



# YALE NATIONAL INITIATIVE

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Curriculum Units by Fellows of the National Initiative  
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## Effects of Carcinogens on Cells

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Cancer is the name given to a collection of related diseases caused by the uncontrollable growth and reproduction of mutated cells. No country in the world is safe from cancer creating a global impact on health and economics. Cancer is the second highest cause of death in the United States. Genetics, tobacco use, sun exposure, radiation exposure, diet and physical activity, alcohol consumption and other carcinogens such as pesticides contribute to the increased risk of cancer all over the world. Through an awareness of some common carcinogens and cancer risks students will discover ways to possibly decrease their personal risk. This unit discusses what carcinogens and cancer are and how a healthy cell becomes a cancerous cell on a level for sixth grade science students. It introduces the reproduction of cells and mitosis. This unit also provides an introduction on DNA and genes in respect to the creation of a cancer cell.

(Developed for Science, grade 6; recommended for Science, grades 6-8)

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