NIH system to monitor emerging drug trends

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An innovative National Drug Early Warning System (NDEWS) is being developed to monitor emerging trends that will help health experts respond quickly to potential outbreaks of illicit drugs such as heroin and to identify increased use of designer synthetic compounds. The system will scan social media and Web platforms to identify new trends as well as use conventional national- and local-level data resources.

The University of Maryland's Center for Substance Abuse Research (CESAR) will receive five years of funding from the National Institute on Drug Abuse (NIDA), part of the National Institutes of Health, to develop NDEWS.

"NDEWS will generate critically needed information about new drug trends in specific locations around the country so rapid, informed, and effective public health responses can be developed precisely where needed," said NIDA Director Dr. Nora D. Volkow. "By monitoring trends at the local level, we hope to prevent emerging drug problems from escalating or spreading to surrounding regions."

Information about designer synthetic drugs – including different ways to possess and use them – is rapidly spread to millions of people through the Internet and social media. Also, other drug trends may quickly change. An example is the recent increases in heroin use among many regions across the country. Conventional methods to monitor drug trends may not ask about emerging drugs, do not always provide information about the types of drugs used at the community level, and may need a year or more to collect and report information.

Currently, NIDA conducts local-level surveillance on drug use through the Community Epidemiology Work Group (CEWG) network. For the last 38 years, CEWG has relied on drug addiction experts to analyze data from various other sources and summarize this information in semiannual reports from sentinel sites - major metropolitan areas and some states from around the United States. NDEWS will continue to monitor drug trends in sentinel sites around the country using many of the national and local data sources that have been utilized by CEWG. To expand upon these efforts and produce an enhanced national system to reflect that new drug trends may emerge outside of sentinel sites, NDEWS will establish a virtual community - a network of addiction experts across the country who will regularly communicate with each other to:

- Detect emerging drug trends using national and local data sources (existing surveys, various drug-related listservs and networks, and social media and web scans).
- Dispatch a rapid response team at hot spots - local areas with reported rapid increases in emerging drugs. This team will assess the outbreak and collect anonymous urine samples – provided by criminal justice drug testing programs – for enhanced analysis that includes testing for synthetic drug metabolites.
- Quickly disseminate information to the public using traditional and social media, websites, publications and newsletters.

"NDEWS promises to provide the country with critically needed real-time information about changing drug use patterns in communities across the country," said lead investigator Dr. Eric Wish of CESAR. "It will utilize social media and other innovative technologies to identify emerging drugs and trends and to quickly disseminate important findings to experts and interested citizens. This opportunity builds on CESAR's over 20 years of experience monitoring and reporting on emerging drugs."

The five-year project begins in August 2014.

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