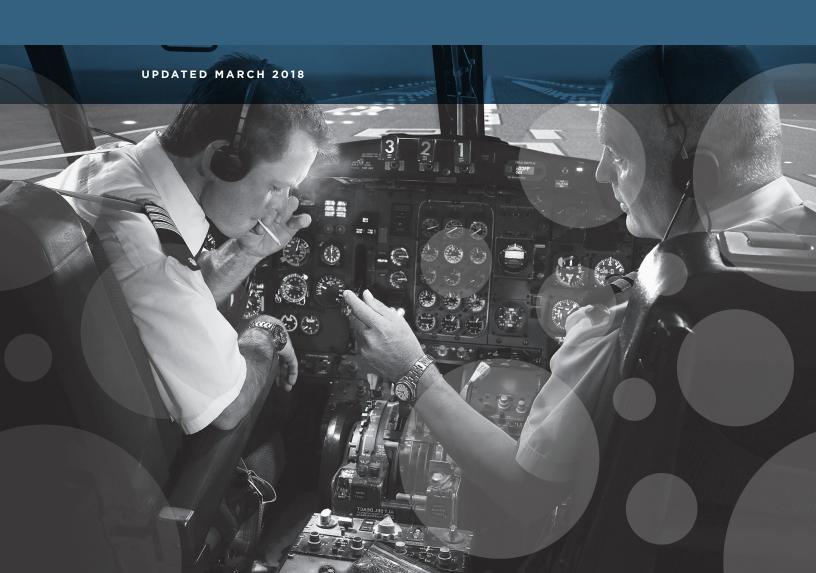


The Voice of Public Health

DISCUSSING POT AND DRIVING WITH TEENAGERS

A guide for adults



THE VOICE OF PUBLIC HEALTH

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This discussion guide is part of the Pot and Driving campaign launched by the Canadian Public Health Association (CPHA)on November 21, 2005 with funding from Canada's Drug Strategy, Health Canada.*

2018 Update

In April 2017, the Government of Canada introduced Bill C-45, the Cannabis Control Act. Bill C-45 will amend the Controlled Drugs and Substances Act, the Criminal Code and other Acts to legalize and regulate the production, distribution, sale and possession of cannabis in Canada. It also aims to provide a public health framework to help reduce the negative health and social outcomes related to cannabis use while minimizing the serious negative effects resulting from the criminalization of cannabis possession. Bill C-46 was introduced at the same time to amend the Criminal Code to strengthen the enforcement of existing laws around relating to cannabis- and other drug-impaired driving. This Act proposes to introduce more severe punishments for those who drive while under the influence of any drug, including cannabis, and allows law enforcement officers to conduct roadside intoxication tests. Provinces and territories have also introduced new legislation to address the legalization of cannabis.

This resource has been updated (March 2018) to reflect recent evidence as it relates to cannabis consumption and driving.

Discussing Pot and Driving with Teenagers can be used in conjunction with the following updated resources:

- A poster of airplane pilots smoking pot with the campaign message, "If it doesn't make sense here, why would it make sense when you drive?";
- 10 questions for teenagers; and
- A Frequently Asked Questions backgrounder.

These resources are available on CPHA's website, https://www.cpha.ca/resources

THE EVIDENCE

Driving under the influence of alcohol and/or drugs continues to kill and injure more Canadians than any other crime. Evidence indicates that driving under the influence of cannabis can double the risk of serious or fatal injury in a motor vehicle crash. However, many young Canadians do not believe that cannabis impairs their driving ability; 10,23,38 in fact, their perception of harm associated with cannabis is decreasing.

The evidence is clear that using cannabis affects motor coordination, short-term memory, concentration, information processing and decision-making, which all reduce the ability to drive safely.⁸ If pot is consumed before driving, it can have specific effects, including:^{14,15}

- A reduced or 'drifting' attention span, impairing the ability to be aware of numerous sources of information all at once;
- Slower reaction times, reducing the ability of the driver to respond quickly to sudden changes on the road, especially during unexpected events (e.g., when a sudden stop is required); and/or
- An altered perception and judgment of time and distance, reducing the driver's ability to stay within one lane and increasing variation in following distances and speed.

What do we mean by 'pot'?

