



Board of Supervisors Memorandum

June 9, 2020

Update and Actions on the COVID-19 Public Health Emergency

Introduction

I previously updated the Board of Supervisors regarding current activities and issues related to the COVID-19 pandemic. This is the fifth formal update to the Board. These updates will continue; however, the frequency will decrease to monthly, provided there is no significant rate of change in the COVID-19 infections, deaths or stress on the healthcare system.

I. COVID-19 Infections, Deaths, Hospitalizations and Emergency Room Visits

Our public agency has been tracking key information each week since the beginning of the COVID-19 pandemic. We are now at Week 23. Attachment 1 shows eight graphs that reflect important data regarding COVID-19.

Page 1 of the attachment shows the infections and/or cases by week as well as the number of deaths. As can be seen in this data, Week 16 and Week 20 produced the highest number of weekly cases while Weeks 15 and 16 produced the highest number of deaths. The number of deaths has declined substantially over the last three weeks (Weeks 20, 21 and 22). However, Week 23 shows an increase in cases, which may relate to Memorial Day weekend.

Page 2 of the attachment is simply the COVID-19 cases by week and Page 3 shows these cases by day with large variability. This is the reason we choose to report cases by week rather than by day. It should be noted that adjustments will always occur for the last week of reported data.

Page 4 shows the deaths by date of death. Over the week, there have been very few deaths due to COVID-19.

Page 5 shows the hospitalizations of COVID-19 by week. Week 15 indicates the peak of hospitalizations at 69 hospitalizations. These numbers have been steadily declining in each successive week, as Week 22 shows 19 hospitalizations. The only two lower hospitalization weeks were Weeks 11 and 12 of the data.

Page 6 shows hospitalizations by day with some variation.

Page 7 demonstrates the weekly percent of Emergency Room and in-patient visits with COVID-19 like illnesses. Page 8 shows the same information for all of Arizona.

In summary, this information reflects what may be a spike in infection rates, but with declining death rates and declining hospitalizations, emergency room and in-patient visits due to COVID-19. This information has our public health officials cautiously optimistic that we are on the downward slope of COVID-19 infections. It is too early to determine if the relaxation of any of the stay-at-home orders or other activities will cause any temporary spike in COVID-19 infections. Please note this data becomes more reliable as time passes. Adjustments in the data continues to be made by the State. Data three weeks old is fairly reliable. Data from last week is not.

Reported infections and deaths from State data in Pima County is of some concern based on the infections of June 2, 3 and 4. They are highlighted below:

Date	Number of New COVID-19 Cases	Number of Deaths	COVID-19 Testing in Pima County
June 2, 2020	114	6	1,913
June 3, 2020	131	5	1,407
June 4, 2020	42	6	484

The infections listed on June 2, 2020 of 114 is this highest number of infections we have had during the entire period of the pandemic beginning on March 9, 2020. This was followed by 131 infections on June 3 with a reported number of 42 on June 4. Whether this data represents an increase in the infection rate is unknown; however, it is worth careful analysis, particularly as we continue to report infections over the next few days. We are discussing these infection reports with the State to determine if this is simply another data anomaly, similar to deaths. In addition, the number of daily tests are substantially more than in the past, which may have something to do with more infections.

At this rate, the infections per week will exceed the previous week. Therefore, it is possible to conclude that there has been an increase in infections rather than a continuing decrease in the COVID-19 infection rate. Our public health officials have been in close contact with hospitals and, at this time, are not seeing any substantial increase in hospitalization rates.

Clearly, the analysis and conclusion about where we are on the infection curve may be debatable. We will update this information on Monday, June 8, 2020.

II. COVID-19 Case Mapping

Each week, the number of COVID-19 cases are geographically mapped in Pima County. For the period ending May 30, 2020, there were 2,368 cases reported and mapped. (Attachment 2) These cases fall throughout the urban area. The reported cases are also mapped by age and color-coded as post-infection or active cases with the most recent cases

highlighted in the highest shade of red. The older cases are shaded in a lighter shade of red post infection cases are color coded blue. This provides a graphic representation of case distribution, and identifies hotspots, which is a single address that has more than five reported cases. Most of these "hotspots" are skilled nursing facilities, assisted living facilities or congregate housing such as a prison or detention facility.

Of importance, is 1,560 cases are now post-infection with each of the infection weeks having approximately a similar number of infections. May 24 through May 30 with 296 infections; May 17 through May 23 with 214 infections; May 10 through May 16 with 234 cases.

This information is also been displayed by census tract where the rate of cases is identified as well as congregate housing settings are pinpointed on the map by a green dot. In almost all cases, the congregate cases account for the darker shading in the particular census tract, indicating relative infection rates. (Attachment 2, Figure 1)

Another way to portray the information is to develop an isocline map where an equal number of cases are mapped similar to topographic mapping. The isocline map clearly indicates that the infections and geographic locations of infections are mainly influenced by congregate housing cases that occur in assisted living and skilled nursing facilities and similar congregate housing. (Attachment 2, Figure 2)

Similarly, a heat map is also shown in Attachment 2, Figure 3 and indicates the number of case infections through another graphic representation.

Perhaps, the more important graphic map of COVID-19 reported infection and cases is the graphic that removes the cases that are post-infection and focuses only on new infections. Attachment 2, Figure 4 is a map of reported cases by census tract for three weeks, May 10 through May 30. Previous hotspots identified in previous mapping are now no longer present and are not dramatically influencing the number of infections by census tract. In fact, there are many census tracts that have no reported cases. The highest number of new cases reported in is Census Tract 41.13 is due to COVID-19 outbreaks in a federal or state detention facility.

We will update this map on Monday June 8, 2020, which will reflect the spike in COVID-19 cases for Week 23.

