In the 1990s, domestic growers commonly used 37 pesticides approved for use on tobacco by EPA. Most of these pesticides were also used on food crops. When used in ways that deviate from conditions set by EPA, many of these pesticides can cause moderate to severe respiratory and neurological damage—and may result in death. Moreover, animal studies suggest that some of these pesticides may cause birth defects or cancer.

Under its pesticide registration program, EPA evaluates toxicity and other data to assess health risks to workers and the public from exposure to pesticides—and risks to smokers from exposure to residues in smoke. These assessments have identified a range of risks that required such mitigation as limiting where and how the pesticide may be used, prohibiting use in certain states, and requiring workers to wear respirators and chemical-resistant clothing. On the other hand, EPA has concluded that low levels of residues in tobacco smoke do not pose short-term health concerns requiring mitigation. EPA does not assess intermediate or long-term risks to smokers because of the severity of health effects linked to use of tobacco products themselves.

While EPA regulates the specific pesticides that may be used on tobacco and other crops and specifies how the pesticides may be used, it does not otherwise regulate residues of pesticides approved for use on tobacco. USDA, however, is required by the Dairy and Tobacco Adjustment Act to test imported and domestic tobacco for residues of pesticides not approved by EPA for use on tobacco that federal officials believe are used in other countries. By helping ensure that other countries do not use highly toxic pesticides that U.S. tobacco growers may not use, federal regulation of pesticide residues on tobacco addresses trade equity as well as health and environmental issues. However, USDA has not reevaluated the list of pesticides for which it tests since 1989, even though EPA has cancelled tobacco use for over 30 pesticides since then.