

COVID-19 vaccine critical but it's not silver bullet

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by Sara Del Valle and Ben McMahon

After months of anticipation, the COVID-19 vaccine has been delivered to every state in the nation and inoculations are underway. But vaccinating more than 250 million adults throughout the country is a monumental task that requires careful planning and assessments of different approaches to distribution — without which herd immunity can take longer to achieve.

At Los Alamos National Laboratory, we're using mathematical models and computational simulations enabled by the laboratory's supercomputing capabilities to understand how best to distribute the COVID-19 vaccine. And what we've learned is: While the vaccine is a critical weapon in fighting this virus, it's not a silver bullet — at least not yet.

Our models look at individual communities based on government data. To understand the different outcomes based on how the vaccine will be distributed, we create various what-if scenarios that were developed in collaboration with local, state and federal governments to help them effectively plan for vaccine distribution and complementary mitigation strategies.

Read the rest of the story as it appeared in the [Santa Fe New Mexican](#).

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