

THE HEALTHY SCHOOLS ACT

TWO DECADES IN REVIEW





STATE of CALIFORNIA
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EXECUTIVE SUMMARY

In 2000, the California Legislature passed AB 2260 (Statutes of 2000, Chapter 718), also known as the Healthy Schools Act (HSA), to protect the health of school children and to reduce their exposure to pesticides. To meet these intentions, the law mandates requirements for providing right-to-know information to parents, teachers, and staff when pesticides are used at schools and child care facilities. The requirements include providing pesticide use information through notifications and postings, and keeping annual records that are made available upon request. The law also encourages the use of effective, least-toxic pest management practices, also known as integrated pest management (IPM) and requires anyone using a pesticide at schools and childcare facilities to complete IPM training.

Pests found on school campuses, like cockroaches, mice, and rats, are hazardous to student and staff health because they can spread pathogens and are sources of allergens.¹The Act covers public K–12 schools and public and private child day care facilities (referred to as child care facilities in this report)—collectively defined as schoolsites. The Act does not include private K–12 schools, colleges, and family day care homes. The Department of Pesticide Regulation (DPR) is the lead state agency providing HSA compliance assistance. In 2018, the Legislature directed DPR to evaluate the implementation and the effect of the implementation of the HSA and to provide recommendations for improving the law with the passage of AB 2826 (Statutes of 2018, Chapter 720).

In writing this report, DPR found that the HSA has positively impacted pest management at California schoolsites. DPR also found areas where improvement is needed. DPR's recommendations include steps toward augmenting the resources that schoolsites and the public at large receive about IPM.

RECOMMENDATIONS FOR IMPROVING THE HEALTHY SCHOOLS ACT

- ❖ Supplement the topics included in the model program guidebook to continue to support schoolsite adoption of IPM practices and compliance with the Healthy Schools Act
- ❖ Continue to evaluate training and resource needs to learn about opportunities to expand the topics available to school and child care staff as well as pest control businesses
- ❖ Continue to provide pesticide use data analysis for schoolsites to help school districts and child care facilities better understand their pesticide use

There are many HSA stakeholders, whether they fulfill the law's mandates or receive valuable pesticide use information. School districts, child care facilities, pest control businesses, and DPR must meet mandates of the law. Other stakeholders, like school and child care staff, parents, and other government agencies, are involved with various aspects of the law. While writing this report, DPR engaged with stakeholders and analyzed new and existing data sources to examine compliance with the law and to better understand pest management practices at schools and child care facilities. DPR's report writing activities included the following:

- Convened an advisory panel with school and child care representatives
- Created an “HSA Input” email account to gather stakeholder feedback
- Collected and evaluated novel data from an IPM plan audit and stakeholder survey
- Analyzed existing data from the California School Pesticide Use Report database and HSA training records

¹ United States Environmental Protection Agency, “Preventing Pests for Healthier Schools: The Health Case for Integrated Pest Management,” March 2019, <https://www.epa.gov/sites/production/files/2016-04/documents/preventing-pests-for-healthier-schools.pdf>.

EVALUATION OF THE HEALTHY SCHOOLS ACT

DPR Activities for Meeting the Healthy Schools Act Mandates

In 2001 as a result of the HSA, the DPR School IPM Program (referred to as the Program throughout this report) was created with an outreach and education focus. In its early years, the Program worked with an external stakeholder committee comprised of parents, IPM experts, and school staff to set priorities and develop resources. The Program also established a relationship with the University of California (UC) that continues today. In 2007, the Program became the School and Child Care IPM Program—its current iteration—due to the enactment of AB 2865 (Statutes of 2006, Chapter 865) that expanded IPM outreach to child care facilities. The Program grew again in 2015 after the enactment of SB 1405 (Statutes of 2014, Chapter 848) that added mandates for the IPM plan, schoolsite pesticide use reporting, and IPM training. Most activities held since 2015 have been conducted separately for schools and child care facilities due to their inherent differences regarding organizational structure and pest management needs. There are approximately 1,000 school districts and 12,000 child care facilities that must follow the HSA requirements. At school districts, the responsibility for carrying out the HSA requirements tends to fall to the maintenance and operations departments. Whereas at child care facilities, the responsible party varies widely due to the different types of business structures and facilities—some rent property, while others own their facilities. By acknowledging these differences, DPR has leveraged various school and child care networks to conduct outreach and education activities and disseminate information efficiently and effectively.



