

Brought to you by —



To help communicate the significant and diverse benefits of pesticides. If you find this booklet helpful and would like copies or more information on a particular topic, please contact us.

PO Box 7644
Olympia, WA 98507
(360) 705-2040
www.wafriends.org

Our goal is to share easy-to-understand, scientifically accurate information about pesticides and their use. Please help us in this goal by becoming an advocate for agriculture and the products we use.

Additional resources

National Pesticide Information Center: <http://npic.orst.edu/>

EPA's Pesticide Home Page: <http://www.epa.gov/pesticides/about/index.htm>

Washington State University Pest Management Resources:
<http://extension.wsu.edu/wsprs/Pages/Garden.aspx>

Benefits of Pesticides

**Understanding why pesticides
are used in**

Agriculture



Pesticide safety and regulation

Every pesticide must be thoroughly tested and registered by the Environmental Protection Agency (EPA) before it can legally be sold or used in the United States. Pesticides must be used according to the directions on the label. Any other use is illegal.

Pesticide use is also regulated by the Washington State Departments of Agriculture, Labor & Industries and Ecology. Pesticide applicators must be licensed by the Department of Agriculture. An applicator who applies pesticides illegally is subject to disciplinary action including fines, license suspension or revocation or more depending on the situation.

The research and development process to bring a new pesticide to market is long and expensive. It often takes 10 years or more and costs hundreds of millions of dollars for each potential product. After all that, only one product out of approximately 140,000 researched ever makes it to the market.

EPA sets limits for pesticide residue in food and animal feed. These limits have extra safety factors built in to ensure that the most sensitive populations, like children, will be protected.

Pesticides are designed to act on their target pest (insect, weed or disease). Because herbicides are designed to kill plants, most are nontoxic to people and pets.

Testing and evaluation does not end when a product is approved for sale. Pesticides are periodically evaluated and must be re-registered.

Agriculture

Pesticides are vital tools for growers to control insects, weeds, rodents and plant diseases in the production of food. Pesticides aid in efficient and sustainable farming practices such as *no till* farming. No till farming minimizes soil erosion which helps protect waterways. The use of pesticides as labeled, allows farmers to produce consistent, high quality food on less land. American farmers are some of the most productive farmers in the world.

Did you know that an adequate, reliable food supply could not be guaranteed without crop protection products?

- Over 40,000 species of weeds and insects threaten the health and yield of food crops in the United States.
- Some 20 - 40 % of the world's potential crop production is already lost annually due to weeds, pests and diseases (according to the Food and Agriculture Organization of the United Nations or FAO). These crop losses would be doubled if existing pesticide uses were abandoned. Many fruits and vegetables would be in short supply and the price of food would rise.
- The world population is projected to reach 9 billion by 2050. That means agricultural production needs to increase significantly worldwide in less than 40 years. This is only possible through innovation and new technologies to reduce crop losses both before and after harvest and to increase crop yields.

Organic farmers use pesticides, too.

- Pesticides used by organic farmers differ from those used by other farmers only in that they are non-synthetic.
- Because some organic pesticides are less effective, more applications may be required than with conventional pesticides.

Regardless of how it was grown, the consumption of an abundance of vegetables and fruit offers the greatest benefit to human health. All fresh produce, regardless of how it was grown, should be washed before eating to reduce the risk of illness from bacteria such as salmonella or e. coli. Bacteria poses a far greater health risk than potential pesticide residue.