

IPM for School Athletic Directors

What is IPM?

Integrated pest management, or IPM, is a science-based approach to dealing with pests. It uses sensible methods that protect human health and the environment, and generally reduce the cost of traditional pest treatments. Pests can be insects, plant diseases, weeds, or animals.

What pests are common on athletic fields?

The number one complaint is broadleaf weeds. Others include grassy weeds, grubs. The most frequent problem on athletic fields is thinning turf.

Why is IPM important?

- Children are more sensitive than adults to pesticide exposure
- Since children spend so much time at school, IPM is important to the health of your students, as well as staff
- The EPA and most states recommend (some require) IPM practices on school grounds
- Once established, IPM costs are usually less than traditional pesticide-centered treatments
- Over time, you can expect to see fewer pests, fewer pest-related incidents, and spend less money

How does an IPM policy relate to healthy turf fields?

An IPM policy promotes cultural care over reliance on pesticides—a “proactive” rather than “reactive” strategy.

Keeping an athletic field healthy during a sports season is not easy. Athletic directors have enough to do without day-to-day worries about turfgrass health. Having a groundskeeper who understands plant health and integrated pest management is key. We suggest that together you create a Field Use Policy (include field-wear management).

1.) Reduce wear and tear whenever possible!

Wear on a field is almost always in specific strips of the field used for a specific sport, and when it increases, turf health decreases. The time to act is not when things are getting ugly. Healthy turf is a year-round business. Thinning turf often makes its own problems: more pooling of water,

harder soil when it's dry, invitation for broadleaf weeds to take over, which makes for poor footing.

An Athletic Field Use Policy assists coaches to reduce wear patterns: when possible, always use a secondary field for practice. Encourage practice drills to avoid using the same areas over and over (running drills that always follow painted lines on a field are a big culprit!). Move goals mid-season when possible (this is a luxury most fields don't have)

If your school allows community sports groups to use your field, you are doubling wear and tear. Is this an economic decision? Ask community members, school board members, and your coaches and grounds staff to contribute to your school's field-wear management plan. Ask users to sign an agreement stating they will adhere to the Athletic Field Use Policy.

2.) Understand the needs of healthy turf

Unhealthy turf leads to compacted, hard soils and subsequently more injuries. Turf areas with more than 20% weeds cause unsafe footing. The cost associated with irrigation, frequent overseeding and proper fertilization will always be less than the cost of an unsafe playing field and athletes' injuries. Protect your school from such risk by having an IPM policy in place which includes your Athletic Field Use Policy.

- A. **Irrigation.** You may choose to let turf grass go dormant in hot summer heat. It's part of the life cycle and unless you have players on the field, let it rest. When the sports season begins (approximately 4 weeks before games) start watering so turf is as healthy as possible. (Unless it is drought-resistant, most athletic turf needs supplemental watering.)
- B. **Overseeding.** Turfgrass has two periods of growth—spring and fall. This is the time to overseed. Athletic activity can actually help get seeds into the soil. Keep an eye on new plants if drought conditions occur. Overseeding with the proper turfgrass for your field's conditions has been a proven method to reduce thin spots during the season. Spot seeding of wear areas on a weekly basis works. Quality grass seed is not cheap, but unsafe turf is costly. Begin to build the cost of overseeding into your budget. If your district has ended herbicide treatments, the monies earmarked for pesticides can be moved to the cost of grass seed. Drought-resistant varieties of perennial rye and tall fescue are a good option.
- C. **Fertilizer.** If your district has limited funding for fertilizer, use it where you need it most: your prime athletic fields. Turf fertilizers should be applied at specific times during the plant's life cycle. Slow-release nitrogen is recommended. Follow rate directions. Over-fertilizing causes its own problems. Apply only in spring and fall; fall if you only have one application (when growth is slowing but before ground freezes. 1 to 1.5 lbs nitrogen / 1,000 sq. ft. is recommended. Have your soil tested to determine potassium needs.

Adopt the basic rules of IPM

- Understand what a pesticide is (any product meant to kill a pest—this includes some cleaning products, sanitizers, herbicides, insecticides, generally available to homeowners)
- Learn about the pests you are battling
- Practice proactive measures such as scouting, and exclusion
- Always keep records of pest activity—where, when and your treatments as well as effectiveness
- Create a policy that works for your district and effectively communicate it
- Outdoors, improve turf and ornamentals' chance to thrive by understanding the plant's needs rather than reliance on pesticides
- Talk with the staff, teachers, parents, coaches, and students about ways to work together for a sustainable, healthy school environment
- Use resources such as www.northeastipm.org/schools/ and the links provided to learn about pests and their control (Best Management Practices)
- Join professional organizations and attend workshops

How does IPM affect your budget?

Generally, costs for an IPM based approach are reduced from that of standard contracted services. At first costs will switch from calendar-based contracts with pest control companies to that of training staff, equipment for scouting and preventive tactics. Standard practice pesticide applications, their cost, and their risk are almost always reduced over time, sometimes significantly.

Much can be done by school staff to reduce the need for conventional pesticide use in school buildings and on school grounds. If your district has in-house pest control (a certified pesticide applicator), do you also have a policy that explains to the school board, parents, and staff how IPM works to reduce pesticide use? If your district uses contracted pest control services, does the company use IPM?

One example is the shift in costs from herbicide treatments to buying good quality grass seeds for overseeding athletic fields, or for purchase of irrigation, overseeding or aerification equipment.

How can IPM improve relationships with parents and the community?

Any effort to reduce pests and pesticide use is something your district can be proud of and promote. Air quality inside schools and environmentally healthy buildings and schoolyards keep more students in school, learning. Practicing IPM in your schools proves active pursuit of healthier environment for students and staff. Promoting an understanding of pest management with the community helps spread safer practices in homes as well.

Despite all efforts to reduce risk, pesticides are best avoided when possible. Being confident your district is doing its best to provide a safe playing environment.

Who needs to better understand IPM, and the risks of pesticide use?

Everyone. Pesticides have their use to prevent crop loss and the health of humans, pets and livestock. The more we know about pesticides, the better able to make educated decisions. IPM means understanding the pest and choosing the best treatment based on knowledge, not fear.

Use of pesticides indoors: IPM can reduce the pests inside your buildings and therefore reduce the risk of pesticide exposure. Both pesticides and building pests such as cockroaches and mice are risks to student and staff health.

Use of pesticides outdoors. Reduced use of pesticides on playing fields and playgrounds is good for all students and staff, as well as the community using school grounds.

**Reduction in herbicide use or discontinuance of herbicide use may create concerns about aesthetics of fields. Parents, Community Members and Athletic Program personnel will need to be made aware of the changes and how to work together to keep playing fields usable and offer safe playing surfaces.

Most importantly, at least one person on staff in a school district should take responsibility for pest management decisions. Who is the IPM Coordinator in your district?

Do not assume that Pest Control companies that you hire are using IPM. An emphasis should be on prevention, monitoring and scouting rather than applications. To reduce health risks in your district, find the best pest control company you can. A low bid contract may result in higher costs (health issues, legal issues) in the future.

How can we start or improve an IPM policy in our district?

Visit www.northeastipm.org/schools/ for sample IPM Policies for your district, as well as resources for teachers, staff, groundskeepers and custodial staff. Contact the land-grant college in your state or the cooperative extension office in your county and ask about implementing IPM in your district.

For further information on athletic field care, here are two online resources to start with:

- www.stma.org/knowledge_center/cultural-practices-athletic-fields-fertility/
- usafootball.com/news/field/field-seeding-success