misses heel-to-toe, Off line, wrong # of steps, Improper turn, and stops walking
  • Need 2 total clues

• One Leg Stand Test
  • Instructional stage
  • Balance stage – 30 seconds times – 4 clues – Puts foot down, arms for balance, sways, and hops
  • Need 2 total clues
WHAT IS A DRUG?

A drug is defined as any substance, which when taken into the human body, can impair the ability of the person to operate a vehicle safely.
ARIDE

• Two Days- Taught by SFST instructor and DRE
  • SFST Refresher
  • Legal Update with emphasis on OWI cases
  • Drugs that Impair
    • 7 Drug Categories – CNS Depressants, CNS Stimulants, Hallucinogens, Dissociative Anesthetics, Narcotic Analgesics, Inhalants and Cannabis
  • Additional Tests
    • Modified Romberg Balance Test
    • Lack of Convergence
    • Finger to Nose
DIFFERENCE BETWEEN DECP AND ARIDE

- DRE Candidates are required to:
  - Complete 72 Hrs of classroom training – including 16 hour “preschool” – quizzes and tests throughout school with 80% needed to pass
  - Field certifications (Two weeks) – 12 evaluations with 100% accuracy
  - Comprehensive final knowledge examination

- Maintain certification through continuing education
  - Two evaluations per year
  - One evaluation must be instructor observed
  - Minimum of eight hours of certified recertification training
WHEN SHOULD AN OFFICER REQUEST A DRE?

- OWI cases
  - Impairment level does not match PBT reading
- Traffic crashes
  - Causing injury or death
- School complaints
  - Zero-tolerance policies
- Suspected drug use prior to or during operation of a motor vehicle
  - Admittance of drug use
- ANY time something seems “off”
  - No harm in making the request
- Call a DRE anytime you may have questions!
DRUG INFLUENCE EVALUATION

- 12 step standardized and systematic process
  - Includes PBT, Interview of Arresting Officer, HGN, LOC, RBT, WAT, OLS x2, FTN, 3 pulse checks, BP check, body temp check, pupil size check x3, dark room examination, interview of arrested subject, and chemical test.

- Done after Miranda Rights given and under consent – no penalty for refusing

- Typically takes 45 minutes to 2.5 hours

- DRE completes face sheet and evaluation report (7 to 9 pages on average)

- DRE formulates an opinion on which drug category they believe the subject is under the influence of and impaired by
  - Could also be a medical rule out or no impairment opinion
### Wisconsin DRE Report Face Sheet

**State of Wisconsin Drug Influence Evaluation**

- **Primary Charge:** [Details redacted]
- **Date:** [Details redacted]
- **Hosse:** [Details redacted]
- **Sex:** [Details redacted]
- **Race:** [Details redacted]
- **Weight:** [Details redacted]
- **Height:** [Details redacted]
- **Date of Birth:** [Details redacted]
- **Address:** [Details redacted]
- **Driver’s License #:** [Details redacted]
- **Arresting Officer:** [Details redacted]

#### CHEMICAL TEST:
- **Instrument:** [Details redacted]
- **Results:** [Details redacted]
- **Breathe Results:** [Details redacted]
- **Drug Refused:** [Details redacted]
- **Blood Test:** [Details redacted]
- **Both Tests Refused:** [Details redacted]

#### MIRANDA WARNING GIVEN:
- **Did You Understand:** [Details redacted]
- **Did You Agree:** [Details redacted]
- **Did You Understand Your Rights:** [Details redacted]
- **Did You Agree to the Test:** [Details redacted]

#### Attitude:
- **Type:** [Details redacted]
- **Coordination:** [Details redacted]

#### Speech:
- **Breath:** [Details redacted]
- **Pace:** [Details redacted]

#### Corrective Lens:
- **Distance:** [Details redacted]
- **Near:** [Details redacted]
- **Corrected:** [Details redacted]
- **Indirect:** [Details redacted]
- **Hearing:** [Details redacted]
- **Sign:** [Details redacted]

#### Pulse & Time:
- **Blood Pressure:** [Details redacted]
- **Temperature:** [Details redacted]
- **Muscle Tone:** [Details redacted]
- **Reflexes:** [Details redacted]
- **Pupils:** [Details redacted]
- **Ocular:** [Details redacted]

#### Walk and Turn Test:
- **One Leg Stand:** [Details redacted]
- **Walk:** [Details redacted]
- **Turn:** [Details redacted]
- **Hand Over Head:** [Details redacted]
- **Eye:** [Details redacted]

