E-cigarettes may be a clue at crime scenes

Forensic scientists at VCU are developing advice for forensic teams if e-cigarettes and other vaping paraphernalia are found at a crime scene.

You’ve probably seen the show “CSI: Crime Scene Investigation” and spinoffs like “CSI: Miami.” VCU researchers could provide the inspiration for a new drama: “CSI: Vaping” – about how e-cigarettes could be critical clues in solving crimes.

Forensic scientists at VCU are developing advice for forensic teams if e-cigarettes and other vaping paraphernalia are found at a crime scene.

“The forensic science community is unaware
of the compounds that may be found in these e-liquids. It’s our job to make them aware,” said Justin Poklis, one of the leaders on the research team.

The team includes experts in forensic science, chemistry, pathology, pharmacology and toxicology. Their goal is to collect data from a vaping machine that they created and analyze the contents of the vapor coming from e-cigarettes. They want to find out what compounds can be found in e-liquids and how much of it can be ingested through the body.

In 2015, one out of three murder cases in the United States went unsolved for the lack of witnesses or, more importantly, evidence. E-cigarettes might be missed when collecting evidence at a crime scene if investigators don’t know what they might contain. Illegal substances found in e-cigarettes could be a lead to solving a case.

“We want this information to be spread throughout the forensic science community so when evidence like e-cigarettes come to the forensic labs, they know what to do with it or know the resources to contact,” said Poklis, a board-certified toxicologist.

As research continues on e-cigarettes and their contents, the forensic community will have deeper knowledge about what to do with such evidence. Maybe in the near future, we will see how an e-cigarette helped solve a crime.