IPM at Schools

Schoolsites that use certain pesticides are required to have an IPM coordinator, also called school designee, who is a schoolsite staff member that makes sure the HSA requirements are carried out (ED §17609). The IPM coordinator may or may not be the person directly carrying out the requirements of the HSA, but they are usually the point person for all schoolsite pest management and HSA compliance inquiries. Schoolsites must create an IPM plan and post it on their website. If no website exists, the IPM plan must be included with the annual written notification (EC §17611.5). The IPM plan is the only required public-facing document that contains specific details about pest management at schoolsites and contact information for the IPM coordinator. An accurate IPM plan provides stakeholders with a direct point of contact for questions about the HSA and pest management. If only HSA exempt pesticides are used at a

schoolsite, then identifying an IPM coordinator and creating an IPM plan are optional (EC §17610.5).

DPR is required to develop a template for an IPM plan (FAC §13183). Schools can use the DPR IPM plan template, which is posted on the DPR website, or create their own plan that includes the required information. (See the DPR IPM plan template [here](#).) A single IPM plan can be developed for an entire school district. An IPM plan must include the following information:

- name of the IPM coordinator
- pesticides expected to be applied
- names of the hired pest control business(es)
- date for review and update of the plan

The DPR IPM plan template helps schoolsites comply with the IPM plan requirement and encourages the use of IPM. Completing the template gives the IPM coordinator an opportunity to develop a pest management plan and to compile pest management and pesticide information into one document.

Model School IPM Program Guidebook

The HSA mandates DPR to develop a model program guidebook that includes the basics for developing a schoolsite IPM program (FAC §13183). The guidebook must include guidance for adopting an IPM policy, selecting and training an IPM coordinator, and developing a pest management plan for making least-hazardous choices. The Program developed and made available on DPR's website the *California School IPM*

Model Program Guidebook, which was based on *IPM for Schools: A How-To Manual* by the Bio-Integral Resource Center, with permission. DPR added HSA compliance templates, monitoring and inspection forms, and pest management resources from the UC Statewide IPM Program. The guidebook serves as a resource for schools to adopt IPM practices and comply with the Healthy Schools Act. The Program intends to update the guidebook, which was first published in 2002, to a fifth edition in 2021.

IPM Training Program for Schoolsites

The HSA directs DPR to establish an IPM training program in a train-the-trainer approach to efficiently disseminate IPM information. To meet this mandate, DPR developed the School IPM Workshops in 2002. The workshops are conducted at school campuses throughout California and provide a full day of learning through hands-on activities, demonstrations, and inspections of school facilities and grounds. The target audience includes people involved in doing pest management at schools, such as school IPM coordinators, custodians, groundskeepers, and pest management professionals. All participants attend voluntarily. DPR has also conducted specialty IPM workshops focused on turfgrass and burrowing rodent management. Since 2002, DPR has conducted 80 workshops with 2,941 attendees representing approximately 85% of current California school districts and 98% of student enrollment.

Schoolsite IPM Website

Since 2002, the [DPR School and Child Care IPM Program Website](#) has served as a resource to offer reduced-risk pest management and HSA compliance information. The website includes a child care section that includes child care-specific resources, such as the *Step-by-Step Disinfecting for Child Care Providers* infographic (available in [English](#), [Spanish](#), and [Chinese](#)). All Program resources are made ADA accessible, and most are translated into Spanish. The website also provides stakeholders with the ability to register for School IPM Workshops, join the School IPM and Child Care IPM e-lists to receive monthly updates about IPM and the HSA, and watch the Program's two video series: *Integrated Pest Management for Schools* and *Integrated Pest Management for Child Care Centers*, and find contact information for Program staff. The website is one of DPR's most visited sites based on web analytics.

