

The National Institute for Occupational Safety and Health (NIOSH)

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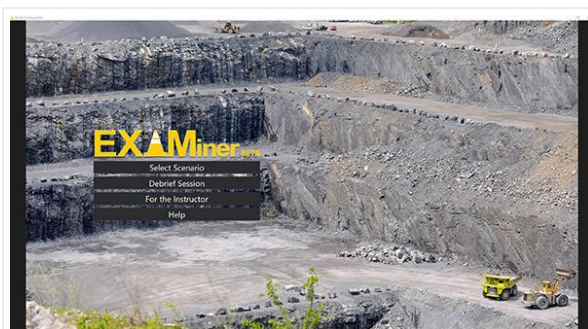
Beta Release: This software has not completed NIOSH's rigorous testing but is considered to be fully functional. Because of the high level of interest from numerous stakeholders this beta version is being made available now. Send comments to mining@cdc.gov [📧](#).

EXAMiner allows mineworkers to search for hazards by performing a virtual workplace examination with the goal of finding as many hazards as possible. The interactive PC-based application can be used with the 30-plus preloaded images of scenes from four locations at a stone surface mine—in the pit, at the plant, in the shop, and along mine roadways—or trainers can upload their own panoramic images.

The software was designed to be used by trainers during Part 46 annual refresher training, quarterly training meetings, or pre-shift toolbox talks.

To create a training session, you have two options:

You can choose to use scenes created by NIOSH and have mineworkers perform a virtual examination at one of four locations at a surface stone mine. By using NIOSH-created



Screenshot of EXAMiner's opening page

scenes, mineworkers are able to practice searching for and finding hazards in the pit, at the plant, in the shop, and along haul roads and other mine roadways. After completing a workplace examination, mineworkers receive feedback on their performance and are provided additional information to reinforce their knowledge of mine site hazards.

Alternatively, you can customize the scenes that mineworkers search by importing your own panoramic pictures to create site-specific scenes to use as training materials at any type of mine, in any sector. This gives you the opportunity to create materials that address specific hazards your mineworkers are encountering in the workplace. Importantly, this also gives you the ability to continually add content to the software, importing as many panoramic pictures as you have available, to address the changing needs of your mineworkers.

EXAMiner in the news:

- News report on [CORESafety TV](#) [🔗](#)
- Feature in [Aggregates Manager news](#) [🔗](#)
- News feature on [WorkersCompensation.com](#) [🔗](#)



Software (Windows) - February 2019

Version: 1.0.12.0 Beta

[Installer](#) 

Pittsburgh, PA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, 2019 Jan: PC software.

- Feature in [National Safety Council's Safety + Health magazine](#) 
- News item on [J.J. Keller regulation compliance website](#) 
- Mining safety news item on [Mine Technology website](#) 
- Industry news item on [American Industrial Hygiene Association website](#) 
- News item on [Rock Road Recycle website](#) 
- Blog entry on [Worksite Medical: Occupational Health in Motion](#) 
- Safety update from [Ohio Bureau of Workers' Compensation Library](#)  

Important notes about this beta release:

- This version of EXAMiner requires the 64-bit version of Windows.
- When making custom scenes, be sure to include hazard description text to avoid an application crash.
 - *This issue will be addressed in the next release.*

EXAMiner installation instructions:

- Uninstall any previous versions of EXAMiner (Heads up early adopters & testers)
- Download and unzip the installer to a local folder.
- Open the Installer folder and run **EXAMiner BETA Setup.exe**.

Fast-fix to allow sharing scenarios:

- Due to tremendous demand for the ability to share scenarios between PC's, a fast-fix has been developed.
- Download and unzip the [EXAMinerBeta Export Tool](#) .
- Right click **EXAMinerBETA_ExportTool.ps1** and select "Run with PowerShell".
 - A ZIP file will get created.
- Follow the onscreen directions on how to copy to another PC and run the Import PowerShell script.

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See Also

[The Concept of Degraded Images Applied to Hazard Recognition Training in Mining for Reduction of Lost-Time Injuries](#)

[Defining Hazard from the Mine Worker's Perspective](#)

[Development and Evaluation of a Training Exercise for Construction, Maintenance and Repair Work Activities](#)

[Effective Hazard Recognition Training using a Latent-Image, Three-Dimensional Slide Simulation Exercise](#)

[Effectively Recognizing Hazards](#)

[Enhancing Mine Workers' Abilities to Identify Hazards at Sand, Stone, and Gravel Mines](#)

[Evaluation of Mining Activities Using a Scenario Interview Approach](#)

[Hazard Recognition Challenge - 1.0](#)

[Hazard Recognition Challenge Invites Mineworkers to Test Their Knowledge of Workplace Hazards](#)

Improve Your Hazard Recognition Skills

Modernization and Further Development of the NIOSH Mine Emergency Response Training System (MERITS), Phase 1

Safety and Health Toolbox Talks - 1.0

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