III. Active Viral PCR Testing, Antibody Testing and Saliva Testing

a) **Polymerase Chain Reaction (PCR) Testing** - Attachment 3 shows data related to PCR testing. Attachment 3, Figure 1 shows the number of test kits requested and provided each week up to May 29, 2020. A total of 10,268 PCR test kits have been provided during this period by our public health agency.

Attachment 3, Figure 2 shows where these test kits were requested and provided by facility type. A majority of test kits were provided to long-term care, assisted living facilities, shelters and group homes. Over 80 percent of the test kits provided by Pima County went to the four facilities previously described. Attachment 3, Figure 3 shows the number of positive results by facility type that would indicate that the positive results of active viral testing came from long-term care and assisted living facilities.

Laboratory testing from our contracted private labs have conducted 10,268 tests and 70 percent of those tests were completed by one contractor, Paradigm Laboratories as well as Translational Genomics Research Institute (TGen). (Attachment 3, Figure 4) We continue to emphasize the use of Paradigm Laboratories since this laboratory has been able to provide test results to our public health agency in a timely manner, in the range of 24 to 48 hours. This timely test resulting is essential if we are to make any progress in isolating infected individuals.

b) **University of Arizona Antibody or Serology Testing** – The antibody and/or serology testing by the University of Arizona completed its first phase of the study of a pilot antibody testing of approximately equal segments of healthcare workers, first responders and the general public. They tested approximately 5,854 individuals in this first phase of the study. Their results were, out of 5,854 people, 73, or 1.25 percent tested positive. Prevalence was 0.82 percent in the community, the same as in the first responders. Front line healthcare workers were higher, at 2.1 percent and University of Arizona students the highest at 2.7 percent.

The next phase of the study is expanding throughout Arizona.

c) **Arizona State University Saliva Testing** – Arizona State University (ASU) through the Biodesign Institute has developed a saliva test. This test allows for sample collection in a more simplified version, as opposed to the now collection of the PCR test by medical personnel. In this test, an individual simply deposits saliva in a tube, the tube is sealed and sent for testing. I will be providing the Board with an Intergovernmental Agreement (IGA) with ASU the Biodesign Institute for saliva testing.

In discussions with Biodesign Institute personnel, they can process up to 3,600 samples per day, at a cost of \$100 per test. More importantly, they are developing a pooled test concept where active viral testing can be performed on much larger populations. For example, when testing 10 individuals the samples would be comingled at the laboratory and a single PCR test would be conducted on the pooled sample. If the pooled sample comes back negative, then all 10 individuals are cleared as not having the active virus. If the sample comes back positive, then all 10 individuals are individually tested for the active virus. This methodology allows us to perform sampling on a much larger population in a shorter timeframe. In

addition, the Biodesign Institute has committed to returning the sample test results, either negative or positive, within 24 to 48 hours, the timeframe, which is desirable.

We are in the process of reviewing their proposed IGA. I will place it on the Board of Supervisors agenda for approval to give our public health agency another dimension for active viral testing.

IV. Contact Tracing

On May 26, 2020, I transmitted a memorandum to the Board regarding our expanded contact tracing program for the County's public health agency. This plan is to expand our capabilities in contact tracing and to add additional full time staff to this function. Presently, approximately 25 individuals perform this function. The goal is to more than double this number and contract with others such as federally qualified healthcare centers, including El Rio, Marana Healthcare, Desert Senita Community Health Center and United Healthcare. Our new Health Department Director, Dr. Terry Cullen, is spearheading the effort to substantially strengthen our contact tracing activities. For your information, I have included previous communication on this subject as well as the contact tracing plan proposed by Dr. Cullen as Attachment 4 to this report.

V. Personal Protective Equipment and Disinfection and Cleaning Supplies

Obtaining sufficient supplies continues to be somewhat of a challenge, however, some supply chains have begun to loosen up. I am enclosing as Attachment 5 an overall report related to the acquisition of supplies of both medical and other. Early in the pandemic staff developed a tool for quickly assessing needed medical and non-medical supplies at priority facilities such as, adult care, skilled nursing and long-term care facilities. This system called Survey 1-2-3 is an automated way of making supply requests and keeping track of inventories on-hand as well as dispersals to agencies requesting the supplies. The attachment indicates the number of requested items by period since late March through April, May and now into June. The two most difficult items to obtain have been isolation gowns and N-95 masks. In the last two weeks, our staff have been able to meet the needs of agencies on almost all items. We are now receiving 10,000 isolation gowns a week and have begun to receive some N-95 masks. Also included in the attachment is the distribution breakout for adult care, skilled nursing facilities and similar congregate housing sites. The information confirms that our priorities for medical supply distribution has been in those facilities most susceptible to infection, serious illness and/or death of the individuals within the facility.

VI. Downtown Tucson Partnership Assistance in Activating Downtown Establishments Including Restaurants and Other Businesses

Pima County is the largest downtown employer; hence, it is in our interest to ensure the downtown has appropriate and sufficient services to provide restaurant and entertainment venues for our employees. During the stay-at-home order, the downtown area was

effectively a ghost town with very few employees present on any given day. Almost all business were closed or had severe restrictions on sales volumes. Most restaurants that managed to stay open in the downtown area were limited to pick up or delivery services.

Just when the stay-at-home order was lifted and restaurants were beginning to feel comfortable with reopening, the downtown area was hit with significant vandalism on the night of May 29 and May 30. This vandalism included a number of broken entry doors and windows, extensive graffiti, dumpster fires and other acts of vandalism that has set back the reopening of downtown Tucson businesses and restaurants.