#### Drug Influence Evaluation:
- **Describe Turn:** [Details redacted]
- **Can Do:** [Details redacted]
- **Test:** [Details redacted]
- **Pupil Size:** [Details redacted]
- **Room Light:** [Details redacted]
- **Darkness:** [Details redacted]
- **Gest:** [Details redacted]
- **Light:** [Details redacted]
- **Heads:** [Details redacted]
- **Right Arm:** [Details redacted]
- **Left Arm:** [Details redacted]

#### Additional Information:
- **Name:** [Details redacted]
- **Address:** [Details redacted]
- **Phone:** [Details redacted]
- **Fax:** [Details redacted]

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**ATTACH PHOTOS OF FRESH INJURIES:** [Details redacted]
DRE “MATRIX”
<table>
<thead>
<tr>
<th>CNS DEPRESSANTS</th>
<th>CNS STIMULANTS</th>
<th>HALLUCINOGENS</th>
<th>DISSOCIATIVE ANESTHETIC</th>
<th>NARC. ANALGESICS</th>
<th>INHALANTS</th>
<th>CANNABIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncoordinated</td>
<td>Restlessness</td>
<td>Dazed appearance</td>
<td>Persisting</td>
<td>Droopy eyelids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disoriented</td>
<td>Body tremors</td>
<td>Body tremors</td>
<td>Warm to the touch</td>
<td>“On the nose”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staggish</td>
<td>Synthesia</td>
<td>Synthesia</td>
<td>Blank stare</td>
<td>Drowsiness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thick, slurred speech</td>
<td>Exaggerated speech</td>
<td>Frenzied</td>
<td>Very early onset of MGVN</td>
<td>Depressed reflexes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drink-like behavior</td>
<td>Anxiety</td>
<td>Uncoordinated</td>
<td>Difficulty in speech</td>
<td>Low, rapid, slow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gait ataxia</td>
<td>Grunting (bruxism)</td>
<td>Nausea</td>
<td>Perspiring</td>
<td>Speedy speech</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drowsiness - Groopy eyes</td>
<td>Redness to nasal area</td>
<td>Difficulty in speech</td>
<td>Poor perception of time &amp; distance</td>
<td>Dry mouth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tumbling</td>
<td>Nausea</td>
<td>Nausea</td>
<td>Poor perception of time &amp; distance</td>
<td>Facial tingling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOTE: With methaqualones, alcohol and Quaaludes, pulse may elevate. Same and Quaaludes dilate pupils.</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>DURATION OF EFFECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbiturates: 1-36 hours</td>
</tr>
<tr>
<td>Tranquilizers: 4-8 hours</td>
</tr>
<tr>
<td>Methaqualones: 4-8 hours</td>
</tr>
<tr>
<td>Canines: 5-90 minutes</td>
</tr>
<tr>
<td>Amphetamines: 4-8 hours</td>
</tr>
<tr>
<td>Methamphetamine: 12 hours</td>
</tr>
<tr>
<td>Duration varies widely from one hallucinogen to another.</td>
</tr>
<tr>
<td>LSD: 4-6 hours</td>
</tr>
<tr>
<td>PSYCHE: 2-3 hours</td>
</tr>
<tr>
<td>MDMA: 1-12 hours</td>
</tr>
<tr>
<td>Onset: 1-5 minutes</td>
</tr>
<tr>
<td>Peak Effects: 15-30 minutes</td>
</tr>
<tr>
<td>Exhibits effects up to 4-6 hours</td>
</tr>
<tr>
<td>Heroin: 4-6 hours</td>
</tr>
<tr>
<td>Methadone: Up to 24 hours</td>
</tr>
<tr>
<td>Others: Very</td>
</tr>
<tr>
<td>6-8 hours for most volatile solvents</td>
</tr>
<tr>
<td>Anesthetic gases &amp; enemals - very short duration</td>
</tr>
<tr>
<td>2-3 hours - exhibits effects</td>
</tr>
<tr>
<td>(Impairment may last up to 24 hours, without awareness of effects.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>USUAL METHODS OF ADMINISTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>Injected (occasionally)</td>
</tr>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>Injected</td>
</tr>
<tr>
<td>Smoked</td>
</tr>
<tr>
<td>Injected</td>
</tr>
<tr>
<td>Transdermal</td>
</tr>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>Smoked</td>
</tr>
<tr>
<td>Injected</td>
</tr>
<tr>
<td>Eye drops</td>
</tr>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>Injected</td>
</tr>
<tr>
<td>Insufflated</td>
</tr>
<tr>
<td>Smoked</td>
</tr>
<tr>
<td>Insufflated</td>
</tr>
<tr>
<td>Smoked</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OVERDOSE SIGNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shallow breathing, Cold, clammy skin. Pupils dilated. Rapid, weak pulse. Carma</td>
</tr>
<tr>
<td>Agitation, increased body temperature. Hallucinations. Confusions.</td>
</tr>
<tr>
<td>Long intense “trip”</td>
</tr>
<tr>
<td>Long intense “trip”</td>
</tr>
<tr>
<td>Slow, shallow breathing. Clammy skin. Carma.</td>
</tr>
<tr>
<td>Carma</td>
</tr>
<tr>
<td>Fatigue, Paranoia.</td>
</tr>
</tbody>
</table>

