

Together We Thrive

Arizona and COVID-19: Winter 2022

Dr. Howard J. Eng
Associate Professor Emeritus in Public Health (retired)

During the past two winters, there have been COVID-19 case surges. It is expected there will be case surges this winter. On December 1, CDC reports Arizona has six counties at high-risk transmission level including Pima County and nine at medium-risk transmission level (see Fig. 2).

Figure 1. CDC Community Transmission Level Map: November 24, 2022

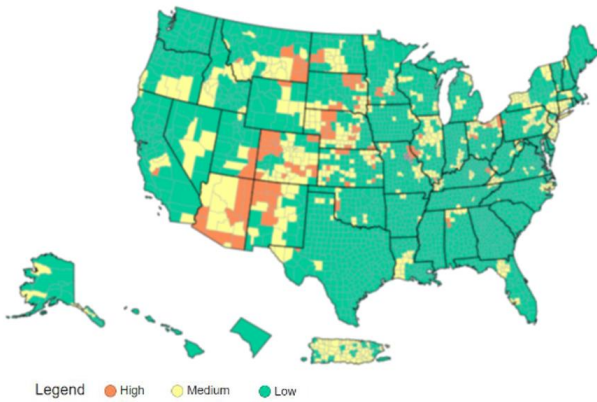
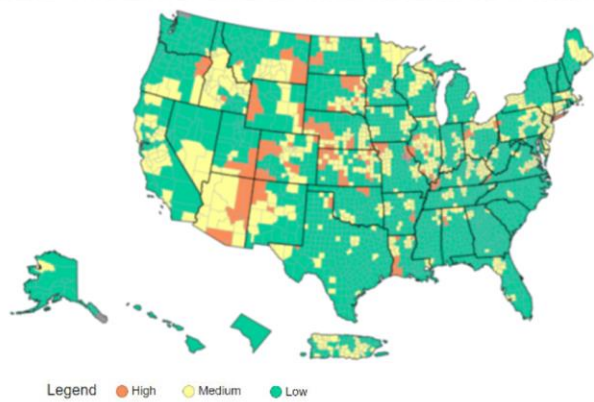


Figure 2. CDC Community Transmission Level Map: December 1, 2022



The Arizona and Pima County weekly case numbers are rising (see Figures 3 and 4). The United States 7-day positivity rate is 10.31% (CDC – November 30). On November 20, the state and county positivity rates were 25% and 27%, respectively (AZDHS).

Figure 3. Arizona Weekly COVID-19 Cases: January 1, 2020 to November 26, 2022

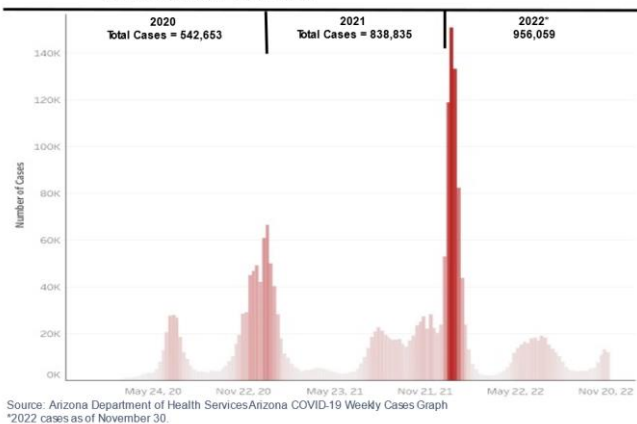
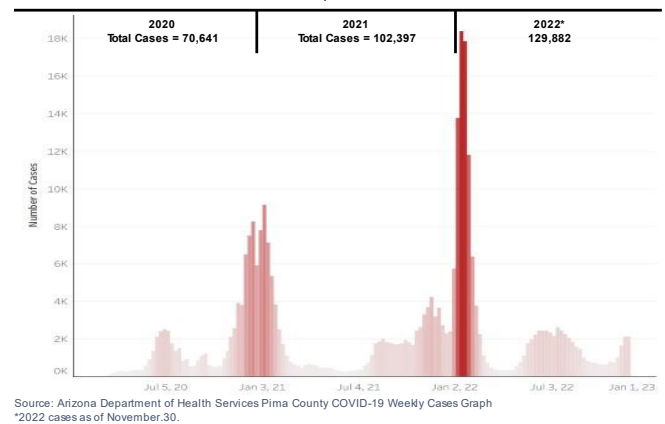


Figure 4. Pima County Weekly COVID-19 Cases: February 1, 2020 to November 26, 2022



On November 30, 2022, Johns Hopkins reports 643,257,096 total cases and 6,634,937 deaths associated with COVID-19 in the world. There has been an increase of 3,679,651 cases during the past week (November 24 to 30). The U.S. has 98,788,140 cases and 1,080,444 deaths. In the previous week, there has been an increase of 284,678 cases.

Tables 1 and 2 show Arizona and Pima County four-week COVID case, hospitalization, and death numbers. Most cases are *mild* or *moderate* and a few cases are *severe* (require hospitalization

and/or result in death). The state and county cases are rising, but the number of cases has a small dropped during Thanksgiving week. The numbers of deaths are 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 |
|------------|-------------|-------------|----------------|-----------------|--------------|---------------|
| 11-09-2022 | 2,300,375 | 7,360 | 119,789 | 463 | 31,613 | 40 |
| 11-16-2022 | 2,311,150 | 10,775 | 120,214 | 425 | 31,647 | 34 |
| 11-23-2022 | 2,324,560 | 13,410 | 120,907 | 693 | 31,709 | 62 |
| 11-30-2022 | 2,337,547 | 12,987 | 121,942 | 1,035 | 31,751 | 42 |

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 |
|------------|-------------|-------------|----------------|-----------------|--------------|---------------|
| 11-09-2022 | 296,396 | 1,081 | 13,434 | 61 | 4,040 | 7 |
| 11-16-2022 | 298,146 | 1,750 | 13,473 | 39 | 4,052 | 12 |
| 11-23-2022 | 300,594 | 2,448 | 13,561 | 88 | 4,058 | 6 |
| 11-30-2022 | 302,920 | 2,326 | 13,689 | 128 | 4,060 | 2 |

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

On November 30, the CDC reports 228,369,460 (68.8% of population) who completed their primary series (previously – fully vaccinated). 93.8% of the senior (65 \geq) population (51,370,466) who completed their primary series, and 17,855,207 (32.6%) received their bivalent booster. There are 4,597,758 (63.1%) in Arizona and 727,494 (68.7%) in Pima County who are fully vaccinated (AzDHS – November 30).

Vaccines reduce the risks of getting a severe case. 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 and offers a third COVID-19 booster option. Both Pfizer and Moderna new bivalent COVID-19 vaccines include 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.

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.

The new *Together We Thrive* website (www.togetherwethrivecovid19.com) will provide weekly updates on Arizona and counties transmission risk levels, state and Pima County weekly cases trends, and weekly COVID-19 health tips will be operational after December 15, 2022. The website also identifies COVID-19 resources and where to go for services and supports.

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