

COVID-19 vaccine prioritisation for type 1 and type 2 diabetes

With the availability of SARS-CoV-2/COVID-19 vaccines, a crucial challenge is the prioritisation of groups of individuals to receive vaccines that will be in limited supply for some time.¹ Several clinical reports have described greater morbidity and mortality from COVID-19 in people with diabetes, often accompanied by obesity. Most of this information is from individuals with type 2 diabetes, with less known about the risk in type 1 diabetes, a phenotypically distinct disorder. Experts have cautioned against extrapolating from studies of type 2 diabetes to individuals with type 1 diabetes.² In the USA, the Centers for Disease Control and Prevention (CDC) currently categorise type 1 and type 2 diabetes differently in terms of risk for severe illness from COVID-19, with people with type 2 diabetes considered “at increased risk for severe illness” and those with type 1 diabetes categorised as “might be at increased risk”.³

Importantly, several recent studies⁴⁻⁶ have shown that both people with type 2 diabetes and those with type 1 diabetes have an increased vulnerability to serious illness from SARS-CoV-2 compared with people without diabetes. In relative terms, patients with type 1 diabetes and

those with type 2 diabetes had similar adjusted odds ratios (ORs) for hospitalisation (3.90 for type 1 diabetes vs 3.36 for type 2 diabetes),⁵ severity of illness (3.35 vs 3.42),⁵ and in-hospital mortality (3.51 vs 2.02).⁴ In a population-based study in Scotland, the risk of fatal or critical care unit-treated COVID-19 was increased for both diabetes types (OR 2.4 with type 1 diabetes vs 1.4 with type 2 diabetes).⁶

Because risk classification and recommendations by the CDC and other health policy makers influence decisions by states and health systems related to vaccine prioritisation, these findings should prompt an immediate revision by the CDC and others of risk assessment, placing individuals with either form of diabetes in the same high-risk category. Such a change in risk categorisation will place the more than 1.6 million people in the USA with type 1 diabetes in the same prioritisation category as those with type 2 diabetes and other high-risk conditions. We call on public health officials and governors throughout the USA, as well as relevant policy makers in other countries, to carefully consider this new information as recommendations for vaccine prioritisation are developed.

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