

**ADOLESCENT HEALTH AND DEVELOPMENT**  
**PANEL QUESTIONS – PANEL #3**  
**SUBSTANCE ABUSE PANEL**

1. How do arrest rates for all crimes differ, if they do, between individuals who began using substances in adolescence compared to those who began using them in adulthood?
2. Steroid use by adolescents is a relatively new phenomenon, especially in high school male athletes. Do you believe a part of this can be attributed to how much a parent pushes their child to excel in sports? If so, what programs can be put into place to change the behavior of the parents?
3. The most recent anti-drug campaign depicts children and some aspect of their life that is incompatible with drug use, such as "Basketball: my anti-drug". How does this compare to past programs, such as Nancy Reagan's "Just Say No"?
4. If the risk of hard drug initiation, via the gateway effect, is contingent more on user age than on marijuana use alone, what type of initiative is needed to target the appropriate age group (i.e. ad campaigns and commercials)?
5. The school-based initiative D.A.R.E. has been shown to be ineffective due to its lack of interactively engaging students and its focus solely at the individual level of intervention. Due to lack of better programming, D.A.R.E. remains the most federally funded school initiative. What aspects of this program can be changed to be more beneficial in reaching those students most at risk for drug abuse?
6. How much does socio-economic factors influence the gateway effect since, in some adolescent environments, hard drugs are more readily available?
7. The Morral article brings up the issue of response bias since most of the study data comes from self-reported information. Does response bias affect the validity of the conclusions drawn from this study? Why or why not?
8. Does having a parent who uses hard drugs increase an adolescent's risk of using them as well?
9. It's already illicit, and if I support marijuana use is a part of adolescent development, has there been enough evidence to pass the law to give more significant punishments (or duties for rehabilitation purpose) than adults for adolescent under age 18 if they exposed to marijuana so that they did not start it until entering college?
10. Cognitive Behavioral Therapy (CBT) coupled with Motivational Enhancement Therapy seems to be the most cost effective therapy. By its nature of CBT, the unit/period of sessions usually is short (8-10 sessions are one unit). The relapse, however, very often happens. Each one has a different marijuana history and exposure periods when one starts the therapy. When is the best timing to apply if we fail to prevent it happen in the first place? The randomized study showed CBT effective and inexpensive, but if needed to apply repeatedly,

it will end up expensive, and may grow resistance against CBT among those who repeatedly receive CBT.

11. Based on the research estimating the cost of family and community involved therapy, it cost about 3 times more than CBT. One Family Support Network may be cost effective than three CBTs. Can we mandate schools to provide family support session? Is there enough evidence to raise funding for these school programs? How to support adolescents those who are out of school or with unstable family? Do studies which focus on family involvement perpetuate high risk population to continue engaging in illicit drug use?
12. Abnormal youth development is often discussed as the extent to which actions of particular adolescents deviate from the norm as defined by chronological age, culture and common practice. In cultures and sub populations where marijuana use is considered normative behavior, are we justified to consider marijuana use as problematic behavior among adolescents? If not, as public health practitioners, should we be spending the amount of money we are spending to convince youth in such cultures not to engage in occasional use of marijuana.
13. Given that experimentation is a normal part of development during adolescence, should we consider occasional use of marijuana during this period as problematic or is it part of the normal processes of challenging authority that occurs among most adolescents. Further, given the limited evidence of the gateway effects of marijuana use and the lack of evidence(to my understanding) suggesting strong addictive effect or even long term consequences of marijuana use, is marijuana use in adolescence an issue of concern? On the other hand, should we only be concerned with use that interferes with executing of daily functions? And won't we be sending mixed messages by telling adolescents that that occasional use is okay but excessive use is not.
14. Studies that have shown effectiveness of drug prevention programs have mainly included rigorously evaluated programs with a disproportionate percentage of white youth. These projects have involved large sums of money and may not be sustainable particularly given changing political environments. Given that marijuana use has been found to be more normative in black communities and availability in such communities is so prevalent, what sustainable strategies should we be adopting to consistently reduce adolescent drug use in such communities?
15. Given the strong association between adolescent drug use and community and family factors, is it possible(and effective) for us to address the adolescent drug use problem in poor communities without first dealing with the community factors that are so associated with the phenomenon.
16. Are teenagers who smoke more likely to use marijuana?
17. Is there any correlation between youth smoking and later use of the "stronger" drugs? (i.e., could tobacco be the "gateway drug"?)
18. Is there any information on the route cause of drug use in youths? isn't it more likely that whatever influence that leads to initial drug use is what also leads to more dangerous drug

use (stress, trauma, access, etc), rather than the initial drug use causing the subsequent drug use?

