

Arizona and COVID-19: Fall 2022

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Arizona's COVID-19 summer case surge is over. It is expected the case numbers in early fall will be low, while the numbers in late fall will be higher. On September 22, the CDC reports Arizona and Pima County are at low-risk transmission levels (see Figures 1 and 2). Pima County has had low-risk transmission levels since August 11.

Figure 1. CDC Community Transmission Level Map: September 15, 2022

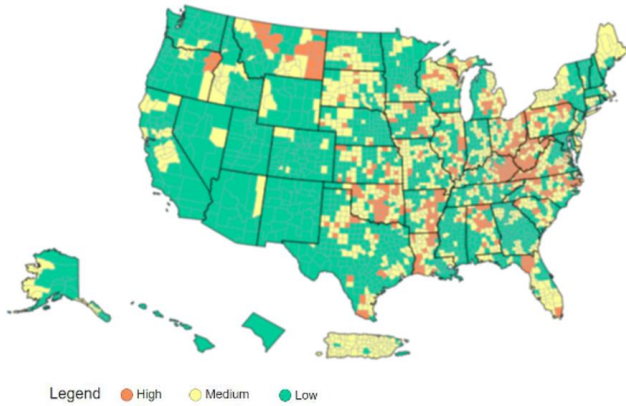
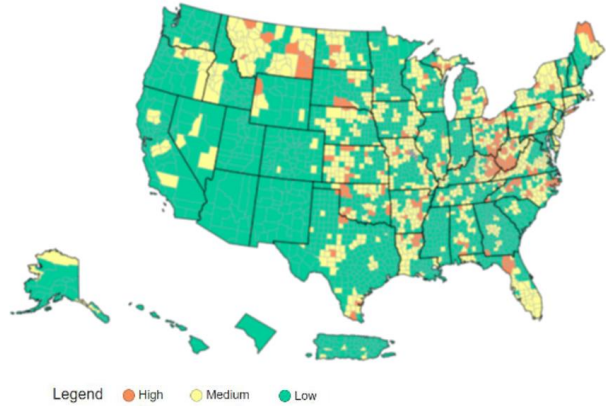


Figure 2. CDC Community Transmission Level Map: September 22, 2022



The Arizona and Pima County weekly case numbers are declining as shown on Figures 3 and 4. The United States 7-day positivity rate is 10.81% (CDC – September 21). On September 11, the state and county positivity rates were 10% and 11%, respectively (AzDHS).

Figure 3. Arizona Weekly COVID-19 Cases: January 1, 2020 to September 17, 2022

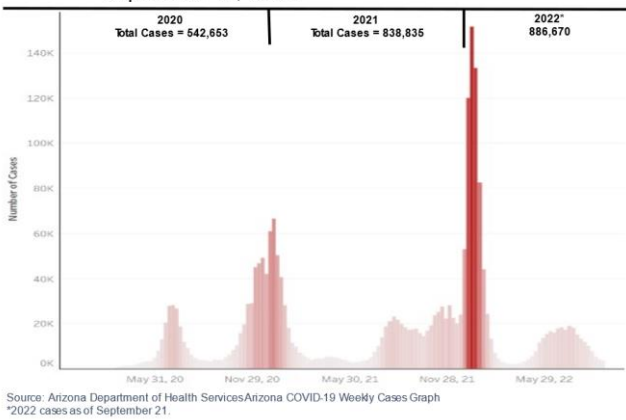
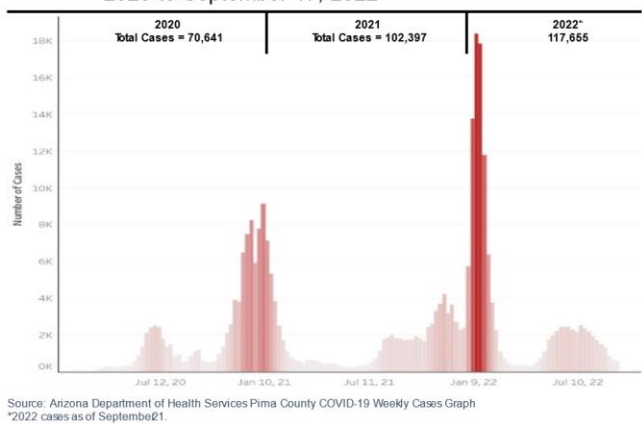


