CESAR Pilots New Community Drug Early Warning System in Criminal Justice System; Finds Synthetic Cannabinoids in All Populations Studied

Emerging drugs of abuse in communities can be rapidly identified by an innovative urine testing system, according to the results of a recently released ONDCP-funded pilot study of the Community Drug Early Warning System (CDEWS).

CDEWS is designed to detect emerging drugs by re-testing urine specimens collected by traditional criminal justice system (CJS) drug testing programs, and examining them for emerging drugs of abuse, such as synthetic cannabinoids (SC). The CDEWS model is based on the premise that emerging drugs of abuse often show up in high-risk CJS populations before other persons in the community. In the pilot study, 1,064 anonymous urine specimens from five CJS populations in Washington, DC; Prince George’s County, Maryland; and Chesterfield, Virginia were sent to an independent laboratory for testing for an expanded CDEWS panel of more than 30 prescription and illicit drugs. In addition, approximately one-half (56%) of these specimens were sent to a second independent laboratory for testing for 12 SC metabolites.

- SCs were detected in the specimens from all participating sites in the District of Columbia, Maryland, and Virginia. Furthermore, all of the SC positive specimens contained one or two of the metabolites (UR-144 and XLR-11) recently identified and added to the federal schedule of prohibited SC metabolites after this study began (see figure).
- SCs were most likely to be detected in younger men. What was not expected was the level of use that was found. For example, one-quarter to one-third of young men in the three populations studied in DC tested positive for SC.
- Unlike other prescription and illicit drugs, SCs were as likely to be found in persons who had failed the limited CJS screen as in persons who had passed. In other words, current drug testing screens which do not test for SCs are likely missing significant drug use (and users) in the populations they monitor. One possibility is that persons who know they will be tested use SC products because they know that the drug is not included in most test panels.

The results demonstrate that CDEWS could be successfully implemented in diverse criminal justice populations, including arrestees, probationers and parolees, and drug court participants and proved its unique ability to uncover emerging drug trends. The findings from this pilot study suggest that CJS drug testing programs should weigh the value of adding SC metabolites to their testing protocols and adopting an annual CDEWS type of process for reviewing and updating the drugs included in their testing protocols. Hospital, physician, military, and workplace testing programs should also consider expanded testing of urine specimens to accurately identify drugs recently used. Finally, the high level of SC use detected suggests that local public health systems should implement targeted prevention campaigns to educate the public, especially youth and young adults, about the rapidly changing ingredients in products sold as synthetic cannabinoids and the potential harm that can result from their use. Plans are currently being developed to expand CDEWS to additional sites.