Pima County established Pima County Back-to-Business (PCB2B) to develop a framework of standards to assist the public and community, commercial and business organizations as they begin to reopen and, eventually, return to regular operations.

The Downtown Tucson Partnership (DTP), as an organization that represents property owners and businesses, non-profits, arts, cultural and historical organizations is uniquely qualified to assist with the work of PCB2B.

Pima County has engaged DTP to develop and help implement a replicable and scalable program designed to assist businesses in Pima County in successfully conducting or restoring business amid the closures and new practices necessitated by the COVID-19 pandemic. The program design is expected to consist of specific actions, opportunities and/or activities eligible for full reimbursement of federal CARES Act funds that can be effectively implemented through the engagement of outside contractors, and completed by December 30, 2020. DTP is and shall be through December 30, 2020, a sub recipient of Pima County's federal CARES Act funds.

While delineated in three initial phases outlined below, the primary work of the DTP shall include:

- Distribution of Personal Protection Equipment (PPE) materials to businesses and general public within the Business Improvement District (BID);
- Serving as our liaison to businesses with educational resources and training/certification for COVID-19 precautions and guidelines (provided by County or other County approved agency);
- Increased sanitation and safety presence downtown educating the public and businesses regarding social distancing and appropriately cleaning public touch points; and
- In cooperation with the County's Communications consultants and workgroup, enhance and expand the Marketing Campaign to ensure public messaging includes but is not limited to all DTP partners via online, email blast, public signage on trash compactors, street banners, electronic signage, mass postal mailing, cross-

promotional campaigns among downtown businesses, and public service announcements.

VII. Coronavirus Relief Fund

The federal CARES Act provided direct federal appropriations to population centers in the State that had in excess of 500,000. The City of Phoenix, Mesa and Tucson received a direct appropriation from the CARES Act as well as Maricopa and Pima Counties.

Early in the pandemic, the County undertook a number of actions to prepare the community for the pandemic, protect the most at-risk population and provide a number of measures in response to the pandemic. These are enumerated in Attachment 6 and are a general summary of major activities undertaken by the County to date. These are not all inclusive of all the actions that have occurred but a fair representation of a majority of our efforts during this pandemic.

Pima County's appropriation was in the amount of \$87,107,597.40. The language and guidance regarding authorized expenditures included language that clearly indicated it was for unbudgeted expenses and expenses related directly to COVID-19. It is this language that has guided our proposed utilization of COVID-19 federal funds from the CARES Act. We have been cautious about expanding expenditures beyond those originally authorized in the Act. A number of clarifying guidance has been received by the US Treasury along with a number of Frequently Asked Questions documents that tend to provide additional guidance for fund expenditures. Based on my experience with Federal grant audits they care little about FAQ guidance and rely entirely on the intent of Congress in the legislation.

Our expenses that will be reimbursed include pandemic leave or other authorized leaves by the Families First Coronavirus Response Act HR 6201. As you will recall pandemic leave was utilized primarily during the Governor's stay-at-home isolation order. Hence, these leaves are eligible for reimbursement. In addition, the County has spent considerable funding in active virus PCR testing, the acquisition of active virus PCR test kits as well as the acquisition of medical grade personal protective equipment (PPE). These are all clearly reimbursable expenses.

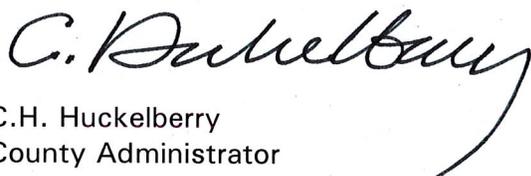
Early in the daily discussions with city and town mayors, we indicated it was unclear as to whether smaller jurisdictions within a county that received a direct appropriation would receive funding from the State or whether funding would be provided by the County to those smaller jurisdictions within Pima County. We indicated that if these jurisdictions did not receive a State appropriation, the County would provide reimbursement for unbudgeted COVID-19 expenses as originally outlined in the CARES Act Legislation. The Board passed a resolution urging the Governor to distribute appropriate funding provided by the CARES Act directly to the State to smaller counties, cities and towns. On May 27, 2020, the State announced available funding amounts to smaller cities and towns in Pima County for the following amounts:

The Honorable Chairman and Members, Pima County Board of Supervisors
Re: **Update and Actions on the COVID-19 Public Health Emergency**
June 9, 2020
Page 8

City/Town	AZCares Fund Allocation
Marana	\$5,628,966
Oro Valley	\$5,286,153
Sahuarita	\$3,607,337
South Tucson	\$656,119

Therefore, the County will no longer need to provide this funding to those jurisdictions. In addition, the federal guidance also indicates it is clearly inappropriate to have both the County and State provide funding to these jurisdictions for the original purposes of the Act the federal government views this a double dipping. Hence, even if we continued to desire to make contributions to smaller cities and towns, the guidance appears to prohibit such.

