What was the research about?
Lung cancer is the leading cause of cancer deaths in the United States. Screening current and former heavy smokers 55 to 77 years of age for lung cancer could prevent more than 12,000 deaths each year. Yet possible harms from screening include false alarms and radiation exposure from the screening test, a CT scan. Many smokers don’t know the benefits and harms of lung cancer screening. Researchers want to develop effective ways to inform smokers about their screening options.

In this study, the research team compared two ways to help people learn about their options for lung cancer screening:

• A brochure that answered common questions about lung cancer screening

• A video decision aid that helped smokers choose between screening options based on what is most important to them

What were the results?
Compared with people who read the brochure, people who watched the video decision aid

• Felt more prepared to talk with their doctor to decide about screening

• Were more aware of their screening options

• Had a better understanding of what benefits and harms of screening mattered most to them

• Had more knowledge about lung cancer and screening options

Who was in the study?
The study included 516 current or former adult heavy smokers. Heavy smokers reported smoking at least one pack of cigarettes a day for 30 years, or an equal amount, such as two packs a day for 15 years. The smokers had called tobacco quitlines, operating in 13 states, for help to quit smoking. Of these smokers, 70 percent were white, 27 percent were African American, and 3 percent were other races. In addition, 62 percent were female and 44 percent had a high school education or less. All smokers were ages 55 to 77 and spoke English.

What did the research team do?
The research team assigned people by chance to one of two groups. In the first group, people received a two-page printed brochure about lung cancer screening. The brochure was from a national lung cancer organization. In the second group, people received a DVD of a video decision aid or a link to view the video online.

The brochure and the decision aid had information on the benefits and harms of screening. The decision aid also guided people to decide which benefits and harms were most important to them.
The team contacted people one week after they received the brochure or decision aid to see how prepared they felt to talk with their doctor to decide about screening. The team also looked to see how aware people were of their screening options and how well they knew which benefits and harms of screening mattered most to them.

The research team also tested people’s knowledge of lung cancer and lung cancer screening one week, three months, and six months after they viewed the brochure or decision aid.

**What were the limits of the study?**
The study only included people who were interested in quitting smoking and who had expressed interest in lung cancer screening. The results may be different for people not interested in quitting or in lung cancer screening. The team only tested the decision aid with English speakers. Results may differ for smokers who don’t speak English.

Researchers could adapt the decision aid so doctors can use it during visits with patients and test how well it performs in that setting.

**How can people use the results?**
Tobacco quitlines can reach many people. Quitline staff could refer people to the video decision aid to help them talk with their doctor to see if lung cancer screening is right for them.

*To learn more about this project, visit [www.pcori.org/Volk029](http://www.pcori.org/Volk029).*