

The Aging Driver and Impairment



ALCOHOL IS STILL A PROBLEM

NHTSA 2014

- 10% of injuries to age 65 and older drivers in crashes were alcohol positive
- Most of those injured had ACs over .16
- Higher than 18-20 year old drivers
- These drivers had notable worse driving records than those who had no alcohol at time of crash

ALCOHOL IS STILL A PROBLEM

MINNESOTA 2014

60+ years of age

- Population: 1.1 million
- Licensed drivers: 1.05 million
- Residents with incidents on record: 128,000

ALCOHOL IS STILL A PROBLEM

MINNESOTA 2014

Age at time of incident

60-64	11,085
65-69	5891
70-74	2884
75-79	1188
80-84	406
85+	81

SENIOR CARE FACTS

- Some type of disability was reported by 36% of adults 65+ years of age
- Nearly 92% of seniors have one chronic condition – 77% have at least two
- Seniors represent 13% of the population, but consume 40% of prescription and 35% of over-the-counter drugs
- Adverse drug reactions among top five greatest threats to the health of seniors

SENIOR CARE CONCERNS

- Diminished capacity
- Reaction Time
- Flexibility
- Vision
- Strength

SENIOR CARE CONCERNS

- Hyper/Hypotension
- Depression
- Sleep Disorders
- Pain
- Surgery recovery

SENIOR CARE CONCERNS

Mental decline in older adults can lead to taking a prescription drug more or less often than they should or in the wrong amount.

Older adults also may not break down the drug in their system as quickly as younger people.

These factors can lead to unintentional intoxication.

DRUGGED DRIVING IN THE UNITED STATES



An Increasing Problem

DRUGGED DRIVING IN THE UNITED STATES

- All drivers in fatal crashes in 2010
 - 46.5% positive for prescription drug
 - 36.9% had used marijuana
 - 9.8% had used cocaine
- The most common drugs found
 - Alprazolam (Xanax): 21.1%
 - Hydrocodone (Vicodin): 11.1%
 - Oxycodone (OxyContin): 10.2%
 - Diazepam (Valium): 8.4%

DRUGGED DRIVING IN THE UNITED STATES

- In 2010, 26% of drugged driver in fatal crashes were 50+ years of age (up from 14% in 1993)
- Illicit drug use in 50-59 year olds more than doubled from 2002 (3.4%) to 2010 (7.2%) -SAMHSA 2014

PRESCRIPTION MEDICATIONS

USE IN THE LAST 30 DAYS

Percent of Population 65+ years of age

- At Least One Prescription: 90%
- Three or More Prescriptions: 65%
- Five or More Prescriptions: 39%