We use the word 'pot' in our materials to refer to any drug derived from the plant *Cannabis sativa*. Cannabis refers to various psychoactive preparations of the plant, including marijuana (made from the dried and crushed leaves and flower buds), hashish and hashish oil (made from the flower bud resin), and cannabis extracts (i.e., oils or wax). We chose 'pot' because it is short and easy to say; more importantly, we chose it because focus group participants were unanimous in saying it. Along with the word 'weed', 'pot' is the most common word used to refer to cannabis in both English and French Canada. Other common names for cannabis include: herb, ganja, grass, Mary Jane, and reefer.

The views expressed herein do not necessarily represent the views of Health Canada.

THE 10 QUESTIONS

In the 2005 youth focus groups led by CPHA, there were a number of widely held beliefs among participants and a range of issues relating to cannabis use and driving that were consistently raised. These comments became the basis for the 10 questions featured in this resource. Some questions take the point of view of a driver, others of a passenger. The responses to these questions suggest that we reconsider these widely held beliefs without judging individuals or groups who hold them. These responses are based on current research on impairment and accident risk.

When we talked to young Canadians in focus groups, we did not express opinions about pot and driving. We were interested in learning about their attitudes and beliefs, and not interested in trying to influence those beliefs. Talking and listening is a very good place to start the discussion on pot and driving, and using our 10 Questions is one way to do that.

Our 10 Questions are an informal way of asking youth if they think:

- Pot has an effect on a person's driving behaviour and on specific driving skills.
- If so, do these effects increase the chances that
 a driver will be involved in or cause a vehicle
 collision, either due to his/her own actions or the
 actions of other drivers? In other words, does pot
 increase what is referred to as 'crash risk'?
- If pot is mixed with alcohol, does the crash risk increase?
- Are there other contributing factors such as driver experience, past experience with the drug or difficult road conditions – that make pot a source of risk for drivers?

COMMON VIEWS ON POT AND DRIVING

As with any open discussion, focus group participants described a range of ideas, opinions and experiences. In our FAQ backgrounder, we address these and many other issues such as law enforcement.

The beliefs we frequently heard in our focus groups, which are still relevant, are:

- Driving high is not a problem.
- I don't know anyone who was in an accident because of pot.
- · Pot makes you more aware and focused on driving.
- You compensate for the effects of the pot on your driving by slowing down.
- If you are stopped by police and they suspect you are high and impaired, they have no way to prove it.
- They're legalizing pot so it can't be all that dangerous to drive high.
- Passengers don't feel at risk if they think you're a good driver.
- Driving drunk isn't a good idea because it's dangerous and you can get charged and lose your license.
- When you're high, you're more afraid of other drivers than how it affects your own driving.
- Pot doesn't cause accidents, drivers do.

APPROACH AND RESPONSE

Our research tells us the approach you take in having a conversation with youth needs to be straightforward and reasonable; avoid moral undertones. As public education on pot and driving increases, it is important to recognize that youth may have their own perspectives and beliefs relating to the harms associated with pot consumption and driving based on their past experiences. Informing youth of the facts will help give them the tools to make informed decisions when it comes to pot and driving, either as a driver or passenger.

CONFIDENTIALITY, CONSENT AND DISCLOSURE

Before starting the discussion on pot and driving, you should first consider issues around confidentiality, consent, disclosure and support.

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THE 10 QUESTIONS AND WHY WE ASKED THEM

1. Getting into it

If you were a passenger in a commercial jet, would you be comfortable if your pilots got high before take-off so they could really 'get into' flying the plane?

You might think consuming pot helps you drive better because you believe that you're more focused. When you're into something, like watching a movie or playing a video game, you can forget where you are.

But when you're really aware of some things, you are less aware of others – it's the law of attention. When you're driving high, you're not able to process numerous sources of information at once. You might not notice something until it's too late.

Discussion points

Suppose you and your friends were on a plane and you noticed the pilot and co-pilot smoking pot:

- How would you convince your pilot not to take a drag from the joint?
- Could the pilot assure you that he isn't putting you or your friends at risk? If so, what would s/he say?

Why did we ask this question?

Several young participants in our focus groups spoke about how they believed pot helped them focus. This correlates with the widely held perception that pot does not reduce driving ability, or that it actually increases it. Regardless of their position on pot and driving, participants indicated they would not be happy if they were passengers in a plane and their pilots consumed pot before take-off.

What does the evidence say?

Observation, simulation and on-road driving studies demonstrate that cannabis consumption impairs a number of cognitive functions that affect driving skills in various ways. This research shows that, despite the common perception, pot actually compromises the capacity to pay attention and concentrate. This impairs the ability to be aware of and react to numerous sources of information all at once. That's why when you drive high, you might not notice something until it's too late.