Sincerely,



C.H. Huckelberry
County Administrator

Attachments

CHH/anc – June 4, 2020

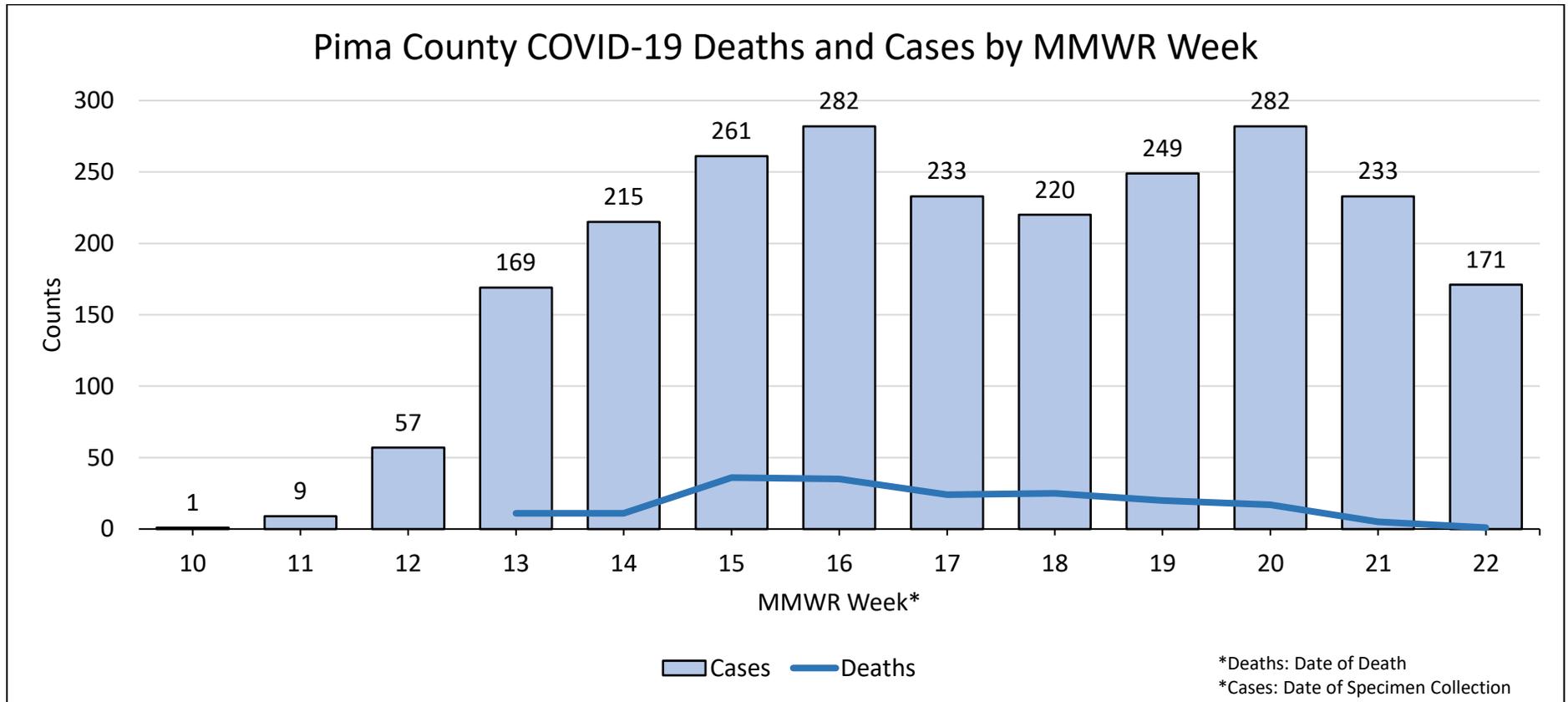
- c: Jan Leshar, Chief Deputy County Administrator
Francisco García, MD, MPH, Deputy County Administrator & Chief Medical Officer,
Health and Community Services
Carmine DeBonis, Jr., Deputy County Administrator for Public Works
Dr. Terry Cullen, Public Health Director, Pima County Health Department

ATTACHMENT 1



Pima County COVID-19 Deaths, Cases, and Hospitalizations Report

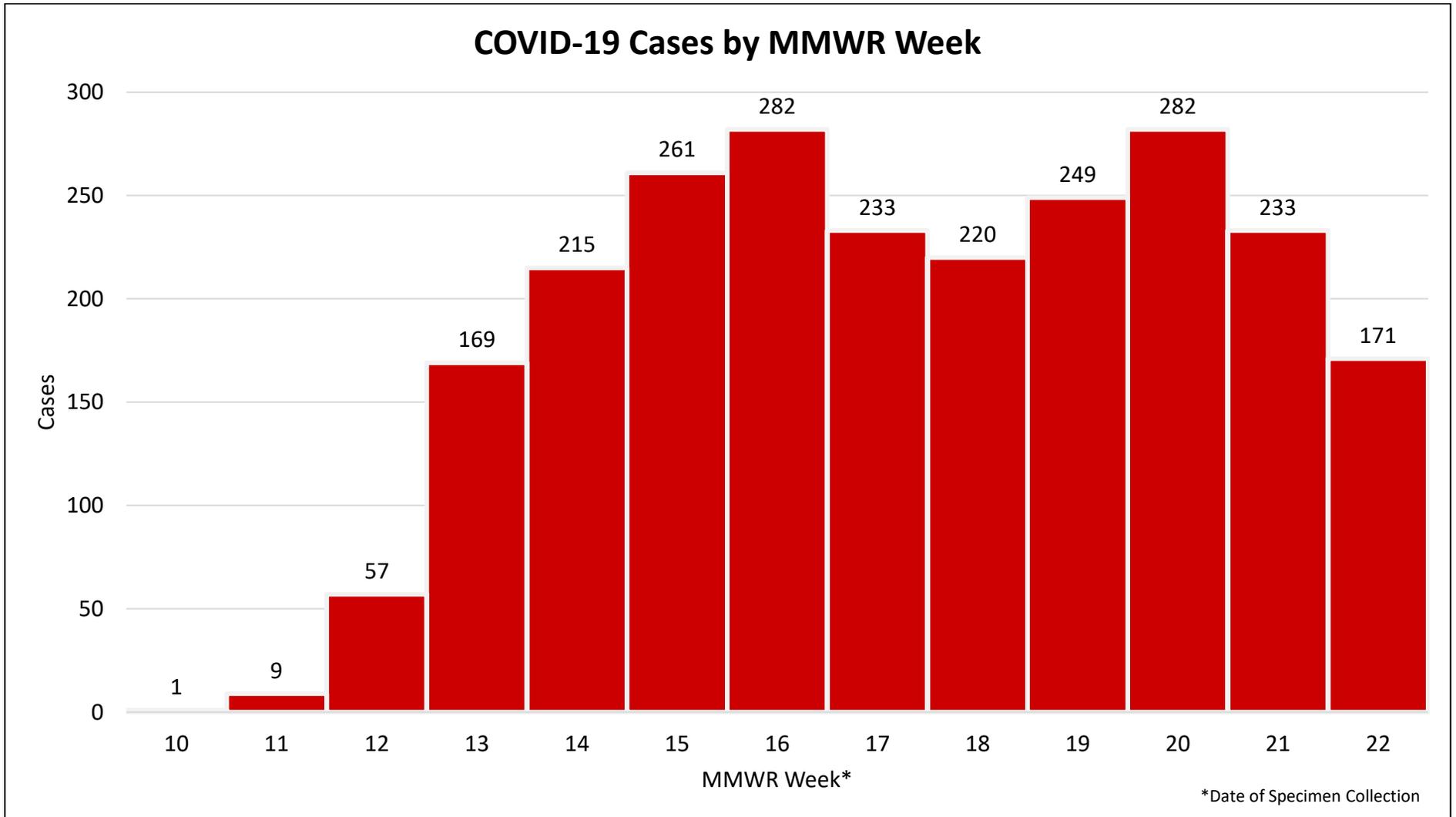
Chart 1: Pima County COVID-19 deaths shown with COVID-19 Cases by MMWR week



