

Pest Management is a Public Health Priority



Making sure the people your facility serves are protected from all pests – some that can carry serious bacteria or viruses – is a critical pest management goal in alignment with the medical profession's commitment to "first do no harm."

Equally important, ensuring the people your facility serves, facility staff, and visitors are protected from the potentially serious harm that pesticides can cause – also a critical health care priority to do no harm.

Many pesticides are linked to serious long-term health impacts and even death for some. Alarming, pesticide exposures can exacerbate a hospital patient's or other facility populations' current medical and mental health issues. Pesticide exposures can easily confuse and complicate diagnosis and treatment.

Consider these examples:

- A child has been brought into the emergency room for a severe asthma attack and is immediately given appropriate medicine, but none of the treatments are working. Prior to this child being taken back to a treatment room, the area was treated with a synthetic pyrethroid pesticide (i.e., Sterifab) for bed bugs. Synthetic pyrethroids are a class of pesticides that exacerbate respiratory symptoms, including asthma. The ER team is perplexed as the situation is serious and the nebulizing treatment and medications are not providing sufficient relief, confounding what else they can do to ensure the child makes it and overcomes this serious attack.
- A cancer patient is in surgery in an operating room, treated for pests the night before. The pesticide used is linked to cancer and has a half-life that extends exposure to the patient and staff in the operating room.
- A patient admitted in an emergency room or a psychiatric facility is experiencing a psychotic episode. He is exposed to a pesticide applied in the admitting area that is linked to causing and exacerbating delusions, hallucinations and/or aggressive behavior, thereby confusing the diagnosis and treatment.
- A newborn in the NICU is diagnosed with neurological issues. She is exposed to a neurotoxic, brain-harming pesticide recently applied on the Unit, which can actually worsen the newborn's condition, while complicating the diagnosis and treatment.

Short-term impacts

Pesticides have been linked to a wide range of acute or short-term, pesticide injuries that are often misdiagnosed as they mimic symptoms of other illnesses. **Acute symptoms may include:**

- Breathing problems
- Diarrhea, nausea, and vomiting
- Headache and muscle pain
- Fatigue
- Blurred vision and eye irritation

Chronic impacts

Even low-dose exposures to pesticides may lead to chronic diseases. Recent research indicates that endocrine disrupting chemicals, including [endocrine disrupting pesticides](#) – can have long-term adverse health impacts at exquisitely low doses. Experts in the field have noted that the regulatory system for pesticide registration may no longer be appropriate, as it is based on the belief that "the dose makes the poison." That is no longer the case, for at least this class of chemicals.

Chronic health effects linked to pesticide exposures includes:

- Neurological disorders, developmental and learning disabilities (autism, ADHD)
- Birth defects
- Infertility and reproductive disorders
- Immune system disorders
- Diabetes
- Asthma and other respiratory diseases
- Parkinson's, Alzheimer's, and Lewy Body disease
- Cardiovascular disease

Managing Your Pesticide Applicators for IPM Compliance

In January 2022, Maryland banned **all uses** of the baby brain-harming pesticide chlorpyrifos. The USEPA studied chlorpyrifos, an organophosphate pesticide, for over 20 years and acknowledged that it was “unsafe at any detectable level.” EPA banned it for use on food crops nationally. Thankfully, Maryland went further with its ban, so it covers ALL uses of this dangerous chemical and bans its uses in hospitals, schools, parks, golf courses and all other sites. That said, 14,000 pesticides are registered in our state despite many of them linked to scientific peer-reviewed evidence of harm. [Just because a pesticide is registered does not mean it is safe to use. EPA does not “approve” pesticides- they register them and never do they say a pesticide is “safe”.](#)

All too often, facilities contract with pest control and land care vendors and rely on the vendors’ judgement/expertise for implementing the facility’s pest and land care management. Vendors have a capability for getting rid of pests, plant disease and weeds using pesticides, but they have no public health expertise on the danger pesticides pose.

A healthcare facility’s EVS Director can avoid unnecessary toxic pesticide exposures for the population their facility serves by overseeing your vendor’s [defined prioritized IPM program](#) to ensure the vendor is prioritizing a non-chemical pest prevention program, whereby least-toxic pesticides are only (if ever) used as a last resort indoors and a pesticide-free land care protocol on facility grounds. Our [webinar series](#) provides specific guidance on how to do so.