

Staying safe on the farm: respiratory protection

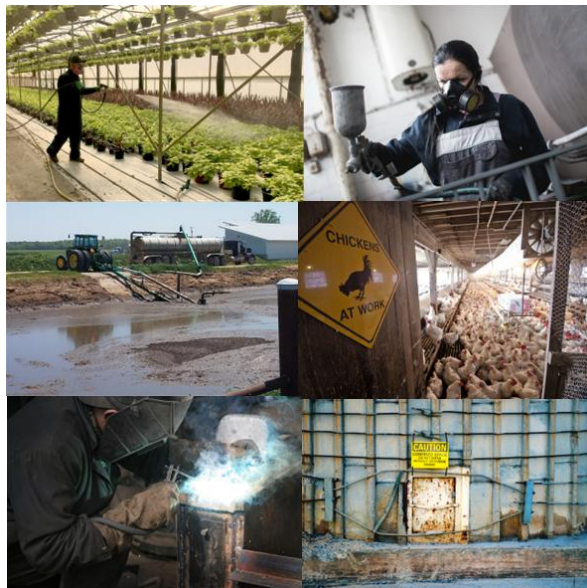
Farmers face inhalation hazards in the agricultural workplace which can lead to acute or long-term harm to their health. A farm-specific respiratory protection program can protect farmers, farm workers, and their families.

The Challenge

Respiratory protection in the agricultural industry is complicated. In addition to knowing which respirator to select for which situation, the regulatory requirements for respirator use are governed by different agencies, different standards, and may differ by use (pesticide versus non-pesticide use and agricultural versus non-agricultural use). Available resources are often for single situations and not found in one central location.

The Response

The Michigan Occupational Health Surveillance Program located at Michigan State University (MSU) Division of Occupational and Environmental Medicine (OEM) synthesized respiratory protection information from a multitude of training, educational, and regulatory materials. OEM also spoke with respirator manufacturing experts from multiple companies and regulatory agencies to clarify standards. OEM developed an initial guide which was then refined through multiple presentations to farmers and agricultural industry workers. Each presentation included real-world examples of selecting the appropriate respirator using the guide's step-by-step instructions. OEM expanded the initial guide by incorporating answers to farmers' questions that arose during the presentations. Safety and Health experts from the Michigan Occupational Safety and Health Administration, Michigan Department of Rural Development, MSU Extension educators, and individual farmers provided feedback that was incorporated into the final guide.



Respiratory hazards in agriculture examples: Greenhouse pesticide spraying (by Jeremy Jubenville), painting, manure pit gases (by MSU extension), poultry (by Lance Cheung), welding fumes, grain bin. All others from istock.

The Impact

The product is a one-stop toolkit for Michigan farmers to use when developing or improving a respiratory safety program. The toolkit provides respirator selection and use guidance, plain language explanations of terms used on respirators and chemical product labels, and practical tools for farmers to use (e.g., posters, checklists, flow charts, at-a-glance summaries). At the center of the guide are detailed tables with a row for each respiratory program element and a column for pesticide and for non-pesticide use—making it easier to understand which regulatory standards apply for which situations.

For more information and to download the guide visit:

<https://www.canr.msu.edu/news/simplifying-respiratory-safety-on-the-farm>.