



CO-SPONSORED BY MD PESTICIDE EDUCATION NETWORK & BEYOND PESTICIDES

Welcome to Maryland Pesticide Education Network (MPEN) Summer IPM "information concierge". Our goal is to keep you updated in one convenient and user-friendly location on IPM Strategies and important news to support your efforts in ensuring a toxic-free environment for the people your facilities serves.

Need input on your IPM Strategy? -- Ask Gina.

MPEN's *IPM in Health Care Facilities Project* is dedicated to protecting the public and the environment from harmful pesticides and promoting healthy alternatives -- Please <u>provide your</u> <u>feedback</u> to continuously enhance our ability to meet your information and IPM Training needs.

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- IPM Quick Check List
- Glyphosate: Alert / Update
- How Kaiser Permanente keeps 70M square feet of flooring free of toxic chemical
- Available for download: Recordings and Presentations on the Health & Environmental Impacts of Chlorpyrifos
- Pesticides: What You Can Do

It is important to remember when managing a post problem to look for long-term solutions not just a temporary control



Chlorpyrifos/ Lorsban Harms Children and is Linked to Childhood Brain Damage

July 22, 2019: The Baltimore Sun

The pesticide the EPA knows harms children but approved anyway "A 2014 EPA assessment warned that even relatively low exposure to the chemical can have disastrous consequences on youngsters. Shouldn't Corteva Agriscience, its maker, be forced to prove its safety rather than allow the rest of us to be guinea pigs?" read more

Maryland:

EPA's latest decision to continue to allow the use of this nerve agent pesticides, in response to a Ninth 9th circuit court of appeals ruling requiring it to reconsider, means that states have to take this issue on.

- For the past two years, a majority of Maryland legislators supported passage of a Maryland ban. This year's bill passed with bipartisan support in the House of Delegates, it stalled in the Senate.
- Chlorpyrifos is linked to neurodevelopmental issues, autism and cancer in children, as well as breast cancer in premenopausal women, and is one of the pesticides most often linked to farmworker poisonings.
- Most vulnerable to the ill-effects of this efficient nerve agent are children. For expecting mothers, fetal exposure to this pesticide is linked to autism, cancer, and development issues in kids. Farmworkers are also at great risk.
- That's why the EPA recommended in 2000 that the pesticide be banned outright.
- It is also a major concern for the health of aquatic life and the Chesapeake Bay and harms pollinators.

For every day this pesticide remains in use, our children, our waterways, our pollinators and wildlife are at risk. In 2020, Maryland legislators plan to bring this bill back, and we look forward to **protecting the vulnerable people you serve as well as visitors and employees.**

Make sure chlorpyrifos is not being used on your facility. It was already banned in 2000 for indoor use. Continue reading below to learn about non and least solutions for your facility.

Non-toxic Solutions:

Chlorpyrifos, the active ingredient is in over 800 pesticide products and is used to control numerous pest problems. However -- There are safer products for weed and pest control!

Pesticide-Free Insect and Weed Control for Safer Facility Grounds:

- Use non-toxic strategies and as a last resort, least-toxic products or less toxic methods for both pest or weed control. These can include mechanical or cultural methods, safer products or natural predators such as ladybugs or nematodes. Use the <u>Beyond Pesticides Pest and Weed Database</u> to find your pest or weed and learn how to safely control it.
- Choose fertilizers and mulches that do not contain herbicides or insecticides. If you need fertilizers, avoid "weed and feed" products as they contain harmful herbicides. Unlike synthetic fertilizers, natural or plant-based fertilizers are great choices that are slow release and improve soil health. Some mulch products are treated with herbicides, so be sure to read the ingredients before purchasing.
- Consider leaving some clovers, dandelions, and wildflowers for bees and pollinators to forage. White clovers are especially beneficial as they also add nitrogen to the soil, reducing the need for fertilizers. If you are concerned about bee stings, mow the lawn to remove flower heads before people enter the lawn area.
- If chemicals are needed as a last resort in the case of difficult to remove invasives or out of control infestations that will be detrimental, use a targeted pesticide that breaks down quickly. Always read and follow the labels exactly.

Least Toxic Pesticides:

Because of the high toxicity of conventional pesticides and the high levels of exposure to people that result from their use, it is especially important to avoid them in our health care facilities. It is important to keep in mind that pesticides are all too often linked to the very issues and illnesses that the populations you serve are challenged with - including cancer, asthma and other respiratory illnesses , reproductive, developmental and neurological issues.

In a prioritized IPM program, least-toxic pesticides should only be used as a last resort after all non-toxic options have been tried to ensure you *'first do no harm'*.

• **Boric Acid** is a low-toxicity mineral with insecticidal properties. It does not evaporate or volatilize into the air or pose the considerable health concerns associated with synthetic pesticides; however it can still pose health hazards and should be used with care. Insects travel through the boric acid, which adheres to their legs. When the insects groom themselves, they then ingest the poison, which causes death three to ten days later of starvation and dehydration. As long as the material is not allowed to become wet, its continuous presence ensures that hatching insects, which sprays commonly spare, are exposed and die. Because boric acid is a stomach poison, don't expect immediate results. *While boric acid is somewhat slower acting it is highly effective over a long period of time. At least one study has shown that the combination of heat, 110-degree F for two hours with boric acid, will increase the speed at which the German cockroach is killed.*

