

## Mayo Clinic Minute: How personalized vaccines target cancer tumors

Vaccines are helpful in protecting against the flu and COVID-19, but could they also play a role in the fight against cancer? Imagine a future where every cancer treatment is personalized to each patient, precisely targeting their unique cancer cells.

Dr. Keith Knutson, a professor of immunology at Mayo Clinic, explains how the development of personalized lung cancer vaccines is giving hope to patients.

Video	Audio
	It may sound like something out of a science fiction movie, but it is reality. Mayo Clinic researchers are developing personalized lung cancer vaccines.
Keith Knutson, Ph.D. Cancer vaccine researcher Mayo Clinic	"We actually make a vaccine that's specific for each individual's cancers."
	The process involves analyzing cancer cells to create a one-of-a-kind vaccine.
	"We can actually take a small part of that cancer and actually sequence that cancer and get the information that we need to design the vaccine."
	The vaccine uses the immune system to identify and combat cancer.
	"We can use that vaccine to hopefully prevent the disease from coming back, or we can use it to help shrink a tumor when given with other types of therapies."
	You can reduce your risk of lung cancer by quitting smoking and avoiding exposure to secondhand smoke.
	For the Mayo Clinic News Network, I'm Alex Osiadacz.