# OREGON STATE PUBLIC HEALTH DIVISION Office of the State Public Health Director



Kate Brown, Governor

## Retail Marijuana Scientific Advisory Committee Public Meeting Minutes March 9, 2017

In Attendance: Katrina Hedberg, MD, MPH, Ken Rosenberg, MD, MPH, Andris Antoniskis, MD, Dennis McCarty PhD, Diane Lia, LCSW, CADC II, PhD, MPH, Julia Dilley, PhD, Jane Ishmael, PhD, Richard Farmer, PhD, Rob Hendrickson, MD, Tim McAfee, MD, MPH

Staff: Tim Noe, Andre Ourso, Dawn Quitugua

### **Committee Member Introductions**

#### Purpose/Agenda

1. Review 2015 approved Oregon Public Health Division statements and discuss whether updates are needed to these statements in light of new findings presented in the 2017 National Academies of Sciences, Engineering, Medicine (NAS) report on the Health Effects of Cannabis, and statements from the Centers for Disease Control and Prevention public health website.

#### **Effect of Adolescent Marijuana Use on Health and Other Outcomes**

- 1. <u>Cognition</u> Approved revised public statement: Marijuana use during adolescence may be associated with impairments in cognitive development.
- 2. <u>Education</u> No change to current public statement: Regular marijuana use by adolescents is associated with low academic achievement, such as not graduating from high school.
- 3. <u>Adult Marijuana Dependence</u> No change to current public statement: Starting marijuana use by adolescents is associated with low academic achievement, such as not graduating from high school.
- 4. Other Drug Use Approved revised public statement: Marijuana use by adolescents and young adults even occasional use is associated with adult high-risk use of alcohol, tobacco, and other drugs. NAS report statement around the development of other substance abuse will be added to this summary document.
- 5. <a href="Psychosis">Psychosis</a> No change to current public statements: Regular marijuana use by adolescents and young adults is associated with an increased rate of psychotic symptoms and disorders such as schizophrenia in adulthood. This risk is increased among those who start using marijuana at a younger age and those with more frequent marijuana use. The NAS report does reference the development of schizophrenia and psychosis although not specific to adolescent or adult use. Reference NAS report conclusion section 12.1. This will be added to the summary document.
- 6. Mental Health (Depression, Anxiety, Suicidal Thoughts) No change to current public statement: There is conflicting research whether or not marijuana use by adolescents and young adults is associated with depression, anxiety and suicidal thoughts. The NAS report does reference the development of suicidal thoughts and depression although not specific to adolescent or adult use. Reference NAS report conclusion section 12.7A. This will be added to the summary document.

#### Fetal Marijuana Exposure and Health Effects

- 1. <u>General</u> No change to the current public statements: There is no known safe level of marijuana use during pregnancy. Marijuana use during pregnancy may have negative effects on the fetus, regardless of when it is used during pregnancy.
- 2. THC Transfer to the Fetus Approved revised public statement: THC passes from the mother to the

- fetus through the placenta and exposes the fetus to THC.
- 3. <u>IQ, Cognitive and Behavioral Effects</u> No change to the current public statement: Maternal use of marijuana during pregnancy may be associated with negative effects on exposed offspring, including decreased academic ability, cognitive function and attention. These effects may not appear until adolescence. Scientific literature on this topic is limited.
- 4. <u>Marijuana Use by Exposed Offspring</u> (remove row) Conflicting research and there are no NAS or CDC comments.
- 5. <u>Pregnancy Complications, Including Still Birth</u> No change to current public statement: Marijuana use during pregnancy may be associated with an increased risk of stillbirth. Scientific literature on this topic is limited.
- 6. <u>Birth Weight</u> Approved revised public statement: Maternal use of marijuana during pregnancy can decrease the birth weight of offspring.
- 7. SIDS (remove row) Insufficient evidence.
- 8. <u>Birth Defects</u> No change to the current public statement: Marijuana use during pregnancy may be associated with an increased risk of heart defects (isolated simple ventricular septal defects) in exposed offspring. Scientific literature on this topic is limited.

#### **Breast Fed Infants: Marijuana Exposure**

1. <u>General</u> – Approved revised public statement: THC can pass from the mother's breast milk to the infant.

