



Questions & Answers

Diazinon Revised Risk Assessment And Risk Mitigation Measures

On December 5, 2000, EPA held a technical briefing on the revised risk assessment and announced an agreement with registrants to phase out/eliminate certain uses of the organophosphate pesticide diazinon. EPA is soliciting public comments on further risk management options for this widely used pesticide. The following questions and answers provide summary information about diazinon and measures to improve protection of human health and the environment.

1. What action is EPA taking?

- *Cancellation and Phase-Out Agreement:* EPA is requesting public comment on mitigation in view of an agreement reached recently between the Agency and the registrants of diazinon to phase out/eliminate certain uses, including residential lawn and indoor uses. This agreement also will eliminate its use on some agricultural crops as well.
- *Revised Scientific Risk Assessment:* EPA also is releasing its revised risk assessment for diazinon, opening a public comment period on risk management for the chemical. This is part of the overall public participation process for the reregistration of the organophosphate pesticides.

2. What is diazinon and how is it used?

Diazinon is one of the most widely used organophosphate insecticides in the United States. The main uses of diazinon are:

- residential lawns, turf, and gardens
- indoor residential uses, such as crack and crevice treatments
- other indoor uses in office buildings, schools, warehouses, and other structures
- agricultural crops

Most diazinon is used in and around the home and in other non-agricultural settings, including treatment of lawns, gardens, and ornamentals, and use indoors for crack and crevice treatment. Diazinon is currently registered for use on more than 64 different food crops.

3. Why is EPA taking this action?

EPA is conducting a review of diazinon as part of its effort to address the tough, new safety standards established by the 1996 Food Quality Protection Act. Through this review, EPA has determined that diazinon poses risks to humans, birds, and other forms of wildlife. This action adds a greater measure of protection for children by eliminating the most important sources of children's exposure.

EPA is reviewing diazinon through a public participation process and is currently well along in that process. This six-phase process began for diazinon in January 2000 when EPA sent its preliminary human health risk assessment to diazinon registrants for an "error only comment period." The preliminary risk assessment was released for public comment in May 2000. Over 500 comments were received.

We now are concluding Phase 4 of the process by presenting a revised risk assessment to the public at a Technical Briefing, and beginning Phase 5 by soliciting final public comments on risk management.

Stakeholders and the public are invited to submit additional risk management ideas and suggestions during the next 60 days. Then EPA will develop an interim reregistration eligibility decision for diazinon. This decision may include additional risk mitigation measures aimed at further reducing worker and ecological risks.

4. Should I be concerned if my home, school, or office was recently treated with diazinon?

Diazinon is relatively volatile and residues indoors generally are short-lived. Unless your home was treated recently, diazinon residues should be sufficiently low so as not to be a cause for concern. If your home was treated recently, to speed the volatilization of diazinon residues, you can increase the circulation of clean air in your house by periodically opening windows and doors and using fans to mix the air.

Risk Mitigation Actions:

Residential and other non-agricultural uses (in homes, on lawns and gardens, as well as in other outdoor areas):

- ▶ Cancel all indoor uses, and phase out and cancel outdoor residential uses, to effectively eliminate use of diazinon in and around the home.
- ▶ The sale of products for indoor use will end December 31, 2002.
- ▶ Over the next few years, all remaining non-agricultural outdoor uses, including residential lawn and turf applications, will be phased out.

Agricultural uses:

- ▶ Registrants have requested that EPA cancel use on roughly 30% of the agricultural crops on which it is currently registered in the United States.
- ▶ Retain use on over 40 other agricultural crops in the United States, and on the following imports: bananas, cattle and sheep, citrus, olives, pepper, and tomatoes. These remaining

5. Should I be concerned about diazinon in my drinking water?

No. EPA has reviewed a significant amount of monitoring data which indicate that levels of diazinon in drinking water supplies are below those that would pose a risk to human health. However, modeling data suggests a potential basis for concern. The Agency will be looking at drinking water risks further in completing the ongoing review and risk management decision for diazinon. The current actions to phase out residential uses of diazinon will help reduce drinking water exposure since a major source of drinking water contamination is residential applications.

6. Is it safe to eat foods that have been treated with diazinon?

Yes. EPA's human health risk assessment did not identify dietary risks of concern to children or others. The health benefits of a varied diet high in fresh fruits and vegetables outweigh the potential risk of pesticide residues on treated crops. Parents should continue to feed their children a balanced and nutritious diet rich in fruits and vegetables.

7. What effect will this action have on the environment?

According to the United States Geological Survey's 1999 report, *The Quality of Our Nation's Waters*, diazinon is one of the most commonly found pesticides in rivers and streams in urban areas. It also is found in air, rain, fog, and drinking water. Furthermore, the application of diazinon to turf is one of the pesticide uses that currently poses the greatest risk to birds. Between 1994 and 1998 diazinon accounted for more incidents of bird kills than any other pesticide, the majority of which were caused by residential use. Phasing out the non-agricultural outdoor uses of diazinon should significantly improve urban river and stream quality and reduce risk to birds and aquatic life.

8. Diazinon home and garden products will be sold and used for several more years. How can they be used most safely?

It is still legal to purchase and use diazinon products according to label directions and precautions. Use of these products according to label directions does not pose an imminent hazard. Consumers who choose to use the product should take special care to always read and follow all of the label precautions and directions. For example, when using lawn and garden products:

- wear gloves, long pants, and long-sleeve shirts when applying the product;
- water in the product using a sprinkler;
- keep children, pets and others off the lawn for several hours, until sprays have dried;
- wash your hands and your clothes after applying the product; and
- take extra precautions to prevent contamination of nearby rivers, lakes, and streams, and to reduce risks to birds and other forms of wildlife.

9. If I choose not to continue using a home or garden product, what should I do with it?

If you decide to discontinue use, contact your state or local hazardous waste disposal program or the local solid waste collection service for information on proper disposal. You also can refer to the disposal directions on pesticide product labeling. For information on household hazardous waste disposal programs in your area, contact Waste Watch or call 1-800-CLEANUP (See below).

10. What alternatives are available for homeowners for controlling pests in lawns and gardens?

Alternative pesticides for controlling white grubs include but are not limited to imidacloprid, halofenozide, milky spore, and carbaryl. To control other pests (e.g., caterpillars, ants, mole crickets, and chinch bugs), homeowners can use *Bacillus thuringiensis*, hydramethylnon, abamectin, pyrethroids, propoxur, and carbaryl. Please note that these are the names of pesticide active ingredients and that there may be many end-use products on the market containing any single active ingredient.

For More Information

- The diazinon revised risk assessment documents and other background information about organophosphate pesticides are available on the Internet at www.epa.gov/pesticides/op/
- For additional information on the revised risk assessment and risk mitigation agreement, see EPA's fact sheet, *Diazinon Revised Risk Assessment and Agreement with Registrants*.
- Fact Sheets referenced in this document and the following consumer brochures can be found on EPA's web site www.epa.gov/pesticides or by calling the Office of Pesticide Programs Communication Service Branch at (703) 305-5017:
 - Healthy Lawn Healthy Environment
 - Pesticides and Food
 - Citizen's Guide to Pesticides
- The National Pesticide Telecommunications Network (NPTN) can answer questions about pesticide toxicity. Contact NPTN at 800-858-7378 or on the Internet at <http://ace.orst.edu/info/nptn>.
- Waste Watch Center is a non-profit organization that collects and compiles information on household hazardous waste collection programs, and provides that information to the public on their website: www.wastewatch.org.
- Earth's 911 provides community-specific disposal information. Call 1-800-CLEANUP.