The U.S. Environmental Protection Agency (EPA) has a critical role in food security and safety within the United States, in areas such as food safety, water quality, and pesticide applicator training. The EPA is responsible for ensuring that the American public is protected from potential health risks posed by eating foods that have been treated with pesticides. The Agency is responsible both for the registration of new pesticides before they can be marketed and the re-registration of older pesticides to ensure that they meet current scientific standards. EPA uses the National Research Council's four-step process for human health risk assessment: Hazard Identification, Dose-Response Assessment, Exposure Assessment and Risk Assessment.

Since the Passage of the Food Quality Protection Act of 1996, the EPA is undertaking a comprehensive review of tolerances for pesticide residues in food. The focus of the review included an increase protection for infants and children as well as other vulnerable groups. Progress of this review can be found at the following Web site: http://www.epa.gov/pesticides/tolerance/reassessment.htm.

A pesticide is any agent used to kill or control undesired insects, weeds, rodents, fungi, bacteria, or other organisms. Pesticides are classified according to their function: insecticides control insects; rodenticides control rodents; herbicides control weeds; and fungicides control fungi, mold and mildew. Herbicides are the most widely used type of pesticide in agriculture. Chemical pest control plays a major role in modern agriculture, and has contributed to dramatic increases in crop yields over the past four decades for most field, fruit and vegetable crops.

Pesticides cause illness in human adults with even more severe symptoms in children and pets if absorbed on contact, inhaled or eaten. The EPA sets maximum residue limits, on the amount of pesticide residue that can lawfully remain in or on each treated food commodity. EPA considers the toxicity, amount and frequency of pesticide application, and how much of the pesticide (and or pesticide residue) remains in or on food. An added margin of safety ensures that residues remaining in foods are many times lower than amounts that could actually cause adverse health effects. The Food and Drug Administration (FDA), which monitors domestically produced and imported foods traveling in interstate commerce except meat, poultry, and some egg products enforces the pesticide tolerances set by the EPA.

Integrated Pest Management (IPM) uses an array of pest control methods to achieve better results with the least disruption (harm) to the environment including cultivating pest-resistant plants, adjusting planting times to avoid pest infestation, using beneficial or predatory insects (lady bugs), station traps containing pheromes (sex hormones) to remove fertile adult insects, destroying nesting areas, removing leaf clutter etc. Studies suggest that IPM techniques generally increase crop yields and economic profits, while reducing the use of chemical pesticides. Modern biotechnology has enabled the production of new plant-pesticides. For example, new types of agricultural plants that have been altered to produce proteins toxic to insects that destroy crops. Such plant-pesticides reduce the need for conventional pesticide applications, thereby reducing production costs as well as risks to workers and non-target insects.

For additional Information please visit:
EPA's pesticide programs: http://www.epa.gov/pesticides/
US Farmer and Rancher Alliance http://www.fooddialogues.com/foodsource/pesticides-fertilizer-herbicides
Beyond Pesticides http://www.beyondpesticides.org/