### Cognitive, Neurological, and Mental Health Effects of Adult Marijuana Use

- 1. <u>Memory, Attention and Learning</u> Approved revised public statements: Marijuana use can be associated with acute impairments in memory, attention, and learning. Frequent use of marijuana is associated with impaired memory, persisting a week or more after quitting.
- 2. <u>Acute Psychotic Symptoms</u> No change to the current public statement: Use of THC, a component of marijuana, can cause acute psychotic symptoms during intoxication.
- 3. <u>Mental Health (Depression/Anxiety, Suicidal Thoughts)</u> Approved revised public statements: Regular use of marijuana may be associated with symptoms of depression and anxiety.
- 4. Symptoms or Diagnosis of Anxiety (remove row) Anxiety is included in above public statement.
- 5. <u>Symptoms or Diagnosis of Psychosis, Onset of Schizophrenia</u> Approved revised public statements: Marijuana users are significantly more likely than nonusers to develop chronic mental disorders, including schizophrenia. Some marijuana users have an increased risk for psychosis. Marijuana use may trigger psychosis in people with schizophrenia.
- 6. Diagnosis of Schizophrenia (remove row) Schizophrenia is included in above public statements.

## Cardiovascular Effects of Marijuana Use

- 1. <u>Myocardial Infarction (Heart Attack)</u> Approved revised public statement: Marijuana use may be associated with increased risk of triggering a heart attack among adults.
- 2. <u>Stroke (Ischemic)</u> No change to the current public statement: Marijuana use may be associated with increased risk of stroke.

#### Marijuana Use and Respiratory Health

- 1. <u>Carcinogens</u> No change to the current public statement: Marijuana smoke, both firsthand and secondhand, contains many of the same cancer-causing chemicals as tobacco smoke.
- 2. <u>Airflow Obstruction</u> No change to the current public statement: Regular marijuana smoking is associated with mild decreased airflow in the lungs.
- 3. <u>Acute Use Improves Airflow</u> Approved revised public statement: There is some evidence that acute (but not chronic) marijuana smoking can improve airflow in the lungs.
- 4. <u>Particulate Matter</u> No change to current public statement: Marijuana smoke may deposit more particulate matter in the lungs per puff compared to tobacco smoke.
- 5. Emphysema (remove row) Not enough evidence to indicate that chronic marijuana smoking increases

- the risk of emphysema.
- 6. <u>Chronic Obstructive Respiratory Disease (COPD)</u> Approved revised public statement: Smoking marijuana may increase the risk of developing COPD. These symptoms generally improve when marijuana smokers quit.
- 7. <u>Chronic Bronchitis with Cough/Wheeze/Sputum</u> Approved revised public statement: Heavy marijuana smoking is associated with chronic bronchitis, including chronic cough, sputum production and wheezing. These symptoms generally improve when marijuana smokers quit.
- 8. Bullous Lung Disease (remove row) Affiliated with COPD.
- 9. <u>Lung Cancer, Pre-malignant Lesions in Airways</u> Approved revised public statements: Although there is not enough evidence to know whether smoking marijuana directly causes lung cancer, heavy marijuana smoking is strongly associated with pre-malignant lesions in your lungs.
- 10. <u>Smoke from Water Pipes or Bongs Contain more Cancer Causing Chemicals</u> No change to the current public statement. Smoke from water pipes or bongs may contain more cancer-causing chemicals per milligram of THC compared to smoke from unfiltered joints.
- 11. <u>Respiratory Health Effects from Aerosolizing/Vaporizing</u> No change to the current public statement. Smoke from water pipes or bongs may contain more cancer-causing chemicals per milligram of THC compared to smoke from unfiltered joints.

## **Motor Vehicle Crashes and Marijuana Exposure (new section)**

1. <u>Motor Vehicle Crashes</u> – New approved public statement: Driving after using marijuana can increase the risk of motor vehicle crashes.

#### Next Steps

- 1. Revisions will be made as necessary to the summary of selected evidence reviews and public statements.
- 2. The revised document will be circulated to the committee for feedback/approval.
- 3. The final document will be posted to the public health website.
- 4. Final version tentatively scheduled for distribution by March 30, 2017.

#### **Public Comment**

There were no public comments today.

Meeting Adjourned: 5:16pm