AG Yost unveils two projects aimed at preventing opioid addiction

10/2/19

(COLUMBUS, Ohio) – In an effort to fight the opioid epidemic at its source, Ohio Attorney General Dave Yost today announced the launch of two scientific projects aimed at reducing the number of people who succumb to substance use disorder.

“While Ohio’s first responders and treatment and recovery experts are fighting a heroic battle to curb opioid-related fatalities, the key to victory is stop people from becoming addicted in the first place,” Yost said. “The two projects we are launching aim to prevent people from entering the addiction pipeline.”

One project is an unprecedented study to identify the genetic factors that make an individual more prone to developing an opioid addiction, information that could guide physicians when they prescribe medication for pain management.

“Genetics and addiction often go hand-in-hand, but we need to find out how and translate this knowledge into clinical practice if we want to gain the upper hand in the battle against opioid addiction.” Yost said. “If we can prevent the problem, we can ultimately win the war.”

The genetic study will be co–led by Dr. Jon Sprague, Director of Science and Research for the Attorney General’s Office and the Bureau of Criminal Investigation Eminent Scholar at Bowling Green State University, and Dr. Caroline Freiermuth, an Associate Professor of Emergency Medicine at the University of Cincinnati Medical Center.

The study will focus on 1,500 emergency department patients at the University of Cincinnati and The Ohio State University. The specific goals of the study are to:

- Determine which genes are associated with the development of opioid use disorder.
- Develop an Addiction Risk Score, to better classify patient likelihood for opioid dependence.
- Determine the prevalence of gene-related addiction risk in the general population.

Patients will be asked about factors associated with opioid addiction, including details of previous opioid exposure, current opioid use, and other health history.

The research team will collect a cheek swab from each patient for DNA testing to compare to with 180 genetic markers suspected to be associated with opioid addiction.

The genetic research team is made up of scientists from The Ohio State University, the University of Cincinnati, Bowling Green State University, Case Western Reserve University. Genemarkers, a leader in genomic research based in Kalamazoo, Michigan, will provide scientists for analysis, and InXite, of Columbus, will provide researchers for advanced machine learning algorithm processing.
Attorney General Yost’s second initiative is a task force charged with finding innovative prevention techniques and strategies. Dr. Sprague has assembled a team of experts in medicine and pharmacy practices, nursing, behavioral economics, data analysis, epidemiology and medical anthropology.

The panel is called the Scientific Committee on Opioid Prevention & Education, or SCOPE. It will look for the circumstantial, environmental, social, behavioral and psychological factors that incline some people to substance use disorder.

“We want to know why two people can take the same drug in the same dosage and only one becomes addicted,” Yost said. “Answering that question could help us get in front of this epidemic and begin to relieve the pressure on those who are working so hard to save those who already are in the clutches of the opioid monster.”