



National Transportation Safety Board

Truck Driver's Use of Marijuana and Sedating Medication

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Overview

- Medical conditions
- Prescribed medications
- Use of impairing drug marijuana and impairing prescribed medication clonazepam

Medical Conditions

- Psychiatric hospital admission 2016
 - Depression
 - Post traumatic stress disorder (PTSD)
- Outpatient visit Nov 14, 2016
 - Doing well on current medical treatment
 - Not a danger to self or others
 - No evidence of substance abuse

Prescribed Medications

- Clonazepam: impairing/sedating anti-anxiety
- Zolpidem: impairing short-acting sleep medicine
- Escitalopram: nonimpairing antidepressant
- Prazosin: nonimpairing – reduce nightmares

Toxicology Results - Impairing Compounds

Drug	Description
Clonazepam	Sedating prescription benzodiazepine
Delta-9-THC (THC)	Marijuana's primary psychoactive compound
Testing conducted on blood specimen collected about 2 hours postcrash	

THC

- Marijuana's primary active chemical
- Psychoactive central nervous system (CNS) depressant
- THC blood levels vary based on type and frequency of use as well as dose
- Driver's THC blood level: 7.1 ng/mL (2 hours postcrash)
 - Blood levels decrease by about 90% within 1.4 hours of use

Marijuana / THC – Effects

- Degradation of cognitive and motor skills
- Simulator studies
 - Average THC level of 13 ng/mL demonstrated lane weaving similar to that of drivers impaired by blood alcohol concentration of 0.08 g/dL

Clonazepam

- Sedative benzodiazepine
- Misused by truck driver
- Driver's clonazepam blood level - 50 ug/mL
- Average blood level of clonazepam in 164 people arrested for drug-impaired driving was 50 ug/mL

Drug Interaction

- THC and clonazepam are potent CNS depressants
- Each drug likely to enhance impairing effects of the other

Summary

- No evidence driver was impaired by medical conditions
- Prolonged erratic driving not explained by cell phone distraction
- Driver impaired by use of marijuana in combination with misuse of prescribed medication, clonazepam