

Beyond Pesticides and other environmental and public health organizations identify a series of deficiencies in EPA's review of pesticides, calling into question the safety of commonly used products. The following are a sample:

- Less and non-toxic strategies ignored: The current system assumes that if a pesticide meets a highly questionable "acceptable" risk threshold, it has value or benefit. This is the practice even though there are typically less or non-toxic methods or products available. Absent altogether is any analysis of whether the so-called "pest" (insect or plant) has been accurately defined.
- Inconsistent definition of "reasonable" risk: The interpretation of "reasonable" risk varies. EPA sometimes allows a cancer risk, for example, of one in a million and other times accepts one in 10,000.
- Disproportionate risk: EPA fails to take into account the numerous circumstances and realities that make some population groups more vulnerable to daily pesticide exposures including children, farmworkers and their families and communities, the elderly, those with compromised immune systems, the chemically sensitive, and those living in poverty. People of color are disproportionately represented in these impoverished areas.
- Pesticide synergy: Pesticide exposures in the real world are not isolated incidents, although testing for health and environmental impacts occurs in isolation. Research shows that combinations with pesticides and other chemicals, including medications, multiply the toxic effects of individual chemicals and create new adverse impacts not seen in either chemical alone. The U.S. Geological Survey (2006) found that EPA does not evaluate mixtures of pesticides typically found in the nation's streams, rivers and lakes.
- "Inert" ingredients: Manufacturers are not required to disclose the so-called "inert" ingredients of its products. Despite their name, these ingredients are neither chemically, biologically or toxicologically harmless. In general, inert ingredients are minimally tested, however, many are known to state, federal and international agencies to be hazardous to human health.
- Metabolites and contaminants: Contaminants are often a part of the pesticide product and responsible for product hazards. Metabolites are breakdown products that form when a pesticide is used in the environment and mixes with air, water, soil or living organisms. Contaminants and metabolites can be more hazardous than the parent pesticide.
- Endocrine disruption: EPA does not currently evaluate or consider the endocrine disrupting properties of pesticides during registration. Endocrine disruptors are mistaken for hormones by the body and thus may alter the function of hormones. Since hormones regulate things like growth and body development, there is great potential for damage.

Estrogen-mimics interfere with the reproductive system, causing infertility, malformed sexual organs, and cancer of sensitive organs. Many commonly used pesticides that are known or suspected endocrine disruptors.

- Assumes 100% compliance: The agency assumes 100 percent compliance with pesticide product labels when setting standards, ignoring real world violations or accidents, which are widespread.
- Industry generates data: All data considered for initial pesticide registration is generated by the chemical company that will be profiting from the sale of the pesticide. Independent research and public review is not considered until after a product is already on the market.
- No federal incident monitoring: EPA's Pesticide Incident Monitoring System (PIMS) was abandoned in 1981. Since that time, there has been no federal incident monitoring system to protect workers and residents from pesticide poisoning or to consider in product reregistration.