A Study Overview
Health Risks from Exposures in Uranium Mills

Study Purpose

- To obtain more information about the health effects from working in uranium mills.
- Previous studies have reported that uranium millers may be at a greater risk of developing various types of cancer.

Study Design

- We examined causes of death among 1,484 millers employed for at least one year after January 1940 in one of seven uranium mills in the Colorado Plateau.
- We compared the death rates among the millers to the death rates of the general U.S. population

Study Results

- Results from the study showed an increased risk of death from non-cancerous lung diseases (pneumonia, emphysema, pneumoconiosis, etc.). For the group of workers that we studied, we expected to see 70 deaths from these causes but 100 occurred.
- Results also showed a slightly higher number of deaths than expected from blood cancers (lymphoma and Hodgkin's disease), lung cancers, and chronic kidney diseases.
- However, the risk of death from the above diseases was not higher among workers who were employed for the greatest number of years. This means that some reason other than working in the mills may have been the reason for the increase in deaths.

Conclusions

- The study found an increased risk for various causes of death among millers, but was **unable to show conclusively** that these deaths resulted from working in the mills.
- The study results evaluated workers as a group. The results do not mean that all uranium millers will acquire one of these diseases.

Limitations

- The study was unable to estimate exposures for individual millers.
- The study lacked information on smoking.
- The number of workers in the study was somewhat small for examining rare causes of death.

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Questions or Comments?

If you have any questions or comments, would like more information, or would like a copy of the study reports:

Call our NIOSH toll-free 800 number: **1-800-356-4674** between 9:00 a.m. and 4:00 p.m., Eastern Time, Monday through Friday. Say you are calling about the Uranium Millers Notification and ask to speak with Frank Stern. You may also call Frank Stern directly at: **1-513-841-4519.**

If you have Internet access, you may e-mail questions, comments, or suggestions to: **nioshworkernotification@cdc.gov.**

You can also find additional information regarding the studies of uranium millers on the NIOSH Worker Notification Website at:
www.cdc.gov/niosh/pgms/worknotify/
Click on **"Uranium (Millers)"** under the title Work Exposures
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We sincerely hope this information is helpful to you!!

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Thank You!!