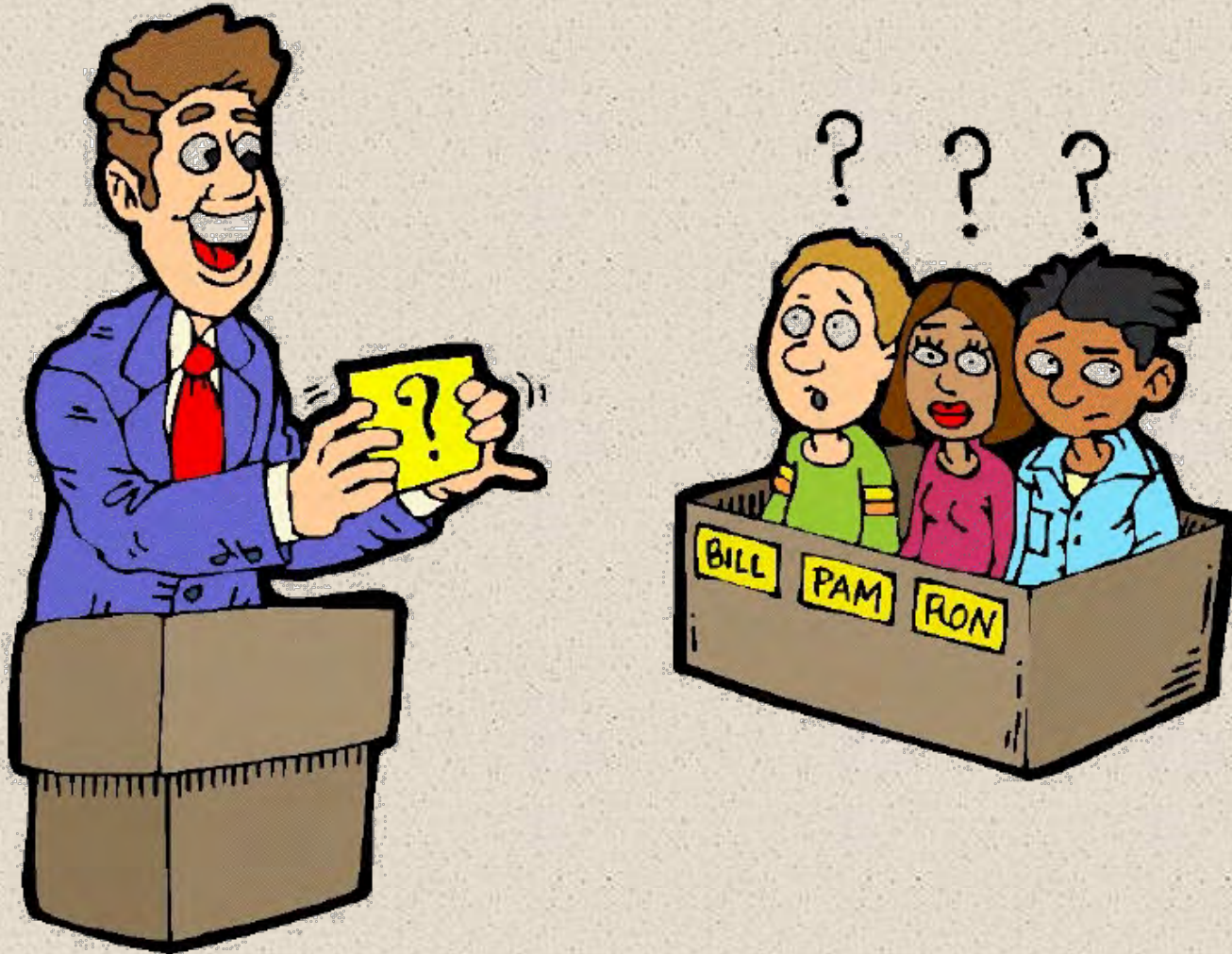
PRESCRIPTION MEDICATIONS

ANNUAL PRESCRIPTIONS FILLED

65+ years of age

- United States: 27.9
- Minnesota: 26.1
- Alaska (low): 18.4
- Kentucky (high): 42.5

What is a “Drug”?



DEFINITION

Any substance which, when taken into the human body, can impair the ability of the person to operate a motor vehicle safely.





FROM THE PHARMACY....

- **Over-the-counter** – do not require a prescription and are readily available in a variety of stores.
- **Legend drugs** – regulated substances that require a prescription.
- **Controlled substances** – require a prescription from a licensed prescriber who hold a registration with the U.S. Drug Enforcement Administration.

Examples of Commonly Abused Over-The-Counter Medications

- Allerest Maximum Strength - (Pseudoephedrine and Chlorpheniramine)
- Actifed - (Diphenhydramine and Pseudoephedrine)
- Vicks Formula 44 - (Dextromethorphan)
- Benadryl - (Diphenhydramine)

Examples of Commonly Abused Over-The-Counter Medications

- Contac Cough Liquid - (Guaifenesin and Dextromethorphan)
- Dayquil (Vicks) - (Phenylpropanolamine and Brompheniramine)
- Dexatrim - (Phenylpropanolamine)
- Dimetapp - (Brompheniramine)
- Dramamine - (Meclizine)
- Motrin - (Ibuprophen)
- ChlorTrimeton - (Chlorpheniramine)

Examples of Commonly Abused Over-The-Counter Medications

- Nyquil (Vicks) - (Doxylamine Succinate, Dextromethorphan, Acetaminophen, Pseudoephedrine)
- Robitussin-DM - (Guaifenesin and Dextromethorphan)
- Sudafed - (Pseudoephedrine)
- Tylenol Flu Maximum Strength - (Acetaminophen, Dextromethorphan, and Pseudoephedrine)
- No-Doz - (Caffeine)

Central Nervous System Depressants



Alcohol
Barbiturates
Anti-anxiety Tranquilizers
Paxil
Ambien
Many Others



Miscellaneous Barbiturate Tablets

Central Nervous System Depressants

- Drowsiness
- Thick, slurred speech
- Uncoordinated
- Fumbling
- Slow, sluggish reactions

Central Nervous System Stimulants



Ritalin
Amphetamines
Adderall



Central Nervous System Stimulants

- Restlessness
- Anxiety
- Euphoria
- Talkativeness
- Excitation
- Bruxism
- Body tremors
- Exaggerated reflexes
- Loss of appetite



Dissociative Anesthetics

Ketamine

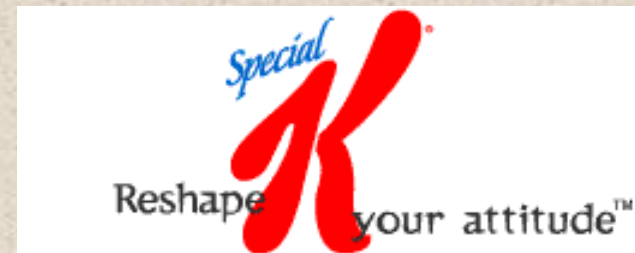
Dextromethorphan

Ketaject



General Indicators of Dissociative Anesthetics

- Blank stare
- Loss of memory
- Perspiring heavily
- Warm to touch
- Incomplete, slurred verbal responses
- Cyclic behavior
- Agitated
- Rigid muscle tone
- Disoriented
- Nonresponsive
- Chemical odor



