



Farmers' Exposure to Dust and Noise Hazards at On-Farm Grain Facilities



This project focuses on the environmental respiratory exposure and the noise exposure farmers face at their on-farm grain storage and handling facilities. Measurements will also be collected on the workers' respirators to determine their effectiveness and protection factors to combat the grain dust

The expected impact of the study will help farmers and researchers better understand the health hazards at on-farm grain storage facilities. Results will guide the development of training resources to decrease exposure to these hazards, and ultimately improve the quality of life for Ohio farmers.

What to expect during the exposure monitoring research:

1. The research team will schedule a time to visit participants' farms to collect data when bin cleaning activities occur. We kindly ask for a 1-day advance notice.
2. Farmers will wear a backpack which contains the sampling equipment while they perform their normal work at the bins.
3. Sampling will occur for the length of the bin cleaning task at one or multiple bins while on site. We understand this could be 30-minutes to several hours.

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RESEARCH STEPS

This is a 2-step project that will be done over a 2-year period.

SURVEY

Each year, you will complete a survey about your respirator and hearing protection use while working at your on-farm grain facility. This survey will take about 15 minutes.

ON-FARM SAMPLING

Each year, researchers will visit your farm while you are in the final unloading stages and performing bin sweeping tasks.

Personal dust exposure level and noise levels will be monitored while you work.

A respirator protection factor test will also be measured.

After samples are analyzed, you will receive your results.

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