****Note:** Recent deaths or illnesses in the last 4-7 days may not be reported yet.

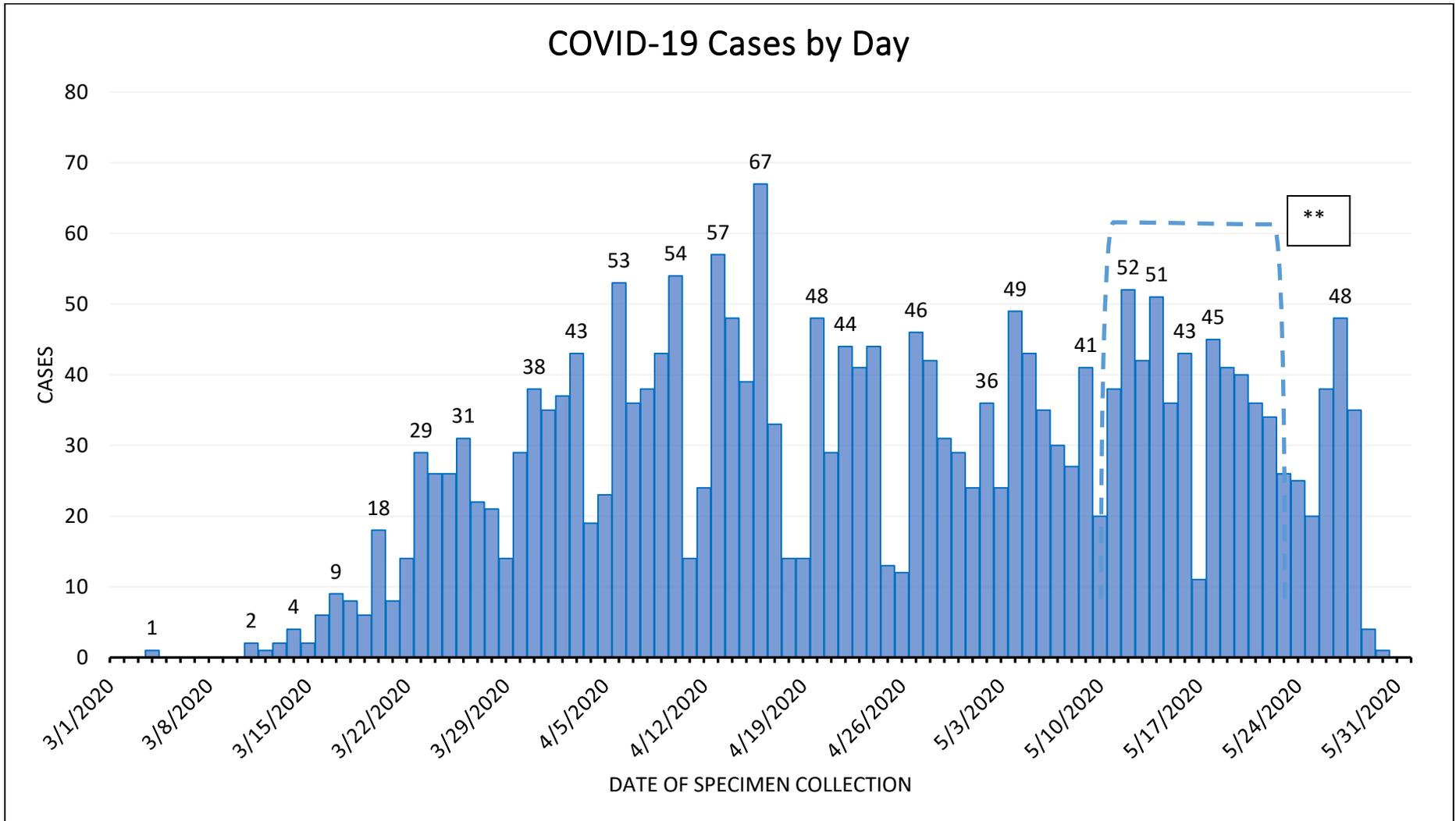
Week 10: 3/1/20-3/7/20 — **Week 11:** 3/8/20-3/14/20 — **Week 12:** 3/15/20-3/21/20 — **Week 13:** 3/22/20-3/28/20 — **Week 14:** 3/29/20-4/4/20—**Week 15:** 4/5/20-4/11/20 —**Week 16:** 4/12/20-4/17/20 — **Week 17:** 4/19/20-4/25/20 — **Week 18:** 4/26/20-5/2/20—**Week 19:** 5/3/20-5/9/20—**Week 20:** 5/10/20-5/16/20—**Week 21:** 5/17/20-5/23/20—**Week 22:** 5/24/20-5/30/20

