Tobacco smoking increases the risk of developing diabetes

- Cigarette smoking is an established risk factor for type 2 diabetes mellitus. Tobacco use and tobacco smoke are toxic to the pancreas.^{1,2} If the pancreas is damaged, insulin production may be affected. The pancreas is responsible for making insulin.
- Smoking cessation may result in weight gain, which could increase the risk for diabetes.¹ However, the health benefits of smoking cessation far outweigh the risk of short-term weight gain from quitting.
- For smokers at risk for diabetes, smoking cessation should be coupled with strategies for diabetes prevention and early detection.¹
- The association between tobacco smoking and diabetes is greatest among Caucasian men and women.²

Secondhand smoke exposure increases the risk of developing diabetes

- Secondhand smoke contains toxins similar to what smokers inhale but exposure is at different temperatures and conditions. Some toxic substances are found in higher concentrations in passive, or secondhand smoke.²
- The greater the exposure to smoking and secondhand smoke, the greater the risk for developing diabetes.²
- Both active and passive smoking are associated with the body not efficiently using glucose (or blood sugar) in young adulthood.²

Smoke-free laws and diabetes

- Eliminating smoking in indoor spaces fully protects nonsmokers from exposure to secondhand smoke. Separating smokers from nonsmokers, cleaning the air, and ventilating buildings cannot eliminate exposure to secondhand smoke.³
- Legislation that eliminates public smoking will reduce the burden of diabetes, a very serious illness which takes a heavy toll on individuals and the healthcare system.

For more information, contact the Kentucky Center for Smoke-free Policy University of Kentucky College of Nursing, 859-323-4587 or <u>www.kcsp.uky.edu</u>.

^{1.} Yeh HC, Duncan BB, Schmidt MI, Wang, NY, Brancati FL. Smoking, Smoking Cessation, and Risk for Type 2 Diabetes Mellitus: A Cohort Study. Annals of Internal Medicine. 2010; 152 (1): 10-17.

^{2.} Houston TK, Person SD, Pletcher MJ, Liu K, Iribarren C, Kiefe CI. Active and passive smoking and the development of glucose intolerance among young adults in a prospective cohort: CARDIA study. *BMJ*. 2006;332:1064-1069.

^{3.} U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General.* Atlanta, GA: Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease and Prevention and Promotion, Office of Smoking and Health;2006.