Narcotic Analgesics

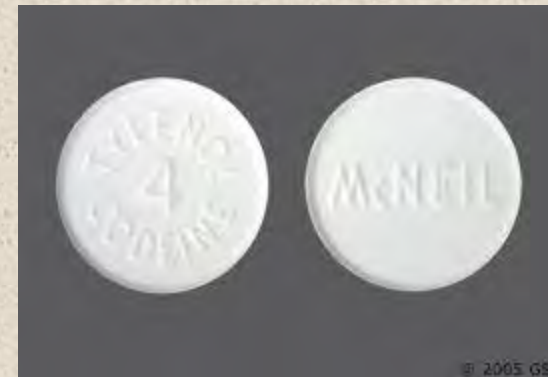


- Oxycontin
- Morphine
- Codeine
- Vicodin
- Demerol
- Methadone
- Darvon



Potency of Opiates Relative to Morphine

- Codeine 1/8x
- Demerol 1/10x
- Percodan =
- Fentanyl 8x
- Methadone 1/2x (Long Acting)



General Indicators of Narcotic Analgesics

- “On the nod”
- Slowed reflexes
- Low, slow, raspy speech
- Facial itching
- Dry mouth
- Euphoria
- Flaccid muscle tone



Inhalants

Anesthetic Gases

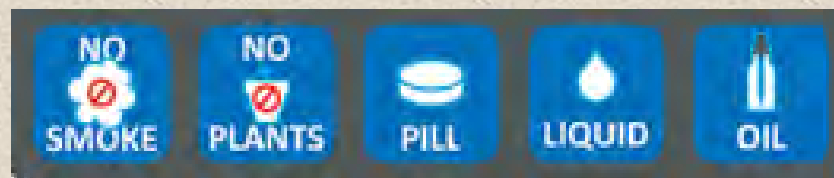
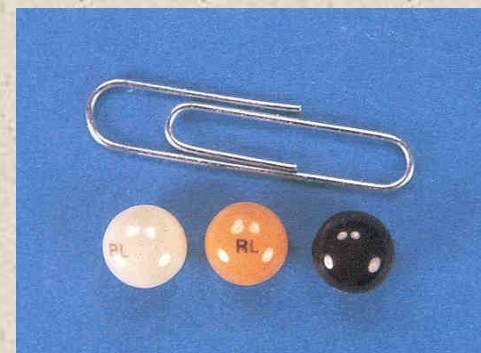


General Indicators of Inhalants

- Odor of the inhaled substance
- Dizziness, numbness
- Bloodshot, watery eyes
- Distorted perception of time and distance
- Confused, disoriented appearance
- Light headedness
- Flushed face, possible sweating
- Slow, thick, slurred speech
- Floating sensation

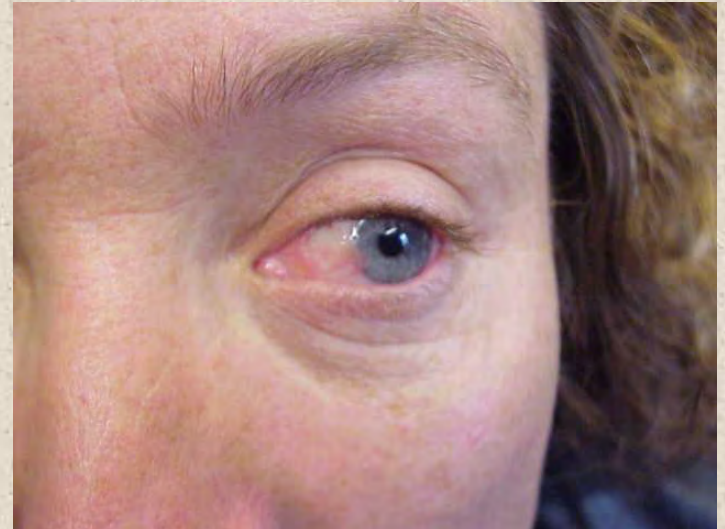
Cannabis

- Marinol
- Dronabinol
- Medical Cannabis



General Indicators of Cannabis

- Impaired perception of time and distance
- Marked reddening of whites of eyes
- Body tremors
- Disorientation
- Impairs attention
- Relaxed inhibitions



Tolerance

May exhibit relatively little evidence of physical impairment.

Even tolerant drug users, when impaired, usually exhibit clinical evidence (i.e. vital signs, eye signs, muscles, bruxism, etc.).