Chart 2: Pima County COVID-19 cases by MMWR Week



***Note:** Illnesses in the last 4-7 days may not be reported yet

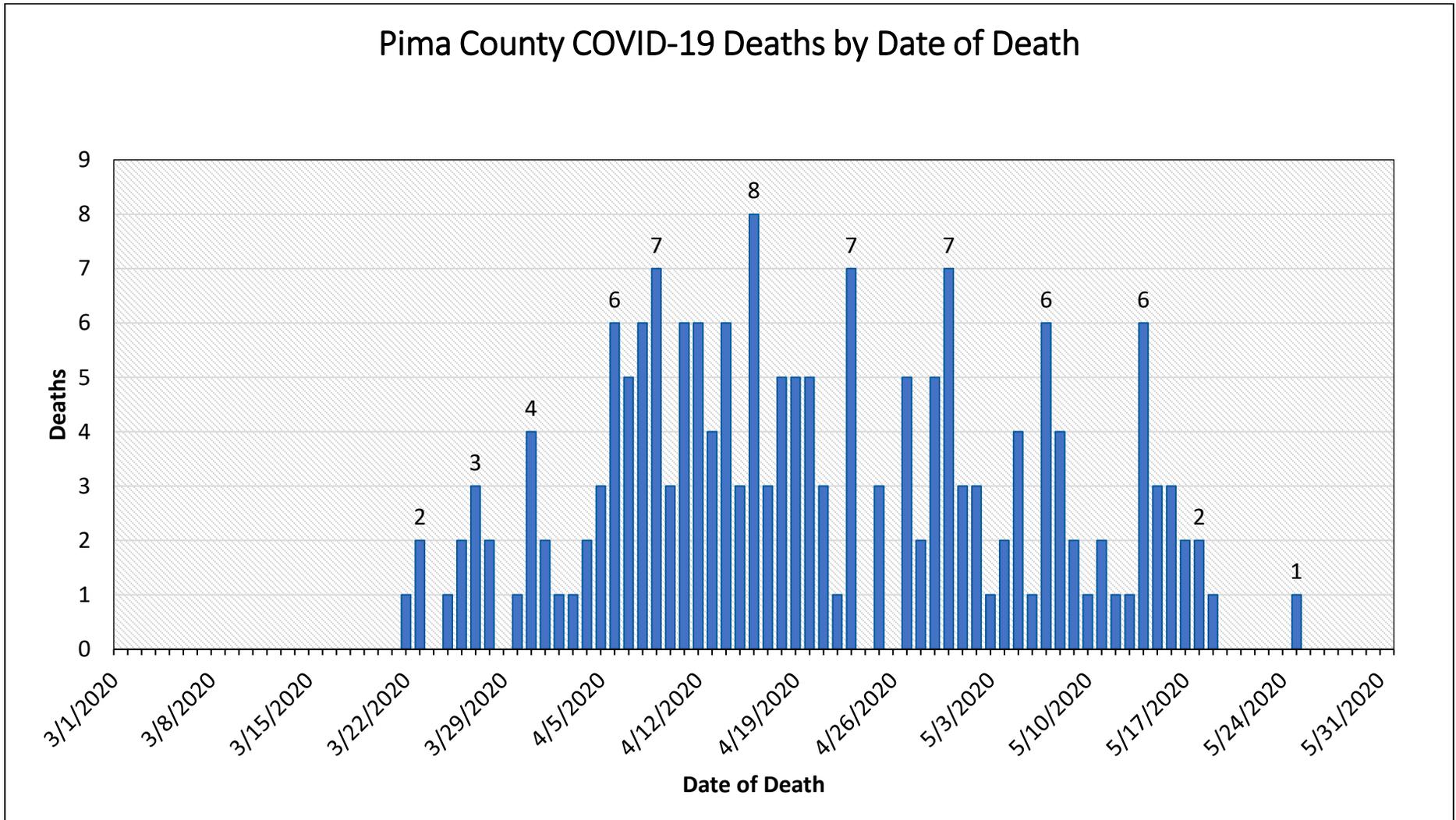
Chart 3: Pima County COVID-19 cases by date of specimen collection from March 3, 2020 to May 31, 2020