2.	Play	NOTES
	g high is like playing a video game, what when you make a wrong move?	
паррепз	when you make a wrong move:	

Some video game players believe that consuming pot improves their skills in a video game. In the gaming world, you can learn as much by making wrong moves as you can by making right ones. But the consequences of making a mistake in a game are minimal compared to the consequences of driving a real motor vehicle high, which could be fatal.

Discussion points

- Do you think people experience gaming differently when they're high?
- If you make a mistake in a game, what might be the consequence?
- How might the consequence be different if you made a mistake while driving high?

Why did we ask this question?

Similar to playing a video game high, some young people might associate driving high with increased driving ability. Video games are popular in part because they allow players to take risks and learn from them. Games that simulate motor vehicle crashes are especially appealing to young male Canadians. However, playing a video game while high and driving while high do not have comparable risks or consequences.

What does the evidence say?

Consuming pot adversely affects safe driving and it has been established as a motor vehicle crash risk factor, doubling the risk of serious or fatal injury.² For example, pot reduces the ability to stay within one lane and increases variation in following distances and speed. The effects of pot on driving skills can vary depending on the THC potency of the pot consumed, experience of the driver and frequency of consumption. However, even at low doses, it can affect the ability to drive safely,¹³ especially when combined with alcohol.¹²⁻¹⁴

3.	React	NOTES
-	ving high slows down your reaction time, what will en if a car suddenly swerves into your lane?	
Some	times when you're driving, you have to react	
	ly to something you don't expect. Your reaction	
	is the time it takes to see the problem, figure out to do, and do it.	
Cons	uming pot slows down your reaction time,	
	ng a driver more vulnerable to unexpected	
event	s, like when a sudden stop is required. If you	
drive	high, your slower reaction might make a big	
differ	ence when it counts.	
Discu	ssion points	
• Ha	ve you ever been in a situation where you or	
-	ır driver had to react quickly to something	
	expected while you were driving? If so, what was	
you	ır experience?	
Why	did we ask this question?	
The f	ocus group participants generally believed that	
pot ir	creases reaction times while driving. More	
	t data suggests that many youth do not believe	
	onsuming pot impairs driving skills, ^{11,8} especially	
	this is compared to youth who realize the risks	
	nking and driving. 10 These misperceptions are	
	erning, because it is thought that youth are more to consume pot if they do not perceive it to be	
risky.		
_		
	does the evidence say?	
	fects perception and motor co-ordination, ⁸ and s reaction time, which reduces the ability of a	
-	r to respond quickly to sudden changes on the	
	Also, new drivers might have slower reaction	
	, and reaction time can decrease during difficult	
	ng conditions. Reaction time is critical to safe	
	ng, making driving high especially dangerous	
	g unexpected events on the road. 14,15	

4.	Drift	NOTES
	r mind drifts when you drive high, will you be red for something that needs your full attention?	
The re	eason why your mind drifts when you're high is	
	se pot disturbs your short-term memory. Losing	
	rain of thought may not be that important if sitting on a park bench with friends, but it can	
be daı	ngerous when you're behind the wheel.	
	drive high and your mind drifts, you may not be	
abie to	p pay attention when you really need to.	
	ssion points	
	en a person is high after consuming pot, what the effects of the drug?	
	you think the effect pot has on the mind and the y can have an effect on driving?	
	at does it feel like when your mind drifts?	
	y could it be dangerous if your mind drifts while	
you	re driving high?	
Why o	lid we ask this question?	
	you've been driving for a while, the knowledge	
	cills you use behind the wheel become part of	
	ong-term memory. You get used to driving and it	
	ike you're doing it without thinking, but you still to be alert to what's going on around you. The	
	focus group participants indicated that when	
	were high, their minds drifted more.	
What	does the evidence say?	
	fects short-term memory, information	
	ssing, and decision-making, all of which affect	
	ility to drive safely.8 Not being focused on the	
task o	f driving can be dangerous. This could be further	
exace	rbated by the residual effects of consuming	
	'weed hangover', which is characterized by	
condi	tions like fatigue and brain fog.	

5. Compensate

Will someone always be able to compensate if they drive high?

When some experienced pot consumers drive high, they may try to make up for the effects that pot has on their driving skills in different ways, like slowing down or staying in one lane. In other words, they may try to compensate for being high.

However, research tells us that this attempt to compensate does not eliminate the risks of driving high. You never know what you will encounter on the road when you're driving.