Cooperation with the University of California

In the last twenty years, the Program and the UC Statewide IPM Program have collaborated on a number of projects. UC Extension staff have contributed to various training events and school-specific research projects. Between 2014 – 2018, Program staff and UC Extension staff co-hosted the turfgrass and burrowing rodent specialty IPM workshops, which were topics specifically requested by school staff. In 2016, the Program began working with UC Extension staff to conduct research on school-specific, least-toxic pest management practices. Three studies funded by DPR included best practices for managing a spreading invasive cockroach, most effective and economical IPM program for baiting red imported fire ants, and effectiveness of vegetation management using steam machines. These topics were identified as priorities based on stakeholder requests and school pesticide use reporting data. Program staff used the technical findings from these studies to create practical pest management infographics, such as the *Best Management Practices: Outdoor Cockroaches Invading Indoor Spaces* infographic (available in [English](#) and [Spanish](#)).

The Program has collaborated with the UC San Francisco California Childcare Health Program (UCSF CCHP) on multiple projects designed to provide IPM education to child care staff. Two DPR grants partially funded the development of two child care toolkits: *Integrated Pest Management Toolkit for Early Care and Education Programs* published in 2011 and *Integrated Pest Management Toolkit for Family Child Care Homes* published in 2016. Between 2020 – 2022, Program staff and UCSF CCHP will conduct six Child Care IPM Training-of-Trainers Workshops in person or virtually.

Pesticide Use Warning Signs

Schoolsites must post a warning sign 24 hours before a pesticide application is made and leave it posted for at least 72 hours after the application. The warning sign must be posted at the area of application and must be visible to all persons entering the treated area (EC §17612). Warning signs do not need to be posted when HSA exempt pesticides are used at schoolsites (EC §17610.5).

Visible warning signs provide pesticide use information to anyone near the treated area, which can help limit

pesticide exposure and protect the health of school children. Pesticide applications on a schoolsite generally occur over a large area, such as an athletic field or the perimeter of classroom buildings. DPR provides a warning sign template for schools and child care facilities to post when pesticide applications are made. Schools and child care facilities can use this template or create their own version. (See the DPR warning sign template [here](#).) The warning sign must include the following information:

- The term "WARNING/Pesticide Treated Area"
- Product name
- Manufacturer's name
- U.S. EPA registration number
- Intended date of application
- Area of application
- Reason for the application

Pesticide Use Reports

Pest control businesses must report all U.S. EPA registered pesticides to DPR annually (EC §17611; CCR §6625). Since 2015, schoolsites must report non-exempt pesticides to DPR annually (EC §17611). DPR created two versions of the school pesticide use report form: one for pest control businesses and one for schoolsite staff. Hard copy forms must be submitted by mail to DPR by January 30 each year. (See pesticide use report forms under [School Pesticide Use Reporting](#).) The form must include the following information:

- Name and address of the schoolsite
- Date and location of the application
- Pesticide product name
- Quantity of pesticide used

The Program uses these data to identify pest management issues, then prioritize and deliver general and targeted outreach to stakeholders. Program staff also create an annual *California School and Child Care Pesticide Use Report Summary* and post it online. (See the 2017 summary [here](#).) In 2018, Program staff published details about the database in "The Maintenance and Use of California's School Pesticide Use Report" a chapter in the book *Managing and Analyzing Pesticide Use Data for Pest Management, Environmental Monitoring, Public Health, and Public Policy*. The Program also receives and fulfills public records requests. Since 2016, 87 requests have been fulfilled for parents, advocates, scientists, and investigative reporters.

Pesticide Use Records

Schoolsites must keep records of pesticide applications for four years (EC §17611). Records must include information about applications made by schoolsite staff and hired pest control businesses. The schoolsite must provide these records to the public upon request. Records do not need to be kept when HSA exempt pesticides are used at schoolsites. Schools can meet this requirement by keeping a copy of the posted warning sign and adding the amount of pesticide used. The DPR warning sign template provides a space for adding the amount of pesticide used. Pesticide application records must include the following information:

- Product name
- Manufacturer's name
- U.S. EPA registration number
- Intended date of application
- Area of application
- Reason for the application
- Amount of pesticide used

The Program and UC created the *School IPM Recordkeeping Calendar* to aid school staff in the HSA pesticide use record keeping requirement. (See the 2020/21 calendar [here](#).)