19. . The "common factor model" offers an alternative explanation for the "marijuana gateway effect" by suggesting that an individual's propensity for drug use accounts for the association between early marijuana use and later use of hard drugs (Morral et al., 2002). If we were to conclude that marijuana is not a "gateway drug," how would drug policy and the debates around policy change?
20. According to the JAMA article (Lynskey et al. 2003), "early regular use of tobacco and alcohol emerged as two factors most consistently associated with later illicit drug use and abuse/dependence." If the same criteria used to support that marijuana is a "gateway drug," such as increased risk of using hard drugs later, holds for cigarette and alcohol consumption, why is there a continued focus on marijuana?
21. Data from Monitoring the Future 2004 suggest that over 35% of 12th graders in high school report using marijuana in the past 12 months. Is there such a thing as healthy experimentation? Is there proof that marijuana is psychologically or physically addictive?
22. Should smoking and possession of marijuana be a crime? What are the implications? What are alternative interventions to curb marijuana use among adolescents (considering the small effect of short-term outpatient interventions)?
23. The most striking data of 'Monitoring the Future' was the easy access to marijuana. Among 12th graders, approximately 90% said that it was 'fairly easy' or 'very easy' to obtain marijuana. Who and where are they receiving marijuana from?
24. Among 8th graders, usage is quite low comparatively to other grade levels (~15% and the trend is decreasing). What accounts for this trend? Is this difference mainly due to the lack of availability, or more from the lack of knowledge about what kinds of drugs are out there?
25. If there is evidence that there is a marijuana gateway effect, what does this imply about possible marijuana usage for medical treatment? Also, national data show that marijuana usage is slightly declining. If this decline continues, what effect might this also have for policy makers? Will they be more lenient towards using marijuana for medical usage?
26. Why are women less likely than men to abuse alcohol and use illicit drugs? Is being female a protective factor? Does this affect intervention programs as to whom and how one should intervene?
27. In the 1970's, the Dutch partially legalized marijuana. Since then, the use of "hard drugs" in Holland has declined. If marijuana were a gateway drug, would "hard drug" use not have gone up?
28. Since the sixties, marijuana has been a part of a subversive youth subculture. Today, commercially successful musicians have been advocates of marijuana use. Has the popularity

of this music had an impact on marijuana use? On anti-marijuana campaigns? If so, how do public health practitioners combat this? Or work with other musicians to not exoticize marijuana use?

29. Although THC and marijuana smoke have few proven long-term physical effects on humans, excessive use can lead to an undesirable attitude toward life, permanent memory loss, and add to emotional problems. For youth, who are at a particular point in neurological and physical development, are marijuana effects excessively detrimental?
30. Marijuana use has been linked with premature and low birth weight babies. For teen births, where there is already a disproportionate number of births to teen moms that are premature and low birth weight, should there be targeted interventions around marijuana use to adolescents that might be inclined toward early childbearing?
31. What the policy implications of medical marijuana laws on access to marijuana to adolescents?
32. The Lynskey article mentioned that cannabis use is higher in the U.S. in the Netherlands, where cannabis was decriminalized in an effort to separate it from the hard drug market. Please comment on this specific example. Are there other examples of places in the world where legislation has been able to influence cannabis use?
33. A propensity model that has been proposed has been able to replicate many of the phenomena found in the “marijuana as a gateway drug” model. Does the existence of such varying studies about the gateway effect discredit campaigns to ban marijuana use? What is your opinion on various explanations proposed in the literature?
34. Please discuss factors you think may act as protective factors for adolescents to abstain from marijuana use. Does existing legislation encourage/promote these protective factors?
35. Marijuana use among adolescents appears to be focused primarily in countries such as the United States, Australia, Canada, and Europe. Does the United States use examples from other countries to create policy?
36. There has been extensive research that shows to support the “marijuana gateway effect.” In one study, a few relationships such as dose response were observed to have a strong positive correlation to the gateway effect theory. Do you think relative risk and dose response have a baseline common factor that causes the adolescent drug use?
37. Papers published on the study of adolescent use of marijuana have encouraged the involvement of prevention programs, parental involvement and communications skill building as a means of decreasing adolescent drug use. Do you agree that these sort of therapeutic sessions are successful for marijuana, remedial for other drug use, or completely useless at all?
38. The Drug Policy Alliance states that the basic tenet to understand that there is not, nor will there ever be a drug free society. Do you agree or disagree with this statement? What, in the best of your knowledge, is your definition of a “drug free society?”

