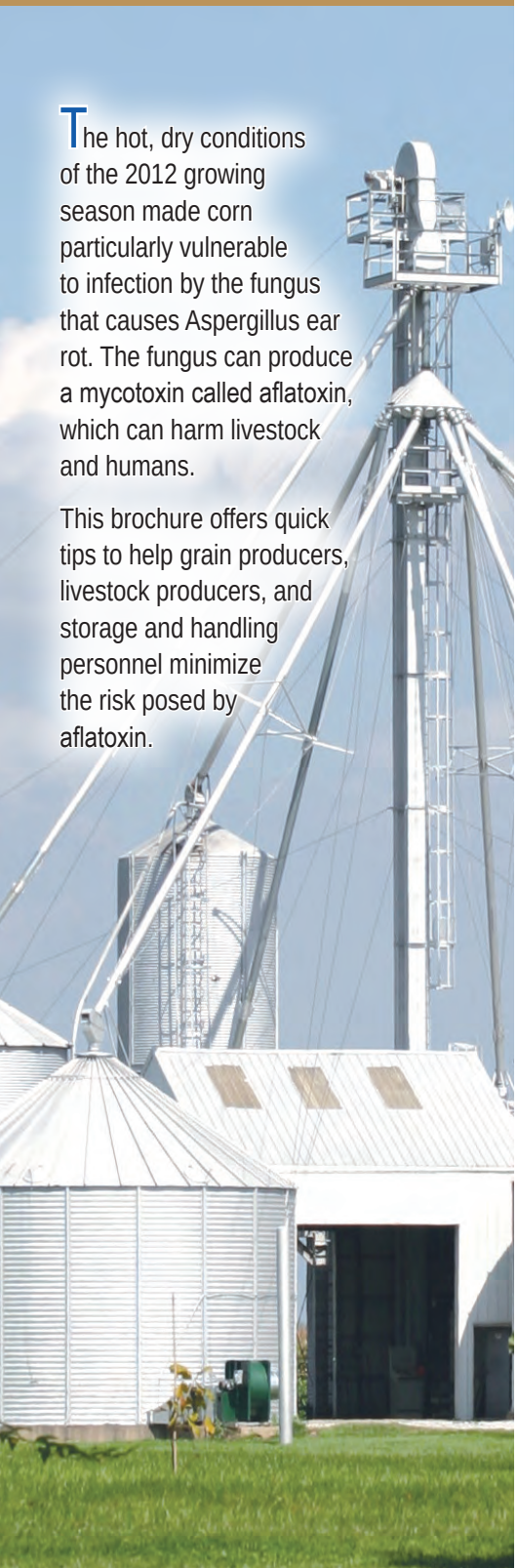

The hot, dry conditions of the 2012 growing season made corn particularly vulnerable to infection by the fungus that causes Aspergillus ear rot. The fungus can produce a mycotoxin called aflatoxin, which can harm livestock and humans.

This brochure offers quick tips to help grain producers, livestock producers, and storage and handling personnel minimize the risk posed by aflatoxin.

Learn More

Purdue Extension: Managing Moldy Corn

www.purdue.edu/cornmold

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9/12

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Managing Aspergillus Ear Rot and Aflatoxin

Managing Aspergillus Ear Rot and Aflatoxin

Harvest Quickly and Dry

The best way to avoid aflatoxin contamination is to keep mold from growing on grain. Follow these steps if you suspect a potential aflatoxin problem:

- **Harvest corn as early as possible.** Late season rains can increase mold growth and aflatoxin levels.
- **Dry grain to less than 15 percent moisture.** Make sure to dry grain promptly to keep aflatoxin problems from getting worse.
- **Remove fine material.** Fines often contain higher toxin levels than the grain, and can interfere with drying and aeration.
- **Clean equipment inside and out before and after use.** Moldy or insect-infested kernels can contaminate next year's crop.
- **If you suspect aflatoxin, contact your crop insurance provider before harvest.** Your provider will have guidelines you must follow in order to make a claim for aflatoxin loss.

Learn more in *Diseases of Corn: Aspergillus Ear Rot* (Purdue Extension publication BP-83-W), available from the Education Store, www.the-education-store.com.

www.purdue.edu/cornmold

Monitor Feed

Aflatoxins can cause liver damage, reduced egg and milk production, and suppression of immunity in animals even when dietary concentrations are low. Aflatoxin can appear in milk, which can pose a risk to nursing livestock and humans.

The U.S. Food and Drug Administration has established levels for aflatoxin danger, and can take enforcement action if it is sold and found to contain amounts above the "action level" for its final use.

U.S. FDA action levels for aflatoxin-contaminated corn.

Action Level (parts per billion)	End Use of Grain
20 ppb	Animal feed and feed ingredients intended for dairy, immature poultry, and stressed animals
20 ppb	Human consumption
100 ppb	Grain intended for breeding cattle, breeding swine, and mature poultry (such as laying hens or breeding birds)
200 ppb	Grain intended for finishing swine of 100 pounds or greater
300 ppb	Grain intended for finishing beef cattle

Source: *FDA Regulatory Guidance for Toxins and Contaminants*, www.ngfa.org/files/misc/Guidance_for_Toxins.pdf.

Take these precautions when working with feed suspected of containing aflatoxin:

1. **Test all corn feed at an approved laboratory.** Make sure to test grain as well as any corn byproducts (stover, dry distillers grains, etc.) you might feed to livestock.
2. **Formulate diets so they do not exceed aflatoxin** thresholds.
3. **Consider using feed additives to reduce the impact of aflatoxin.** Discuss these options with your nutritionist or feed representative.
4. **Monitor livestock for signs of aflatoxicosis.**

Find more information about aflatoxin feed thresholds and symptoms of alfatoxicosis on the Purdue Extension Managing Moldy Corn website: www.purdue.edu/cornmold.

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Protect Yourself

Take precautions when handling grain, especially grain that may be infected with mold.

- **Wear a respirator capable of filtering fine dust particles** (N95 or better). Even a little spoiled grain can produce millions of spores that can irritate lungs and cause severe reactions that require hospitalization.
- **Change your clothes after handling grain.** Don't expose others, including your family, to spores that can stick to clothing.
- **See a doctor if you get sick after handling grain and make your physician aware of your activities.**
- **Handle out-of-condition grain carefully.** Be alert for blocked flow, cavities, crusting, and grain avalanches. Out-of-condition corn is the leading cause of suffocation in grain bins.