Vaccination, NPI compliance needed to prevent COVID-19 surges

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To prevent surges in COVID-19 cases, hospitalizations, and deaths, high

vaccination rates and compliance with nonpharmaceutical interventions (NPIs) are needed, according to research published in the May 5 early-release issue of the U.S. Centers for Disease Control and Prevention *Morbidity and Mortality Weekly Report.*

Rebecca K. Borchering, Ph.D., from the Pennsylvania State University in State College, and colleagues used a multiple-model approach comprising six models to assess the potential course of COVID-19 in the United States across four scenarios with different vaccination coverage rates and effectiveness estimates and strength and implementation of NPI during a six-month period (April to September 2021). The authors sought to provide long-term projections of potential trends in COVID-19 cases, hospitalizations, and deaths.

The researchers note that an accelerated decline in NPI adherence was shown to undermine vaccination-related gains during the subsequent two to three months and could lead to surges in cases, hospitalizations, and deaths in combination with transmissibility of new variants. By July 2021, a sharp decline in cases was projected; in high vaccination scenarios, the decline was faster.

"Based on these findings, public health messaging to encourage vaccination and use of effective NPIs is essential to control the COVID-19 pandemic and prevent increases in COVID-19-related hospitalizations and deaths in the coming months," the authors write.

Several authors disclosed financial ties to industry.

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