

CESAR FAX: October 8, 2007 (Vol. 16, Issue 40)

Smokeless Tobacco Use Not a Safe Substitute for Smoking

Smokeless tobacco use is often considered to be less toxic and carcinogenic than cigarette smoking. However, a recent study of persons seeking treatment for tobacco dependence found that smokeless tobacco users were exposed to higher levels of the carcinogen NNK than smokers. Smokeless tobacco users had 3.79 pmol per milliliter of urine of NNAL (a measure of NNK exposure), compared to 2.18 for cigarette smokers. In addition, smokeless tobacco users had higher levels of cotinine, a biomarker of nicotine exposure, which may be because “smokeless tobacco users strive to achieve similar nicotine levels as do cigarette smokers in order to satisfy their craving”(p. 1571). While the authors acknowledge that “cigarette smoke contains, in addition to NNK, multiple carcinogenic combustion products which are not present, or present in only low amounts, in smokeless tobacco,” they emphasize that “the data presented here show that smokeless tobacco use is far from safe”(p. 1571) and thus is not an acceptable substitute for cigarette smoking.

SOURCE: Adapted by CESAR from the Office of Applied Studies, SAMHSA, *Treatment Episode Dataset (TEDS) Highlights—2005, National Admissions to Substance Abuse Treatment Services, 2007*. Available online at <http://www.oas.samhsa.gov/dasis.htm#teds2>.