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Drugs and Driving: The Research

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Presentation to CACP Traffic Seminar
Chilliwack, BC
April 3, 2007

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Drugs and driving

- Highly controversial and often confusing issue.
- Many claims; fewer solid facts.
- Near hysteria can surround the issue – societal ambivalence: alcohol (OK); drugs (not OK).
- Moral overtones – illegal (bad) versus legal (good) drugs.



Drugs and driving – complex issue

- Drugs and driving is a much more complex issue than drinking and driving.
- Complexities account for shortcomings in knowledge and different interpretations of evidence.



Why it is so complicated?

- Many different drugs; highly complex chemicals.
- Different populations of users.
- Effects (pharmacodynamics) differ by drug and user.
- Testing for presence vastly more complex than testing for alcohol.



Four key questions

- Do drugs impair skills/abilities needed for safe driving?
- Do people actually use these drugs while they are driving?
- Are drivers who use them involved in collisions?
- Is there evidence that the presence of the drug caused the crash?



Do drugs impair driving skills

- **Yes.** Experimental studies show a wide range of drugs impair critical skills and abilities.
- Some have a potent impact particularly those with a sedative/hypnotic effect. Some have a moderate effect (cannabis); some are less likely to cause impairment (stimulants).



Do people use them and drive?

- **Yes, but...** Data on frequency and quantity of drug use in the driving population are sketchy.
- Best estimate is that about 10% of drivers are using impairing drugs.
- Marijuana is the most commonly reported/detected and most common among young males.



Are drivers who them involved in crashes?

- **Yes.** Overall incidence of drug detections among drivers killed or injured in road crashes is in the 14-17% range.
- Most commonly detected substance is cannabis (about 10-11% of cases); next are benzodiazepines (class of drugs with hypnotic, anxiolytic, anticonvulsant, and amnestic properties) found in about 5-9% of cases.



How many crashes are *caused* by drug impairment?

- **Unknown**, because the evidence of the contribution of drugs to crashes is inconsistent and inconclusive.
- One problem is that when drugs are detected in blood they are frequently found in combination with alcohol (as often as 75% of the cases with some drugs).
- Biggest problem is distinguishing between the effects of the drugs and the characteristics of the users (e.g., risk taking among some users; reduced skills in general among elderly).



Summary

- Many drugs impair skills and abilities deemed important for the safe operation of a vehicle.
- Many of these drugs are used by people when they drive.
- Many of these drugs are found in drivers involved in collisions.
- The risks (contributory effects) are not well established.
- *On balance the evidence shows that the problem is by no means trivial even though still not well understood.*



Action needs

- Continue research to clarify the magnitude and characteristics of the problem.
- Research is needed to verify the concern that young people are “substituting” drugs for alcohol to avoid detection/arrest.
- Continue efforts to produce a reliable chemical test for screening at roadside.



Action needs

- In absence of reliable chemical roadside test, alternative is to facilitate the collection of evidence of impairment – SFST.
- Also need a companion drug evaluation – DRE.