39. What are some of the school policy and programs for students with substance abuse that are most effective in promoting behavior change. Can they be scaled up?
40. Can the Gateway Theory be extrapolated to the adolescent population effectively?
41. How would you refute argument that teens would have about the medical efficacy of marijuana use?
42. How strong is the lobby for and against marijuana laws? How is the effect that marijuana has on adolescents taken into consideration?
43. There have been some reports that marijuana prohibition has not curtailed marijuana use by adolescents. If this is true, what should the response be? Do you think its prohibition actually increases its use?
44. Do you believe that removing criminal penalties for the personal use and acquisition of marijuana would lead to an increase in use among adolescents? What are the benefits in removing these penalties?
45. What areas of research are missing in the literature? In your opinion, what kinds of research are needed to convince policy-makers of your viewpoint, or simply better inform them about the situation?
46. When assessing the trends in drug use and abuse many factors are taken into consideration such as, gender, race/ethnicity, education, job classification, and marital status. From current research it has been seen that high school use and unemployment play a huge role in an increased likelihood of substance use. It has also been seen that being a female, a college graduate, a professional, and being married decreases the likelihood of substance abuse. (Substance Abuse Among Adults 35, Merline, O'Malley, et al 2004 ) In terms of marijuana and cannabis, what are the factors that strongly influence whether or not a person will be more likely to use these drugs? Have there been any significant trends seen in marijuana and cannabis use when looking at race/ethnicity and social economic status?
47. Given that media and advertisements play a huge role in many peoples lives, what role has it played in influencing marijuana and cannabis use? Which sources of media impact marijuana and cannabis use the most?
48. In March 1999 the Institute of Medicine stated that, "There is no conclusive evidence that the drug effects of marijuana are causally linked to the subsequent abuse of other illicit drugs." If marijuana is not considered a gateway drug by the IOM, then what drugs are considered gateway drugs? Are there any other organizations doing research on marijuana which would give the counter argument that marijuana is a gateway drug?
49. How do adolescent substance abuse trends differ in countries where marijuana is legalized? What type of effect might legalizing marijuana in the US have on trends of adolescent substance abuse? Would it decrease the marijuana gateway effect because an adolescent would no longer have to obtain it through the black market and therefore not be exposed to ready access of other hard drugs? Or would the legalization of marijuana lead to increased substance abuse?

50. What can parents and other family members do if an adolescent starts using marijuana? Is there a line that can be drawn between simple experimentation and abuse? Is simple experimentation a normal and acceptable part of adolescence? What types of discussions should a parent have with their adolescent regarding drug use?
51. Would harsher penalties influence trends in adolescent substance abuse? For example, would adolescents be less likely to use illicit substances if they faced time in a detention center for possession of an illicit substance?
52. To what extent does popular culture and the media influence trends in adolescent substance abuse? If the glorified portrayal of illicit substances were banned from movies, do you think this would impact trends in adolescent substance abuse? Should policy makers take steps to implement such bans?
53. According to our class lecture, education is correlated with substance abuse. Do other industrialized countries with high emphasis on education experience similar substance abuse trends among adolescents as in the United States? Do countries with higher academic achievement have lower substance abuse trends?
54. Is it possible to focus an intervention that will make marijuana use unacceptable to the adolescent population?
55. Do adolescents who use marijuana progress to become injection drug users (using heroine), and what percentage of them progress if they do?
56. Is marijuana use associated with juvenile delinquency or crime among adolescents? And if so should youths who commit these crimes be treated as criminals or should they be treated as patients.
57. What effective policies have been put in place to limit access of marijuana and other substances of abuse to adolescents?
58. What is the role of the media in the rate of marijuana use among adolescents? Are they to blame?
59. Whether or not marijuana use is rite of passage in our urban culture it is so prevalent in Baltimore City and County how can young people find ways to avoid using it? In other words, marijuana use is the standard in the teen social scene what can we do to help the young men & women who might want to stay clean but don't want to be alone every weekend?
60. How do genetic differences come into play when an individual starts and continues using substances of abuse?
61. Briefly describe the various public health issues related to use of substances of abuse?
62. What are the differences of these terms: "Tolerance", "Addiction", "Dependence" and the different types of dependence?