Written Notification

Schoolsites must provide annual written notification of pesticides expected to be applied during the school year to parents, guardians, and staff. Schoolsites must also provide parents, guardians, and staff an opportunity to register to receive pesticide application notices (EC §17612).

The annual written notification must include the following information:

- Pesticide product names and active ingredient(s)
- A link to the [DPR website](#) for information about active ingredients and their impact on public health and the environment
- An opportunity for recipients to register to receive pesticide application notices at least 72 hours before each application

Each pesticide application notice must include the following information:

- Product name
- Active ingredient(s)
- Intended date of application

Training Course on IPM and the Safe Use of Pesticides at Schoolsites

In 2016, DPR created a course to help stakeholders fulfill a new HSA training requirement that required anyone using any pesticide at a schoolsite to complete training as mandated by SB 1405 (Statutes of 2014, Chapter 848). In response, the Program created three, free online courses: *Basic IPM for the Classroom and Office Environment* (available in English and Spanish), *Integrated Germ Management* (available in English and Spanish), and *Best Pest Management Practices Around Children* (available for DPR and SPCB continuing education credit). *Integrated Germ Management*, the newest online course, was developed especially for child care staff who are required to use antimicrobial pesticides as part of their child care licensing requirements, but is available for all stakeholders to complete.

As an alternative to online training, schools or districts may train groups of employees by using a free, DPR group-training DVD. Each DVD contains the DPR online courses (excluding *Best Pest Management Practices Around Children*) and supplemental materials about IPM and the HSA. Upon completion of group training, schools are asked to email their sign-in sheets to DPR.

Between July 2016 and December 2019, over 170,000 people have completed a DPR HSA training course. About 62% of completion certificates have been for online courses and about 38% from the group-training DVD. The Program continually evaluates the usefulness of the courses and updates them accordingly.

DPR also has the authority to approve courses created by third-party organizations. Since 2016, the Program has approved 18 third-party courses, which are listed online. Organizations are asked to email their course records to DPR.

In 2019, DPR conducted a public survey to solicit feedback about the Healthy Schools Act.² Respondents viewed the training requirement as having the greatest positive impact on improving pest management at California schoolsites. In March 2020, there was a noticeable jump in the number of users completing the DPR HSA online courses as compared with March 2019. There was a greater than three-fold increase in users who took the *Basic IPM for the Classroom and Office Environment* course and a seven-fold increase in completion of the *Integrated Germ Management* course. The Program contributes this jump to the increase in disinfectant use at schoolsites due to the COVID-19 pandemic.

² Department of Pesticide Regulation, "Healthy Schools Act Legislative Report Survey," April – November 2019

Additional Outreach and Education Activities

The Program regularly engages with stakeholders to encourage the adoption of IPM at schools and child care facilities in California by hosting and attending in-person outreach and education events. Program staff give presentations at continuing education seminars, host booth space at school- and child care-related conferences, attend school health fairs, and partner with numerous organizations to disseminate Healthy Schools Act information. In 2020, Program staff transitioned to virtual events to keep in contact with stakeholders during the COVID-19 pandemic. Program staff proactively address emerging pest problems by keeping current with statewide pest-related news, and then creating useful resources tailored for the school and child care audience.

School and Child Care IPM Program Spotlight

The DPR School and Child Care IPM Program stays current with emerging pest issues, then creates helpful resources and provides relevant training to schoolsites throughout California. Schoolsite staff throughout the state face similar pest challenges and, oftentimes, find success in resourceful ways. Many Program events aim to bring schoolsite staff together so they can share their successes with each other. Program staff then share these success stories by interpreting them as infographics, e-list messages, and other resources and disseminating them statewide.

