

# APPLETREE COVID-19 Supplemental Awards

## Kentucky Department for Public Health

### Introduction

In early 2021, ASTHO, with support from CDC's National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry (ATSDR), announced awards to five state health agencies to support their responses to the COVID-19 pandemic. State health agencies in Kentucky, Virginia, Arkansas, Vermont, and Indiana were selected for this opportunity because of their recent application to ATSDR's Partnership to Promote Local Efforts to Reduce Environmental Exposure (APPLETREE) cooperative agreement program. Vermont requested that ASTHO work directly with their partner organization, [Informed Green Solutions \(IGS\)](#), for this project. ASTHO provided funding and assistance to the recipient state health agencies and state health agency partners to support their environmental health-related COVID-19 response activities. This factsheet outlines planned activities and their associated outcomes under these awards for the Kentucky Department for Public Health (KDPH).

### Planned Activities

KDPH's Division of Public Health Protection and Safety planned to conduct a variety of proposed activities as part of this funding award aimed at providing guidance and technical assistance to K-12 schools on safe disinfection practices. Activities planned as part of this award included:

- Developing and implementing a plan with K-12 schools, environmental stakeholders, and decision-makers to provide coordinated outreach and communication to school professionals on safe disinfection practices in schools.
- Creating a tool for assessing K-12 schools' needs, barriers, and challenges related to safe disinfection practices and other COVID-19 mitigation measures. KDPH will also develop a process for K-12 schools to request environmental assessments to help customize their mitigation measures to their specific needs.
- Developing guidance and educational materials for K-12 schools on the topics of safe disinfection practices, safe re-entry practices for closed facilities, and capacity building for future preparedness and emergency response planning and activities. KDPH will collaborate with existing partners, such as the Kentucky Department of Education (KDE) and develop new partnerships to help facilitate the sharing and development of these educational materials and trainings for K-12 schools.
- Continuing to assist and educate K-12 schools on other COVID-19 mitigation measures that are protective of both the environment and public health as needed.
- Reviewing and adapting KDPH guidance for chemical and radiological emergencies with COVID-19 considerations.

### Project Outcomes

KDPH completed several activities as part of this funding award. The primary focus of these efforts was providing guidance and technical assistance to K-12 schools, as well as other stakeholders, on mitigation measures and best practices to reduce the spread of COVID-19.

Early on in its work, KDPH recognized the need to partner with the KDE and Kentucky Association of School Superintendents (KASS) to help develop and inform K-12 school guidance and outreach materials. With this partnership, KDPH met regularly with KDE and KASS to assess the needs of K-12 schools related to COVID-19 mitigation measures and guidance. These discussions led KDPH and KDE to develop a “Healthy at Schools” flagship document, titled “Guidance on Safety Expectations and Best Practices for Kentucky Schools (K-12),” to educate school administrators on best practices to reduce the spread of COVID-19 within school settings, including information on disinfection practices. KDPH also developed a checklist to assist schools preparing to reopen with modifications due to the COVID-19 pandemic, including considerations related to COVID-19 prevention measures and policies, school closures, and cleaning/disinfection practices. Over the course of the project, 171 K-12 school districts were provided with guidance and assistance.

KDPH held regular calls with local Kentucky health departments to ensure they were aware of new information and guidance as it was developed. Since it was often a challenge to push information out to the local health departments, KDPH utilized a liaison to help with these efforts.

Although registered sanitarians receive training on indoor air quality and ventilation considerations during their certification programs, KDPH recognized a need to provide a refresher and additional training on conducting risk assessments for indoor air quality and ventilation in schools. KDPH collaborated with the Eastern Kentucky University’s (EKU) Master of Public Health program and JHB Environmental/Occupational Health Consultants, LLC (JHB) to develop and implement a training course and walkthrough inspection video to assess indoor air quality and ventilation within schools, as well as identify ways to improve indoor air quality to reduce the transmission of COVID-19. This training course and walkthrough video was offered to all local health department registered sanitarians. Overall, 206 registered sanitarians received this training.

KDPH also reviewed and adapted its guidance and response plans for chemical and radiological emergencies with COVID-19 considerations.

## **Project Challenges and Barriers**

During this project, KDPH encountered several challenges and barriers:

- KDPH often received new information and emergency orders around the same time as the public, making it difficult to develop materials for distribution beforehand. Following a standardized format for guidance documents and materials helped KDPH speed up developing new resources when needed.
- All documents and guidance developed by KDPH had to go through an extensive review process, which added to the challenge of ensuring information and guidance was disseminated timely.
- While partnering with various agencies across KY was invaluable to KDPH’s COVID-19 response efforts, ensuring consistent coordination across multiple agencies proved challenging at times due to the differing priorities and goals of each agency and time constraints.
- Indoor air quality factors vary greatly between schools and other buildings due to building age, ventilation system design, and maintenance status. In turn, creating materials that could be generalized for a wide variety of building environments proved challenging.

## **Reflections and Final Thoughts**

Some final thoughts and lessons learned throughout the project included the following:

- Having preexisting relationships with multiple agencies, including KDE and KASS, helped KDPH quickly establish partnerships and coordinate response activities during the COVID-19 pandemic. KDPH and KDE’s partnership and continuous communication led to the development of resources based on the current needs of K-12 schools.
- Once indoor air quality factors were found to play important roles in COVID-19 transmission, KDPH, ECU, and JHB were able to quickly develop and disseminate a training course and walkthrough video for registered sanitarians to help assess and improve indoor air quality factors in K-12 schools. KDPH utilized the expertise of ECU and JHB to answer questions and develop guidance on emerging indoor air quality concerns, including the use of ionizing units and other air cleaners/purifiers. This pivot from focusing primarily on surface cleaning and disinfection was important in reducing COVID-19 transmission risk in K-12 schools.
- Despite the challenges of the constantly changing nature of the pandemic and the shifting priorities of KDPH and partners, KDPH was able to remain flexible and adapt their workflow to successfully complete COVID-19 response activities as a part of this project.

## Resources Developed

The resources and information below were developed, updated, and/or supported fully or partially as a part of this project:

- Resources based on the “Healthy at Schools” flagship document, titled “Guidance on Safety Expectations and Best Practices for Kentucky K-12 Schools,” are available in the [COVID-19 Prevention in K-12 Schools](#) document, including [KDPH Guidance for K-12 School Operations for In-Person Learning: Layered Prevention Strategies](#). The original flagship document is no longer publicly available.