***Note:** Illnesses in the last 4-7 days may not be reported yet

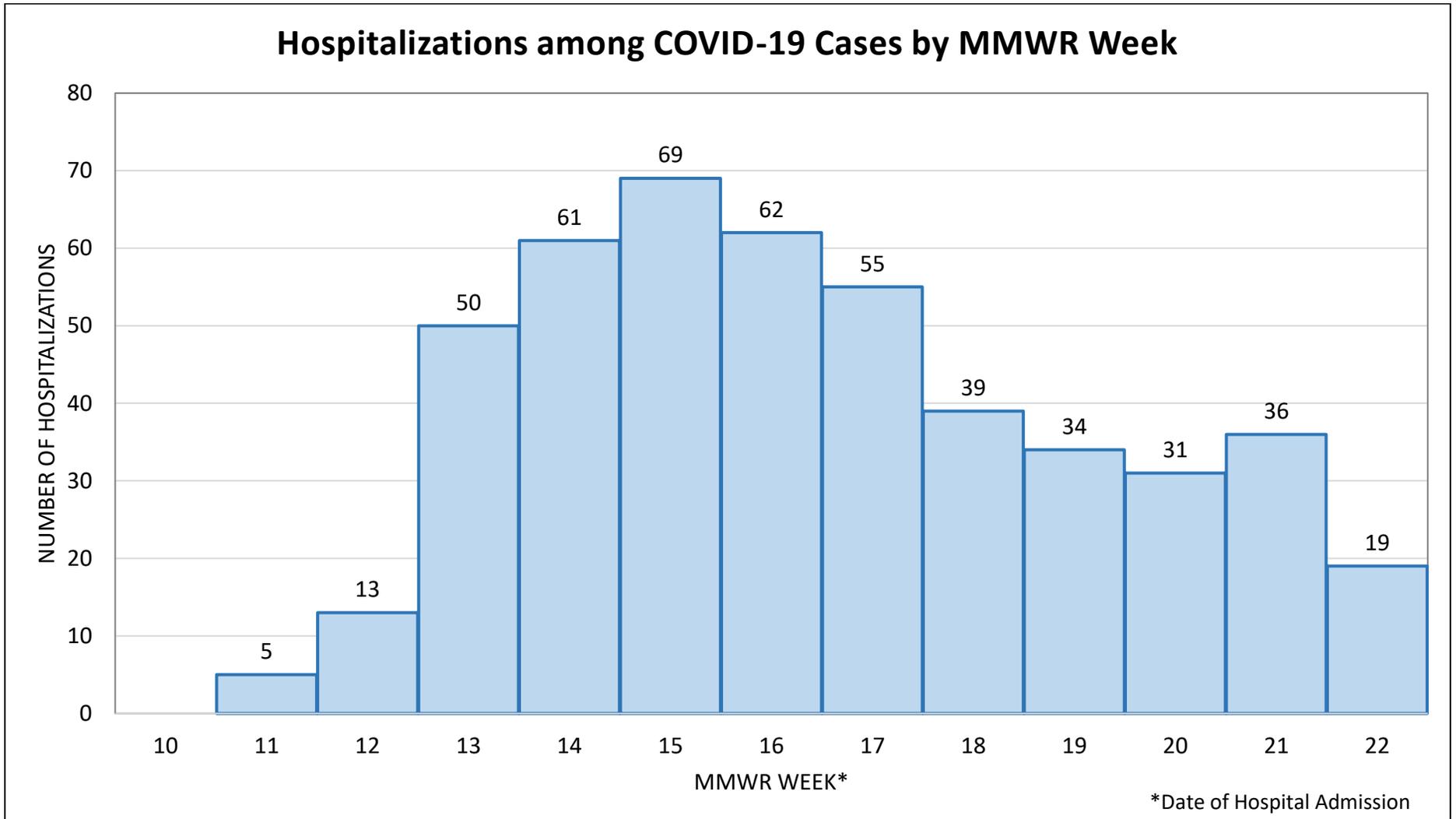
**MMWR Weeks 20 and 21: 5/10/20—5/23/20

Chart 4: Pima County COVID-19 deaths by date of death: March 22, 2020 to May 31, 2020



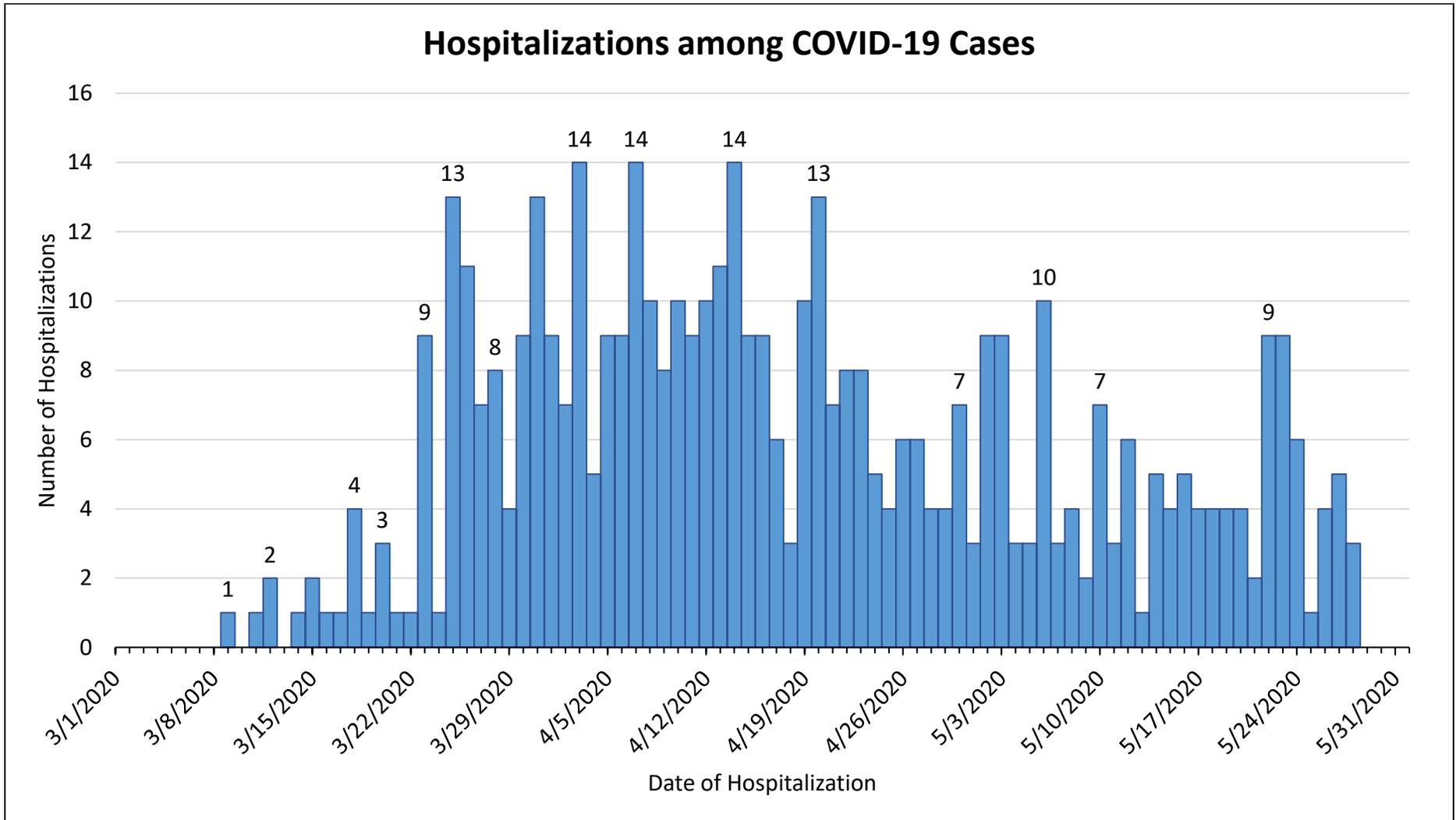
****Note:** Recent deaths may not be reported yet.