Program Spotlight: DPR COVID-19 Response

The COVID-19 pandemic is a recent example of the Program responding quickly to an emergency pest problem. Beginning mid-February of 2020, the Program prioritized outreach on proper disinfectant use at schools and child care facilities. As concerns about COVID-19 increased, the Program received an increase in calls and emails regarding how to properly disinfect schools and child care facilities while ensuring compliance with the HSA requirements. Program staff worked quickly to create a *Reminders for Using Disinfectants at Schools and Child Cares* fact sheet (available in [English](#) and [Spanish](#)) in March 2020. A link to this document was also included on the California Department of Public Health's and the California Department of Education's COVID-19 Guidance web pages.

Program Spotlight: Gopher Trapping at Manteca Unified School District

Manteca Unified School District's gopher trapping program is a success story that the DPR School and Child Care IPM Program shared through various outlets. Between 2014 – 2017, Manteca Unified School District went from reporting the highest number of gopher-targeting pesticide applications of all school districts in California to reporting none. DPR School and Child Care IPM Program staff learned from John Lopez, Manteca Unified's IPM coordinator, the district had switched to a district-wide gopher trapping program after trying to address the issue using various pesticides. John had previously learned about trapping gophers at a DPR School IPM Workshop. John confirmed that not only had the district eliminated all gopher-targeting pesticide applications, but they had also improved the conditions of school grounds. Program staff knew that Manteca Unified's success story would resonate with other school districts, especially if John shared the story himself. The Program highlighted Manteca Unified's successful gopher trapping program by inviting John to speak at several Program events. John also gave Program staff permission to refer other school IPM coordinators struggling with gopher management to him. Program staff have connected at least 6 other IPM coordinators to John. In 2017, the Manteca Unified School District, Operations Department was awarded a DPR IPM Achievement Award for their gopher trapping program.

Program Spotlight: Herbicide Use Reduction at Long Beach Unified School District

In 2017 Long Beach Unified School District (LBUSD) reached out to the Program for guidance on how to meet their goal of going herbicide-free in future school years. The Program helped LBUSD put together an IPM team that included maintenance and operations staff, parents, and a UC Extension advisor. Together, the IPM team was able to agree on goals and a plan of action. The maintenance and operations staff, with advice from the UC Extension advisor, began investing in and trying several non-pesticide methods to manage weeds, such as sealing cracks on pavement and using a weed steamer. In 2018 LBUSD offered to host a DPR Weed Management Alternatives Expo for Schools. DPR organized the event for local school districts to learn more about LBUSD's non-pesticide weed management practices and to see demonstrations of the weed steamer

machine. By changing practices and sticking to the IPM plan, LBUSD was able to significantly reduce the number of herbicide applications done in 2017, as compared to 2015 and 2016. From what was learned through this collaboration, DPR created the *Alternatives to Herbicides for Weed Management* infographic (available in [English](#) and [Spanish](#)). With guidance from the Program and a commitment to IPM, LBUSD demonstrated that a large California school district is capable of relying on non-pesticide practices for successful weed management.

RECOMMENDATIONS FOR IMPROVING THE HEALTHY SCHOOLS ACT

Parents in California appreciate their right to information about pest management and pesticide use at schools and child care facilities. The HSA requires DPR to facilitate the adoption of IPM at schoolsites in California. Through positive relationships and practical resources, the Program attempts to steer school and child care personnel to make better pest management decisions. A concerned teacher or parent can pick up the phone and contact Program staff, who are available to hear concerns, answer questions, provide public records, and reach out to school district staff. Program staff are also available to schoolsite staff to provide compliance information, suggest least-toxic alternatives to pesticides, and conduct site-specific training. When needed, Program staff help to mediate disagreements between schoolsites and stakeholders about pest management and pesticide use issues. Throughout the years, the Program has conducted many activities to teach people about IPM and provide practical recommendations for implementation. The Program continually evaluates its impact and adjusts outreach and education activities accordingly. Through the course of writing this report, DPR found opportunities to improve implementation of the HSA.