Discussion points

- Do you think someone can compensate for being drunk behind the wheel? Why? Why not?
- Do you think someone can compensate for being high behind the wheel? Why? Why not?

Why did we ask this question?

Driving impaired, which literally means driving with 'reduced ability', has a negative impact on driving skills, which can be exaggerated in conditions where the driving gets more demanding. When you're driving under the influence of cannabis, it's harder to judge distances and your mind can drift. It may be more difficult to pay attention to your surroundings. Despite this, there is a common belief among people who consume pot that they can compensate for being high at the wheel.

What does the evidence say?

Experienced pot consumers who drive under the influence may be aware of their state of impairment and use tactics such as driving slowly or increasing following distance between cars, to compensate for their reduced driving abilities. ¹⁶ While these drivers have developed certain behaviours to adapt to their impairment, these adaptations do not eliminate the risks of driving under the influence of cannabis.

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6. Strength

How strong is your pot?

The legalization of pot will regulate production and ensure quality control of the pot distributed to government-licensed outlets. Pot strength will vary depending on the grower, how it was grown, and the strain. The strength of the pot can make a big difference on your driving, especially if you only use it occasionally.

The type of pot consumed and how it is consumed affects the timing, duration, and intensity of the high felt by the person consuming it. There are also a number of individual factors that can influence the effects of pot, like how often a person consumes it. This can impact the ability to drive safely, especially if you are not familiar with consuming pot.

Generally, it is advised to "start low and go slow" if consuming, and to wait at least six hours before driving after smoking pot, and at least eight hours after ingesting it.

Discussion points

- Do people who consume the same amount/type of pot seem to have the same high? If no, how do the highs seem to differ?
- What would you tell your friend who wants to consume the same amount of pot as someone who consumes more often than he/she does?

Why did we ask this question?

Consuming high doses of pot is an established motor vehicle crash risk factor,^{2,31} and, as with alcohol, there is evidence of a dose-related relationship between pot and impairment of the skills needed for safe driving.³² Unlike alcohol, THC concentrations in pot can vary significantly, and there is also a degree of variability in the effects on impairment between consumers. For example, the same dose of pot could have less of an

effect on a more regular user than on an infrequent user. Because of this variation, caution is warranted, especially to avoid over-consuming if a person is not familiar with pot and its effects.

What does the evidence say?

There are a number of individual factors that can impact the length and intensity of impairment when consuming pot,^{8,1} including:

- the dosage, strain of pot, and THC potency consumed;
- the frequency of use, sensitivity and tolerance;
- body composition (i.e., amount of fatty tissue);
- co-consumption with prescription medication or alcohol; and
- health status and family health history.

How pot is consumed will also influence the length and timing of the high. For example, when pot is smoked, THC quickly enters the bloodstream and the consumer can feel high within minutes, whereas the high felt from edibles can take longer to peak (up to four hours) and last for a longer period of time (up to 10 hours).30 After dabbing, or consuming hash oil, a consumer can feel high more quickly because hash oil is much more potent (up to 60-80% THC³⁰). This makes it challenging to establish the exact relationship between dose and risks.8 Because the effects from smoking pot gradually wear off over two to four hours, and longer when it's ingested, it is recommended to wait at least six hours before driving after smoking cannabis and at least eight hours after ingesting it.30

NOTES			

7.	Mixing	NOTES
What ha	ppens if you mix pot with alcohol or other drugs?	
with oth	ou consume pot together with alcohol, or ner drugs (such as party drugs), the effect is t than when you use them separately; the can be unpredictable.	
effect or	pot with alcohol or other drugs has a negative n your ability to drive safely, and it can put you r passengers at serious risk.	
Discuss	ion points	
• How consu	would you compare drinking alcohol or ming pot with using them together? Do you this makes it unsafe to drive? Why? Why not?	
Why die	l we ask this question?	
	sumption with other drugs or alcohol can the length and intensity of impairment. 1,8 The	
negative	e effects of this on driving skills are evident, as	
_	under the influence of alcohol and/or drugs	
	es to kill and injure more Canadians than er crime.¹ Mixing pot with other drugs, and	
-	ohol in particular, is one of the most serious	
concern	s relating to pot and driving.	
What do	pes the evidence say?	
	cond only to alcohol as the substance found	
-	ed or fatally injured drivers. Research tells us	
	en alcohol consumption is combined with pot, h risks are greater than impaired driving from	
	ubstance alone. ³² Some evidence suggests that	
	of motor vehicle crashes greatly increases	
when co	onsumption is paired with even small amounts	
or arcon	01.70	

8. Off-road

Is it safe to drive high off-road?

