Arizona and COVID-19: Summer 2022

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It has been two and a half years since COVID-19 had first appeared in the United States. There have been several COVID-19 milestones: more than half a billion cases and 6 million deaths in the world, more than 80 million cases and 1 million deaths in the U.S., and more than 2 million cases and 30 thousand deaths in Arizona. For more than two months in the spring, the COVID-19 transmission risk for Arizona and Pima County have been low. This week the transmission risk rose to medium level for Pima County and most of the state. (see Figures 1 and 2).

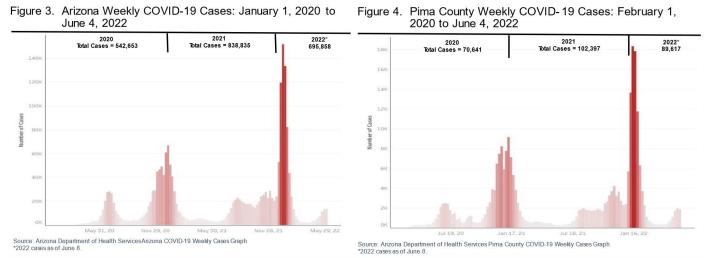
Figure 1. CDC Community Transmission Level Map: March 24, 2022 Figure 2. CDC Community Transmission Level Map: June 9, 2022

Legend 🔴 High 😑 Medium 🔵 Low

Legend 🔴 High 😑 Medium 🌘

On June 8, 2022, Johns Hopkins reports 533,667,432 total cases and 6,304,835 deaths associated with COVID-19 in the world. There has been an increase of 2,944,393 cases during the past week (June 2 to 8). The U.S. has 85,214,036 cases and 1,010,520 deaths. In the previous week, there has been an increase of 769,046 cases.

The Arizona and Pima County weekly cases have been rising (see Figures 3 and 4). The United States 7-day positivity rate is 13.52% (CDC – June 8). On May 29, the state and county positivity rates were 23% and 21%, respectively (AzDHS).



Tables 1 and 2 show the state and county four-week COVID case, hospitalization, and death numbers. The state and county cases are rising, but hospitalizations and deaths are low.

Table 1. Arizona Total and Weekly Numbers	of COVID-19 Cases	Hospitalizations, and Deaths
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Date	Total Cases	Weekly Case	Total Hospital	Weekly Hospital	Total Deaths	Weekly Deaths
05-18-2022	2,038,129	7,204	109,820	164	30,259	29
05-25-2022	2,049,627	11,498	110,029	209	30,299	40
06-01-2022	2,062,669	13,042	110,202	173	30,332	33
06-08-2022	2,077,346	14,677	110,587	385	30,372	40

Source: Arizona Department of Health Services COVID-19 Dashboard. Arizona 2021 population est. is 7,285,370, July 1, 2021 – Arizona OEO.

Date	Total Cases	Weekly Case	Total Hospital	Weekly Hospital	Total Deaths	Weekly Deaths
05-18-2022	256,778	1,090	12,136	20	3,854	4
05-25-2022	258,470	1,692	12,155	19	3,859	5
06-01-2022	260,455	1,985	12,172	17	3,864	5
06-08-2022	262,655	2,200	12,225	53	3,866	2

Source: Arizona Department of Health Services COVID-19 Dashboard. Pima County 2021 population est. is 1,058,318, July 1, 2021 – Ariz. OEO.

As more people have COVID immunity (vaccine and natural), the numbers of severe cases, hospitalizations, and deaths will stay low. Those who are immune compromised, have severe medical conditions, adult 65 and older, work in high-risk settings, and are obese have the highest risk of getting a severe case and need to be fully vaccinated. High risk vaccinated people whose vaccine protection is waning need to get booster shots to extend their immunity protection. The U.S. has been tracking several active variants There are Omicron BA.2.12.1, BA.4 and BA.5 case surges in the U.S.; the surges have moved westward.

There are more than 11.53 billion vaccine doses administered in the world (Johns Hopkins – June 8). The CDC reports 258,881,611 individuals (78.0% of the U.S. population) receive 1-2 vaccine shots. There are 221,567,092 (66.7% of population) who are fully vaccinated. 91.2% of the senior ($65\geq$) population (49,970,654) are fully vaccinated, 34,843,783 (69.7%) received their first booster, and 10,517,321 (30.2%) received their second booster.

Arizona has administered 11.84 million COVID-19 vaccine doses (AzDHS). There are 4,422,763 (60.7%) in Arizona and 698,514 (66.0%) in Pima County who are fully vaccinated. 108.6 percent in the state and 106.3 percent in the county adults 65 and older have received 1 or 2 vaccine shots.

Even though the vaccine reduces the risk of getting a severe COVID case, one can still get the virus. Staying healthy will keep your immunity level high and will reduce the risk of getting a severe case. You should maintain social distancing and wear a N95 or multi-layer face mask in high COVID-19 risk situations (e.g., indoor low ventilated places with large crowds of people).

Both Pfizer and Moderna have new COVID-19 vaccines (effective against Omicron and other variants) in Phase 3 Clinical Trials. The fourth U.S. vaccine Novavax (Nuvaxivud) is under reviewed for approval by the Food and Drug Administration (FDA). This week, the FDA advisory committee recommended approval of the vaccine.

It is expected that there will be a summer case surge in Arizona and Pima County similar to the 2020 and 2021 surges. Even with the surge, the numbers of severe COVID-19 cases and deaths in Arizona and Pima County will be low because of the high level of population immunity and the availability of drugs for treating the virus.

Be safe, and stay healthy, calm, and positive.