- **Diatomaceous earth and silica aerogels** are insecticidal dusts that kill pests by breaking through their outer cuticle, which protects them from excess moisture loss. When the dust comes in contact with the pest, it abrades their outer shell, dehydrating and finally killing the pest. Because the dusts are inorganic, they can remain effective for a very long time. Although they are made of inert material and are relatively safe, care should be taken to avoid inhalation. Be aware that they have been combined with pyrethrin insecticides in various products; and there are serious health concerns associated with the use of pyrethrins. Silica aerogels are higher in acute toxicity and tend to kill insects more quickly than diatomaceous earth. Silica aerogels are toxic to fish, so they should not be applied where they could run off into a stream, pond or lake
- Botanical pesticides are derived from plants that are known to have insecticidal properties. It is important to remember that just because a pesticide is derived from a plant does not mean that it is safe for humans and other mammals or that it cannot kill a wide variety of other life. Many botanical insecticides are formulated with synergists that can also cause adverse health effects. These have no insecticidal effect of their own, but serve to enhance the insecticidal effect of the botanicals. Neem oil and garlic oil are two least-toxic botanical pesticides. Others that can also be used as a last resort are citrus oils, mint oil, pine oil and herbal extracts.

IPM In-door Quick Check List:

Share with Your Team and Pest Management Company

Ants:	Cockroaches:
Heat treatments	Electrical currents
Cold treatments	Heat Treatments
Fatty acid soaps	Diatomaceous earth
Diatomaceous earth	Boric Acid
Boric Acid	Botanical pesticides - orange mint, herbal oils, neem
Botanical pesticides - orange, mint,	
herbal oils	
Flies:	Wasp and Hornets:
Botanical repellents	Beneficial Nematode
Silica aerogels	Boric acid
Diatomaceous earth	Silica aerogels
	Botanical oil: Mint oil

Pesticide Alert/ Update: Glyphosate (Roundup)

"Despite the IARC report's 2015 conclusion that glyphosate is a probable human carcinogen, the U.S. Environmental Protection Agency (EPA) maintains that glyphosate is not likely to be carcinogenic to humans. As such, glyphosate is not banned by the U.S. government; Roundup and other glyphosate-based herbicides are readily available for purchase throughout the country. However, the EPA is a captured agency, meaning it is dominated by the industry it presumably regulates. Internal company documents now public in the Monsanto Papers demonstrate that EPA prioritizes the interests of corporations like Monsanto or political groups over the interests of the public it is charged with protecting." Article



"It's beyond time to eliminate any use of Roundup within and around facility campus. Follow link to learn which countries already have banned glyphosate." Where is Glyphosate Banned? & Monsanto Roundup Lawsuit Links

Currently Restricted Use/ Banned in Maryland

- Greenbelt, Maryland Adopted Sustainable Land Care policy for public lands calling for limited use of pesticides.
- **Hyattsville, Maryland –** Passed ordinance prohibiting the use of toxic pesticides on public property in favor of alternative, organic methods
- Montgomery County, Maryland County Council voted to ban the use of cosmetic pesticides on private lawns. In December 2018, Montgomery County Parks announced that it would discontinue the use of glyphosate in parks.
- Takoma Park, Maryland Placed restriction on cosmetic pesticides for lawn care on public and private property.

Speaking of toxic chemicals...

Every day, patients and workers are exposed to a wide array of chemicals in hospitals and health care facilities. Many of these chemicals have been shown to have a lasting negative impact on individual health, public health, and the environment.

How Kaiser Permanente keeps 70M square feet of flooring free of toxic chemicals

Kaiser Permanente is one of the nation's largest nonprofit health systems. With 39 hospitals and 697 medical facilities across the country, its large portfolio includes more than 70 million square feet of flooring – and every last square foot has been vetted for chemicals of concern and exemplifies the system's environmental standards. Clear criteria and healthy relationships with vendors have contributed to the health system's success. Read more about Kaiser Permanente toxic-free flooring

Practice Greenhealth has created a <u>Healthy Flooring Goal</u> for health care institutions to ensure that at least 25% of flooring installed per year meets the healthy flooring silver or gold level criteria.

Follow link to Healthy Flooring Product Lists to make it easier for your hospitals to select flooring that meets the Silver or Gold Level Goals:



Manufacturer product lists are regularly updated -be sure to check back often!

Recordings and Presentations:

New Evidence of the Endocrine Disrupting Properties Chlorpyrifos and dig into the Latest Studies on the Chlorpyrifos and Autism link

Health and Environment Alliance (HEAL): The Health & Environmental Impacts of Chlorpyrifos

Webinar 1: May 14, 2019Urgent evaluation of links between chlorpyrifos and autism development neededDownload the RecordingDownload the Presentation

Webinar 2: May 29, 2019New evidence on the endocrine disrupting properties of chlorpyrifosDownload the RecordingDownload the Presentation

Pesticides: What You CAN DO:

SOLUTION:

You and your team can make a difference – Share with us how you and your staff work to prevent and manage pest problems – both inside and outside your health care facility and be featured in our next IPM in Healthcare Facilities Newsletter

What are your nontoxic methods, such as improved sanitation and structural maintenance, mechanical and biological controls and cultural practices?

How are you reducing or eliminating sources of pest food, water, and shelter?

<u>Contact - IPM in "Health Care Facilities Project - Today!</u>

For IPM Resources, Presentations, Trainings and a list of Joint Commission IPM Strategies to compliment EOC Standards.

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Next Issue: IPM Expert Interviews and Facility IPM Success Share