

COVID-19 Breakthrough Infections

Clark County, Nevada

Date: May 6, 2021

Breakthrough cases are U.S. residents with a SARS-CoV2 RNA or antigen detected on respiratory specimen collected greater than or equal to 14 days after completing the primary series of an FDA authorized COVID-19 vaccine (i.e., complete vaccination).

Given the large number of people being vaccinated in the United States and the high level of ongoing SARS-CoV-2 circulation, thousands of symptomatic vaccine breakthrough cases are expected, even if the vaccines remain as effective as demonstrated during the clinical trials.

This table provides information regarding vaccine breakthrough cases. These data are self-reported through case investigation. Each case must have been successfully contacted, interviewed, and disclosed having received a COVID-19 vaccine, plus the number and date of doses, to be eligible for inclusion. Complete vaccination is two doses of the Pfizer or Moderna vaccine or one dose of the Johnson and Johnson (Janssen) vaccine. Data is considered preliminary and subject to change.

Population Characteristics of COVID-19 Breakthrough Cases

	<i>Overall</i>	
	<i>N</i>	<i>%</i>
<i>All</i>	186	100
Age (in years)		
18-24	7	4
25-49	75	40
50-64	33	18
65+	69	37
Unknown	2	1
Gender		
Male	90	48
Female	96	52
Race/Ethnicity		
Hispanic	34	18
White	95	51
Black	19	10
Asian	22	12
Other	7	4
Unknown	9	5
Travel History		
Yes	28	15
No	142	76
Unknown	16	9
Variant of concern (VOC)		
P.1	1	1
B.1.1.7	1	1
Unknown	184	99
Death		
Yes	2	1
No	135	73
Unknown	49	26
Hospitalization		
Yes	29	16
No	146	78
Unknown	11	6

* White, Black, Asian, and AEA are non-Hispanic

* AEA=American Indian/Eskimos/Alaskan Natives

* There are a limited number of specimens for sequencing of VOCs compared to the total number of all COVID-19 cases; 'Unknown' does not necessarily mean cases were not VOC