

Attachment I
Informed Consent

Consent to be in a Research Study

Enhancing Mine Workers' Abilities to Identify Hazards at Stone, Sand and Gravel Mines

1	Who is conducting the study?	NIOSH is a federal agency that studies worker safety and health. We are part of the Centers for Disease Control and Prevention (CDC).
2	What is the purpose?	Risk is inherent in the work stone, sand, and gravel (SSG) miners perform and it influences the safety decisions miners make while working. The purpose of this research is to study how mine workers recognize hazards in their work environment and how they assess the risk associated with recognized hazards.

You are being asked to take part in a research study. Before scheduling the study, you will be asked several questions about your vision and physical abilities. The following are a list of these abilities:

- No radial keratotomy (laser eye surgery), or other eye surgeries
- No monocular vision
- Normal or corrected to normal vision (20/40)
- No glaucoma
- No macular degeneration
- Able to stand unassisted for 30 minutes
- Able to walk unassisted

If you meet the vision and physical requirements, you will be invited to take part in the full study.

Prior to the start of the study, you will be asked to complete several vision tests. These tests include a self-report of your visual acuity, a color deficiency test, a contrast sensitivity test, and a peripheral vision test. It should take approximately 20 minutes to complete vision testing.

The study will be broken into two phases. Phase 1 of the study will take place in a 360° theater. During this phase, you will be shown scenes from a typical mine site. You will be asked to perform a hazard assessment for each of the scenes. Your task is to identify as many hazards as possible. While you look at the scenes, you will be asked to wear a pair of eye-tracking glasses. These glasses are light weight and will record where you are looking while you perform the task. Phase 1 should take approximately 60 minutes to complete.

Once you complete Phase 1 you will be given a break and then Phase 2 will begin. During Phase 2, you will be asked to look at each of the scenes again to assess the risk for each of the hazards included. We will highlight the hazards for you. Once you have performed the risk assessment, you will be asked to discuss the hazards that you accurately identified as well as any hazards you may have missed during Phase 1. Phase 2 should take approximately 60 minutes to complete.

Finally, you will be asked to complete several questionnaires. The first is a demographic questionnaire. The purpose of this questionnaire is to gather information about your previous work and training experience. We will also ask you to complete two additional questionnaires that are focused on risk tolerance. The purpose of these questionnaires is to gain a better understanding of how tolerant you may or may not be of risk. It should take you approximately 10 minutes to complete these 3 questionnaires.

<p>3</p>	<p>What will I do?</p>	<p>The study will take place in the Virtual Immersion and Simulation Laboratory (VISLab) which is located at the NIOSH research facility in Bruceton, PA. The study will be scheduled to accommodate your schedule and it will take approximately two hours and 30 minutes (2.5 hours) to complete.</p>
<p>4</p>	<p>When, where, for how long will I be needed?</p>	<p>The activities of this study pose no more than minimal risk to you. There is a risk that your private information may not be kept confidential; however, the likelihood is small because we are not asking you to sign any documents and because all collected data will be stored in a secured office that is accessible only by the researchers on the research team. Your data will be retained in accordance with NIOSH data management policy.</p> <p>This study presents minimal risk or discomfort beyond what miners and students would already encounter in their usual safety and health training. All rooms used during the study have heating and air conditioning and the seating is ergonomically designed and well lit.</p> <p>A portion of the study will take place in a 360° circular environment. All scenes will be presented in 2-Dimensions. It is unlikely you will experience motion sickness like symptoms. However, if at any point during the study you feel unwell please let a member of the research team know. You will be assisted from the circular environment and a member of the research team will be with you until you feel well again.</p>
<p>5</p>	<p>Are there any risks?</p>	<p>The study is voluntary. You may choose to be in the study or not. You may choose to answer any or all questions. You may drop out any time for any reason without consequences to you.</p>
<p>6</p>	<p>Is my participation voluntary?</p>	<p>On-site emergency treatment will be provided. 911 will be called if needed. Medical care or compensation will not be provided. If harmed through negligence of a NIOSH employee, you might obtain compensation under Federal Law. If a NIOSH contractor is negligent, you can file a claim with that contractor.</p>

7	What if I'm injured or harmed?	Your company may provide your regular salary while participating in this study at their discretion. You will not receive further compensation from the government for your time.
8	Will I be reimbursed or paid?	There is no direct benefit to you for participating in this study, other than the satisfaction of assisting with research that will increase our knowledge and understanding of how mine workers identify hazards in their work environment.
9	Are there other benefits?	There are no alternative procedures for this study.
10	What alternative procedures might benefit me?	All data collected during the study will be kept in a secure location and will not be shared with anyone outside of the research team.
11	Will my personal information be kept private?	<p>If you would like a summary of the results of this study, please let a member of the research team know. You will have to provide your name and email address to the research team. This information will be kept separate from the data that was collected during the study. The summary of results will be an overall summary of data collected from all of the other people who took part in the study. We are unable to provide you with a summary of your own data.</p> <p>A summary of the information collected during this study is likely to be shared with members of the mining community at stakeholder meetings such as the annual meeting of the National Sand, Stone, and Gravel Association (NSSGA).</p>
12	Will I or anyone else receive study results?	<p>For questions about the research study, contact the principal investigator, Brianna Eiter at BEiter@cdc.gov or 412-386-4954.</p> <p>For questions about your rights, your privacy, or harm to you, contact the Chair of the NIOSH IRB, 513-533-8591.</p>
13	Who can I talk to if I have more	Please indicate whether you would like to take part in the study by saying yes or no.

	questions?	
14	Verbal Consent	