63. What are the consequences related to long term use effects of substances of abuse?
64. What are the correct measures of therapy to an addicted or dependent person? Is there any hope for permanent?
65. Does race/ethnicity or gender matter when we talk about adolescents and marijuana use?
66. What is the current culture among adolescents reveal about their attitudes about marijuana? Has this culture changed over the years, if so, how?
67. Compared to other substances of abuse, such as alcohol and smoking, how harmful is marijuana?
68. Using the common approach model, if propensity of use of Marijuana is as likely as use of other hard drugs should we institute policies in use of drug treatment facilities that reflect this increased likelihood?
69. Will the legalization of Marijuana increase our ability to openly reach adolescents about the dangers of its use by reducing the legal stigma? Will the consequences of these actions affect Marijuana use and hard drug use?
70. What is the significance of identifying gateway drugs? Does this help in policy and intervention development? Shouldn't we be concerned about addressing all substance abuse as potential indicators for those who participate in risky health behaviors?
71. Besides the potential relationship between marijuana and "harder drugs", what are the immediate dangers of occasional marijuana use among adolescents? How are these the same or different than smoking?
72. How addictive is marijuana? Do adolescent users continue use into adulthood?
73. Is there a stereotypical marijuana user? If so how does this relate to the stereotypical hard drug user? How could this difference explain the differences in view and policy of marijuana use?
74. Is there a biologic difference (brain) between adolescents that use marijuana? What are the biologic differences between adolescent and adults (brains) that would make marijuana use a normal part of adolescent development?
75. How is marijuana use among adolescents understood in other countries? If it has been recently legalized what have the results been for use among adolescents?
76. To what extent does socioeconomic background during childhood influence rates of tobacco and drug use in adulthood?
77. Although the odds of use among adults are higher if there is a history of tobacco/drug use in high school, what proportion of those who report trying/using tobacco/alcohol/other drugs in high school will continue to report such behaviors in adulthood?

78. What is/are the proposed mechanism(s) to explain higher rates of cigarette/alcohol use among: i) those with less education; ii) men?
79. Much literature reports lacking information about the predictors and patterns of substance use among minorities. Even less information may be available, therefore, to determine whether existing interventions have proven effective. Since it is known that substance use that begins during the adolescent years has a high risk of leading to substance abuse later in adulthood, what interventions are currently being investigated to target specifically minority groups that are at increased risk for developing substance abuse due to lower SES, education, unemployment, high school completion and other indicators?
80. In terms of a policy standpoint, tobacco and alcohol are not illegal drugs, yet they are also considered gateway drugs and both are addictive with long term use causing serious health effects including lung cancer and cirrhosis of the liver, respectively. What are the arguments of making access to "gateway" tobacco and alcohol legal by those over 18 and 21 respectively, but for keeping marijuana use illegal? In terms of a biological and physiological perspective aren't the long term effects of marijuana smoking much less deleterious on one's health than tobacco smoking? If they are all "gateway" drugs, why is marijuana use considered more risky?
81. Is experimentation with all gateway substances--tobacco, alcohol and marijuana part of normal risk-taking during adolescence and therefore normal adolescent development? To what extent should parents, health care professionals and policy makers encourage independent decision making among adolescents, but also encourage them to understand the addictive nature of these substances and the extent to which early use leads to and increases risk for abuse in later adulthood?
82. Results of twin studies show that early initiation of marijuana use is associated with increased risks for other drug use and for dependence (the gateway effect) regardless of whether the twins were monozygotic. Thus, there is significant evidence that engaging in experimentation and drug use during adolescence is very dependent on environmental, social and peer influences. What types of media campaigns and interventions are being investigated that are targeting the delay of using gateway substances among adolescents today? What are the most successful strategies and why?
83. Other areas of the world such as Western Europe including Holland and Belgium take a more liberal stance toward drug policies than the United States. As European countries move towards greater liberalization of drug policies including relaxing penalties on marijuana possession, how should America respond to this trend? Does the knowledge of more liberal drug policies in Europe encourage American adolescents to flock to cities such as Amsterdam to buy, sell and use drugs? More largely speaking, does the criminalization of marijuana possession in the United States cause adolescents to desire the risk-taking behavior of using and selling cannabis even more?
84. Drug availability and drug use opportunities have been shown to have a large influence on initiation of drug use. Do you think that legalization or decriminalization of marijuana use would produce a net benefit to adolescent health and wellbeing? Is it a different story for "hard" drugs? How does this compare with age limits on legal alcohol use?

85. Given that marijuana use does not seem to have direct adverse health and social affects on most users (especially compared with many "hard" drugs and cigarettes), and since the evidence for a "gateway" effect is shaky, should marijuana use be understood as a fairly harmless form of experimentation and rebellion? If so, what does this mean for public policy? Is there any chance that the decriminalization of marijuana will be politically feasible in the near future?
86. Since starting drug use at an early age is a significant predictor of later drug use problems, it seems important that drug prevention programs begin targeting youth at early ages. Should all youth be targeted early, or only those who are known to be using or are at high risk for using? Should marijuana use prevention be lumped together with prevention for other types of drug use, or should it be considered in a different light?
87. A large proportion of well-evaluated drug use prevention programs seem to be school-based interventions. Although schools provide a relatively easy venue for reaching a large number of youth, some of the youth at highest risk are school dropouts. Do you know of any "success stories" from programs that reach young people through alternate venues (such as churches, shelters, popular youth hangouts, etc)?