

# COVID-19 Breakthrough Infections

## Clark County, Nevada

**Date:** August 19, 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). Complete vaccination is two doses of the Pfizer or Moderna vaccine or one dose of the Johnson and Johnson (Janssen) vaccine.

Exclusion Criteria: The persons who were recently positive for COVID-19, defined as a positive <45 days prior to the current positive test under investigations were excluded.

### Population Characteristics of COVID-19 Breakthrough Cases

	<i>Overall</i>	
	<i>N</i>	<i>%</i>
<b>All</b>	6309	100
<b>Age (in years)</b>		
5-17	53	1
18-24	377	6
25-49	2749	44
50-64	1657	26
65+	1473	23
<b>Gender</b>		
Male	2948	47
Female	3324	53
Unknown	37	1
<b>Race/Ethnicity</b>		
Hispanic	1040	16
White	2365	37
Black	431	7
API	653	10
AEA	6	0
Other	304	5
Unknown	1510	24
<b>Travel History</b>		
Yes	512	8
No	2535	40
Unknown	3262	52
<b>Variant of concern (VOC)</b>		
Gamma	18	0
Epsilon	4	0
Delta	484	8
Alpha	44	1
Unknown	5759	91
<b>Hospitalization</b>		
Yes	304	5
No	2996	47
Unknown	3009	48
<b>Death</b>		
Yes	87	1
No	1417	22
Unknown	4805	76
<b>Vaccine Type</b>		
Pfizer	3990	63
Moderna	1311	21
Johnson	1	0
Janssen	1007	16
<b>Underlying Conditions</b>		
Yes	1462	23
No	4847	77

**Notes:**

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

\* AEA=American Indian/Eskimos/Alaskan Natives API=Asian Pacific Islander

\* 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

\* Data is considered preliminary and subject to change.