Figure 4. Pima County Weekly COVID-19 Cases: February 1, 2020 to September 17, 2022



On September 21, 2022, Johns Hopkins reports 613,459,898 total cases and 6,531,491 deaths associated with COVID-19 in the world. There has been an increase of 3,109,817 cases during the past week (September 15 to 21). The U.S. has 95,874,591 cases and 1,055,195 deaths. In the previous week, there has been an increase of 384,096 cases.

Tables 1 and 2 show Arizona and Pima County four-week COVID case, hospitalization, and death numbers. The state and county cases have been fluctuating. The numbers of deaths remain low.

Table 1. Arizona Total and Weekly Numbers of COVID-19 Cases, Hospitalizations, and Deaths

Date	Total Cases	Weekly Case	Total Hospital	Weekly Hospital	Total Deaths	Weekly Deaths
08-31-2022	2,254,374	8,661	116,462	555	31,114	67
09-07-2022	2,258,040	3,666	116,954	492	31,162	48
09-14-2022	2,264,159	6,119	117,341	387	31,244	82
09-21-2022	2,268,158	3,999	117,625	284	31,326	82

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

Table 2. Pima County Total and Weekly Numbers of COVID-19 Cases, Hospitalizations, and Deaths

Date	Total Cases	Weekly Case	Total Hospital	Weekly Hospital	Total Deaths	Weekly Deaths
08-31-2022	288,089	1,588	12,965	64	3,967	10
09-07-2022	288,749	660	13,039	74	3,972	5
09-14-2022	289,898	1,149	13,087	48	3,983	11
09-21-2022	290,693	795	13,129	42	3,996	13

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

On September 21, the CDC reports 224,980,931 (67.8% of population) who completed their primary series (previously – fully vaccinated). 92.3% of the senior (65 \geq) population (50,576,510) who completed their primary series, 35,864,236 (70.9%) received their first booster, and 15,335,531 (42.8%) received their second booster. There are 4,536,654 (62.3%) in Arizona and 717,778 (67.8%) in Pima County who are fully vaccinated (AzDHS – September 21).

New vaccine options are available. Those who are unvaccinated and reluctant to get the messenger RNA vaccines (Pfizer/BioNTech Comirnaty and Moderna Spikevax), Novavax (Nuvaxivud) offers another vaccine option that uses inactive virus to stimulate antibody production. On August 31, the Food and Drug Administration approved both Pfizer and Moderna new bivalent COVID-19 vaccines that are effective against both the original virus and Omicron BA.4 and BA.5 variants. If your vaccine protection is waning you needed to get the new vaccine to extend your immunity protection. Those high risk in getting a severe COVID case need to get their flu shot.

Many still have anxiety/depression/stress associated with the virus. The causes for the mental anguish are the uncertainty of the virus, constant emergent of new variants, vaccine limitations, the lack control of the situation, and no end to the virus. We know most cases of the virus are *mild* or *moderate*. Few cases are *severe* (require hospitalization and/or result in death). Vaccines reduce the risks of getting a severe case, and therapeutics are used to treat these cases.

There are several things you can do to reduce your chances of getting a severe case of the virus. Staying healthy will keep your immunity level high and will reduce the risk of getting a severe case. You can reduce your exposure to the COVID-19 by maintaining social distancing and avoid touching your nose, mouth, and eyes with uncleaned hands. Potentially contaminated surfaces or objects need to be cleaned and disinfected. During case surges, you need to 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), make sure there is good ventilation and air circulation at home, change your home air filter(s) often, and stay home if you have the virus.

Even with the periodic case surges, the numbers of severe COVID-19 cases and deaths in Arizona and Pima County remain low because of the high level of population immunity, the availability of drugs in treating the virus, and most Omicron variant cases are mild or moderate.

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