NIH Awards $4M for Research Into Environmental Links to Liver Disease

September 26, 2017

The National Institutes of Health (NIH) has awarded a researcher at the University of Louisville School of Medicine more than $4 million to develop research on whether exposure to environmental chemicals may be contributing to human liver disease, Healio reports.

The grant, which was awarded by the NIH's National Institute of Environmental Health Sciences, will allow Matthew Cave, MD, associate professor of medicine in gastroenterology to study the long-term effects of endocrine-disrupting chemicals on the liver. Officially known as the Revolutionizing Innovative, Visionary Environmental Health Research (RIVER) Outstanding Investigator Award, the grant will be distributed over the next eight years.

The chemicals Cave will study include bisphenol-A (BPA), polychlorinated biphenyls and vinyl chloride, which are commonly found in plastic drink bottles, pipes and other construction materials. These so-called endocrine-disruptors get their name because they appear to interfere with the body's hormones, and recent research has linked long-term exposure to them to an increased risk of metabolic diseases such as diabetes and obesity.

In this new NIH-funded study, Cave will seek to learn how these endocrine-disrupting chemicals may also contribute to fatty liver disease. In addition, the grant will enable research teams at the Kentucky-based university to explore new directions for research around potential environmental contributions to conditions like non-alcoholic fatty liver disease (NAFLD) and non-alcoholic steatohepatitis (NASH).

Cave says he will begin his research with cell cultures and animal models before moving on to studying the effects of endocrine-disruptors on humans.