Guam Addresses Rising E-Cigarette Use with Leadership from Health Director

Facing high levels of e-cigarette use among middle and high school students, the Guam Department of Public Health and Social Services is working with partners to address the issue on the island.

Electronic cigarette use is rising throughout the states, territories, and freely associated states. In 2013, U.S. e-cigarettes sales were set to more than double, according to analysts at the investment banking firm Wells Fargo Securities. Data from the intelligence firm Euromonitor International show that e-cigarettes generate half a trillion dollars in revenue annually.

Researchers are still studying the health effects of e-cigarettes, but many health experts have expressed concerns about the growing trend. One possible issue is that e-cigarettes, which contain nicotine, may act as a gateway to tobacco use, particularly for youth. CDC’s National Youth Tobacco Survey found that high school students’ use of e-cigarettes doubled from 2011 to 2012. In addition, 1.8 million middle and high school students said they tried e-cigarettes in 2012. In March 2014, the American Medical Association’s journal *JAMA Pediatrics* published a study, “Electronic Cigarettes and Conventional Cigarette Use Among U.S. Adolescents,” which found that adolescents who used e-cigarettes were more likely to smoke cigarettes than those who did not.

Although evidence suggests that e-cigarettes contain lower levels of some common tobacco-related toxicants than traditional cigarettes, an FDA analysis found that there are several impurities harmful to human health in e-cigarette cartridges. Additionally, the user’s level of exposure to nicotine and toxins can vary widely between e-cigarette products. Some contain nicotine levels that approach fatal doses, and may be linked to nicotine poisoning. In April 2014, CDC reported that calls to poison control centers from the states and territories regarding nicotine poisoning from e-cigarettes rose sharply between 2010 and 2014, and more than 50 percent of the calls involved children aged 5 or younger.

Because FDA has not released e-cigarette regulations as of this story’s publication, the U.S. states, territories, and freely associated states are adopting their own approaches to the issue. Guam Department of Public Health and Social Services (GDPHSS) Director James Gillan, MS, HSA, credits a conversation with Tennessee Department of Health Commissioner John J. Dreyzehner, MD, MPH, FACOEM, with inspiring him to take action in his jurisdiction. E-cigarette use is high among the island’s middle and high school students, according to KUAM News.

“I thought we needed to do something to at least show leadership and try to start the public conversation on this matter,” says Gillan.

Steps Taken:

- In February 2014, GDPHSS expanded its smoke-free policy to prohibit the use of e-cigarettes in all GDPHSS facilities and vehicles. “The actual contents in the cartridges are unknown, which poses health and safety concerns. ... Initial lab tests conducted by the FDA found detectable levels of carcinogens and toxic chemicals, including an ingredient used in antifreeze in two brands of e-cigarettes and numerous cartridges,” said a GDPHSS press release.
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- Following the updated smoke-free policy’s implementation, Gillan discussed e-cigarettes with Sen. Dennis Rodriguez, chairman of the Guam Legislative Committee on Health. Within weeks, Rodriguez had drafted Bill 264, a measure that would prohibit the sale or distribution of electronic cigarettes to minors. Gillan expects that the bill will pass the legislature when the legislative session resumes after April 20, 2014, and he believes that the governor will sign it. “What we are seeing is the recruitment of a whole new generation of addicts, finding another way to get nicotine into people’s systems, and touting it as a fairly harmless way to do so,” Gillan said while discussing the bill’s rationale at its legislative hearing.
- To rally support for Bill 264, GDPHSS leveraged its strong relationships with partners. The Guam Cancer Coalition, the Pacific Region Cancer Coalition, the Guam Behavioral Health and Wellness Center’s tobacco cessation program, the Guam chapter of the American Cancer Society, and several community leaders supported the bill at its hearing.
- GDPHSS has advocated for taxing e-cigarettes as tobacco products and using the revenues raised to fund health programs that address risky behavior.

Lessons Learned:

- Gather scientific data on potential new health risks as they become available. Researchers are continuing to explore e-cigarette’s health implications, but early studies indicate that many e-cigarette cartridges contain potentially harmful substances and that e-cigarette use may lead to tobacco use, especially among youth.
- Show leadership through your own organization. By modifying its smoke-free policy to include e-smoking, GDPHSS showed that it was walking the walk and set an example for other governmental agencies.
- Build relationships with a variety of health partners. GDPHSS worked with a legislative contact on e-cigarettes, which led to creating Bill 264. The department then called on local partners to help raise support for the bill.
- Look for areas of opportunity. One challenge in Guam, and throughout the states, territories, and freely associated states, is that many people perceive e-smoking as a safe alternative to inhaling tobacco smoke or using smokeless tobacco products, despite the lack of supporting evidence. Similarly, some believe that e-cigarettes can be used for cessation purposes, even though FDA has not recognized them as a form of nicotine replacement therapy and researchers have found mixed results on their effectiveness as a cessation tool (see the Lancet article “Electronic cigarettes for smoking cessation: a randomised controlled trial” and JAMA Internal Medicine research letter “A Longitudinal Analysis of Electronic Cigarette Use and Smoking Cessation”). To address these challenges, GDPHSS is exploring the possibility of working with a well-respected physician who will act as an educator and champion.

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