<p>| DRE MATRIX SIDE 2 |</p>
<table>
<thead>
<tr>
<th>Drug Name</th>
<th>2017 WSLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>THC (CARBOXY, DELTA-9, 11-HYDROXY) 2,391-3,301</td>
<td>CLONAZEPAM 147</td>
</tr>
<tr>
<td>BENZOYLECGONINE (COCAINE) 565*</td>
<td>OXYCODONE 147</td>
</tr>
<tr>
<td>MORPHINE 495</td>
<td>CODEINE 122</td>
</tr>
<tr>
<td>AMPHETAMINE 421</td>
<td>DIAZEPAM 119</td>
</tr>
<tr>
<td>METHAMPHETAMINE 417</td>
<td>METHADONE 100</td>
</tr>
<tr>
<td>ALPRAZOLAM 411</td>
<td>NORBUPRENORPHINE 84</td>
</tr>
<tr>
<td>FENTANYL 163*</td>
<td>ZOLPIDEM 83</td>
</tr>
<tr>
<td>COCAINE 159*</td>
<td>LORAZEPAM 77</td>
</tr>
<tr>
<td>7-AMINO-CLONAZEPAM 156</td>
<td>DIPHENHYDRAMINE 77</td>
</tr>
<tr>
<td>NORDIAZEPAM 153</td>
<td>HYDROCODONE 68</td>
</tr>
</tbody>
</table>
PRESCRIPTION VS RECREATIONAL VS SYNTHETIC CONTROLLED SUBSTANCES

**Prescription**
- Legal to possess with prescription
- Generally accepted amongst population
- Most people don’t believe it is an issue to operate a motor vehicle while using prescriptions
- “A doctor told me to take it”
- Most won’t read warning labels
- Harder to detect without training
- Little to no paraphernalia
- Poly drug use across all categories

**Recreational**
- “Street drugs”
- Illegal to possess- no valid prescriptions in WI
- People are ashamed of use and will try to hide
- Must understand appearance of use
- Associated drug paraphernalia
- Totality of circumstances
  - Entire vehicle
  - Other passengers
  - Clothing
  - Related criminal history

**Synthetic**
- Generally legal due to unknown substances – constantly changing
- Unregulated by FDA – unknown exactly what substance contains or chemical make up is
- Becoming more popular
- Easy to obtain – order from internet
- Extremely difficult to detect
  - Synthetic clonazepam example
- Unpredictable results
- “Bath salts,” “Spice,” NBOMe, U-47700, and many more
CASE STUDY

• Two Evaluations involving Zolpidem (Ambien)
  • Both involved a crash – no injuries
    • One with utility pole
    • One with parked vehicle
  • Both subjects had no idea they were involved in a crash yet alone driving
  • One subject took Ambien prior to leaving work so he could fall asleep as soon as he got home
  • One subject took Ambien with alcohol (.038 % BrAC)
  • Both subjects arrested for OWI prior to DRE evaluation
  • Neither had prior offenses and were cooperative
  • CNS Depressants opinion for both evaluations
QUESTIONS?
THANK YOU!

DEPUTY KENT KRAUSE – WAUKEISHA COUNTY SHERIFF’S OFFICE
REFERENCES

• https://xesolbiometrics.com/drowsy-driving-mimics-drunk-driving/ - Image #1
• https://community.intelex.com/explore/posts/sleep-deprivation-increases-possibility-workplace-incidents-70 - Image #2
• https://www.nhtsa.gov/risky-driving/drowsy-driving - Drowsy driving stats
• https://mddre.maryland.gov/wp-content/uploads/sites/17/2016/12/Sleep-Deprivation-Does-Not-Mimic-Alcohol-Intoxication.pdf?fbclid=IwAR0DDJSFFh-AWI1JyA956dG7gBnnf6tewo-RkBfTBnIN8F10SM03NRXXmic – Dr. Citek’s Study