



Research Letter

March 8, 2021

Kimberly G. Blumenthal, MD, MSc¹; Lacey B. Robinson, MD, MPH¹; Carlos A. Camargo Jr, MD, DrPH²; et alErica S. Shenoy, MD, PhD³; Aleena Banerji, MD¹; Adam B. Landman, MD⁴; Paige Wickner, MD, MPH⁵

[Acute Allergic Reactions to mRNA COVID-19 Vaccines | Allergy and Clinical Immunology | JAMA | JAMA Network](#)

- 64900 employees vaccinated with first dose of covid-19 mRNA vaccine.
- 16 cases of anaphylaxis. All treated and all recovered.
- avg time of onset of anaphylaxis 17 minutes.
- **Rate of anaphylaxis** = $13 / 64,900 = 0.00025 \times 100 = \mathbf{0.025\%}$