Canada's a big country with lots of off-road trails. Maybe you ride an ATV, a dirt bike or a snowmobile. In every season, off-road driving has unique challenges.

Pot affects your ability to respond quickly to a sudden change. If you get high and hit the trails, you may not be able to meet the challenges when you really need to.

Discussion points

- What are some of the driving differences you may face on off-road trails versus the road?
- Why do you think getting high and driving off-road is unsafe?

Why did we ask this question?

Off-road driving has unique challenges. In summer, fallen branches, rocks or uneven ground might cause problems for you as a driver. In winter, you may have to deal with dangerous snow or ice conditions on trails that run over rivers, lakes or sea ice. Across Canada, and especially in the North, warmer seasonal temperatures are bringing thinner ice, later freeze-ups and earlier break-ups.

Driving high affects your reaction time and alters perception and judgment of time and distance. Off-road conditions can be more unpredictable than on the main roads, requiring your full attention and clear judgment.

What does the evidence say?

Less is known about driving high off-road than on-road. However, alcohol is known to play a very significant role in off-road accidents. Whether on-road or off, driving high puts you at risk, and the penalties for driving high are the same as on-road. It

is important to inform youth of this, because in many provinces and territories, the driving age for off-road vehicles is younger than for on-road.

9. Passenger

If you think your driver is high, can you choose not to get in?

Having a friend with a car can make a big difference in your life. It gives you the freedom to go more places and do more things.

If your driver is high, his/her ability to drive safely is impaired, and the risk of harm extends to everyone in the vehicle.

You have the right to make the decision to not get into a vehicle if you think your driver is high. You have the freedom to choose.

Discussion points

- Do you feel free to refuse a ride with someone who is high? What could you say to the driver?
- How can you plan for this before you leave home?
 What other transportation could you take if your driver is high?

Why did we ask this question?

Young passengers know they can refuse to get into a car with a driver who has been drinking, because driving under the influence of alcohol is widely regarded as both dangerous and socially unacceptable. However, the same is not necessarily true for pot, as many youth believe that pot does not impair driving skills.⁸

We want our audience to consider other applications of 'freedom of choice' that are important for young people, including the freedom to decide not to do something they think is risky and to look for other options.

What does the evidence say?

Being a passenger when a driver is high can cause an already dangerous situation to become more

dangerous, especially if the passenger is also impaired. Among drivers 24 years of age and younger, passenger presence in a vehicle has been associated with increased at-fault fatal crashes, specifically when there are two or more passengers in the vehicle.27 Surveys indicate that Canadian youth aged 15-24 years are more likely to report riding as a passenger with a driver who had consumed pot within the last two hours than being the driver themselves.^{24,25} Also, a national student survey found that the likelihood of being a passenger of a driver who has consumed drugs (including pot) increased with school grade.¹⁹ This could be because many youth believe it is less dangerous to be a passenger of a driver who has consumed pot than one who has consumed alcohol.23 Despite this belief, driving high does impact the ability to drive safely, and these risks apply not only to the driver, but extend to the passenger(s) as well.

10. Friendship

If your friends drive high, do you have to?

Friends often share interests, opinions and pastimes. That's usually why they're friends. So what happens if your friends drive high and you don't want to?

If you decide not to drive high, your friends might follow your example. You can use this as an opportunity to talk to them about the harms associated with driving high.

Discussion points

- Do you think it is difficult to disagree with your friends? If yes, why?
- How could you talk to your friends about the harms of driving high?

Why did we ask this question?

Most drug use occurs in the context of friends and peer groups. In communities where there is an absence of public transportation, there can be a lot of pressure to drive high or to ride with someone who is high. Peers and friends influence one another in complex ways. This question gives young people the opportunity to raise some of these concerns with their friends and perhaps with their parents.

What does the evidence say?

Peer group norms can have a large impact on the decisions that youth make. For example, focus group data (2017) with youth indicate that two of the most common reasons youth will try or use cannabis are because of peer pressure and the desire to be accepted by their friends.²³ Also, the influence of parents and peers can affect youth passenger behaviours as peer and/or parent modelling and perceived approval is a risk factor for riding with a driver who is impaired by alcohol or other drugs, including cannabis.²⁵

Youth and parents play an important role in keeping the roads safe by modelling safe driving behaviour

and choosing to not drive while high. This can help prevent driving high from becoming a wider group norm.



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