❖ Enhance the Model IPM Program Guidebook

DPR has regularly updated the model program guidebook according to the requirements set forth in the HSA. The Department sees a need for providing supplementary information in order for schools to implement successful, practical, long-term IPM programs while maintaining compliance with the Healthy Schools Act. The Department recommends supplementing the guidebook by adding the following subjects:

- Successful IPM for schools
- Communication with stakeholders about school IPM
- Common pitfalls in school IPM
- Least-toxic structural pest management for schools
- Least-toxic landscape pest management for schools
- Proper cleaning, disinfecting, and sanitizing at schools
- Laws and regulations applicable to pest management at schools
- Resources and contacts for school IPM information

❖ Evaluate IPM training needs and update courses

Stakeholders identified IPM training as the requirement that has the greatest positive impact on improving pest management at California schoolsites. The Department sees the value of continuously evaluating the training needs of schoolsite staff based on emerging pest issues and recommends updating courses accordingly.

❖ Continue to provide pesticide use data analysis for schoolsites

DPR uses the school pesticide use report (PUR) database to facilitate the implementation of IPM at school districts in California. The database allows DPR to conduct data-driven, targeted outreach and to provide one-on-one PUR analysis to school districts to help them meet their pest management goals. To continue direct outreach efforts based on sound data analysis, DPR recommends the continued use of the school PUR database to identify areas of improvement in IPM practices at school sites throughout California.

Conclusion

Over the last twenty years, the Healthy Schools Act has facilitated positive changes at California schools and child care facilities regarding pest management. As is, the law contributes to protecting the health of California's school children and reducing their exposure to pesticides. To further advance IPM at schoolsites, the Department is committed to improving the Healthy Schools Act by implementing the recommendations from this report.

ACKNOWLEDGEMENTS

We acknowledge and appreciate the dedicated school and child care staff whose daily work it is to maintain healthy learning environments for California’s children. Their work—repairing facilities, tending athletic fields, sanitizing food prep areas—may often be taken for granted, but is no less important for our children’s health and well-being.

This report provided the opportunity to examine the Healthy Schools Act and impact during its twenty-year history. During the report writing process we learned about our stakeholders’ concerns and needs, which will inform our future outreach and education activities. We thank the many stakeholders who shared their feedback about their experiences with the Healthy Schools Act.

Lastly, we are grateful to the individuals on our Healthy Schools Act Legislative Report Advisory Panel. The panel members, who represented many stakeholder groups, voluntarily provided us with points-of-view outside of our own. They also assisted our report writing efforts by sharing information through their outreach networks.

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A. Table of Healthy Schools Act Codes and Sections

Code	Sections
Education Code	Division 1, Part 10.5, Chapter 5, Article 4 (commencing with Section 17608; and Sections 17611.5 and 17614); and Division 4, Part 27, Chapter 6, Article 4 (Section 48980.3)
Food and Agricultural Code	Division 7, Chapter 2, Article 17 (commencing with Section 12996; and Section 13186.5)
Business and Professions Code	Division 3, Chapter 14, Article 5 (Section 8593.2)
Health and Safety Code	Division 2, Chapter 3.4, Article 1 (Section 1596.794) and Article 2 (Section 1596.845)
California Code of Regulations	Title 3, Divisions 6, Chapter 3, Article 1 (Section 6625)

The codes and regulations can be accessed at <http://leginfo.legislature.ca.gov/> and www.cdpr.ca.gov.

B. List of DPR Healthy Schools Act Data Sources

The DPR Healthy Schools Act data sources used to write this report are listed below.

1. Comments from Advisory Panel
2. Comments from HSAInput@cdpr.ca.gov
3. Healthy Schools Act Legislative Report Survey stakeholder responses
4. IPM Plan audits for schools and child care websites
5. Healthy Schools Act online training records
6. California School Pesticide Use Report data

These are available from DPR by request at school-ipm@cdpr.ca.gov.

California Department of Pesticide Regulation

Our mission is to protect human health and the environment by regulating pesticide sales and use, and by fostering reduced-risk pest management