Chart 5: Pima County COVID-19 cases that are hospitalized by MMWR Week



****Note:** Recent hospitalizations may not be reported yet.

Chart 6: Pima County COVID-19 hospitalizations by date of hospital admission: March 9, 2020 to May 31, 2020



****Note:** Recent hospitalizations may not be reported yet.

Chart 7: PCHD Weekly Percent (%) of COVID-Like-Illness (CLI) Visits

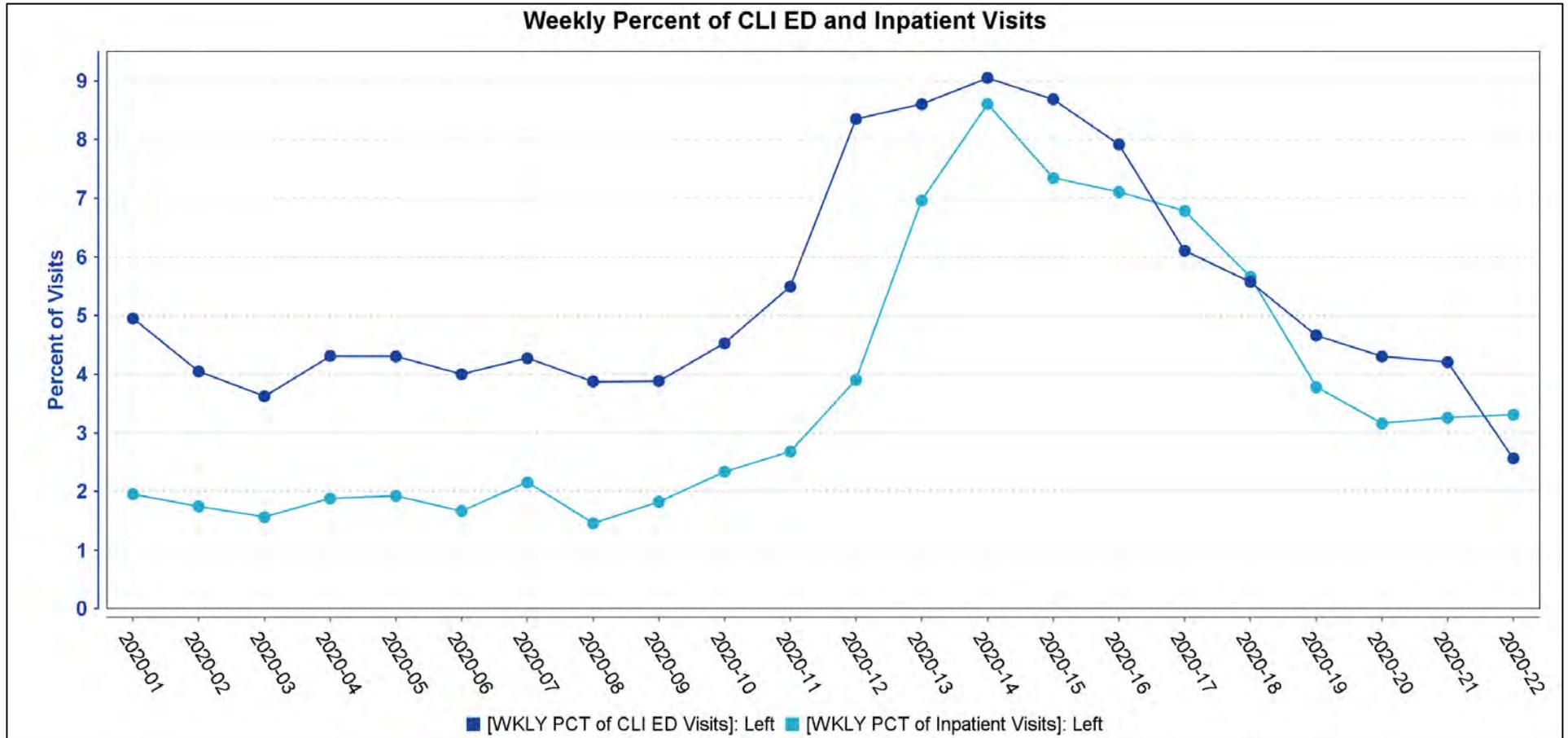
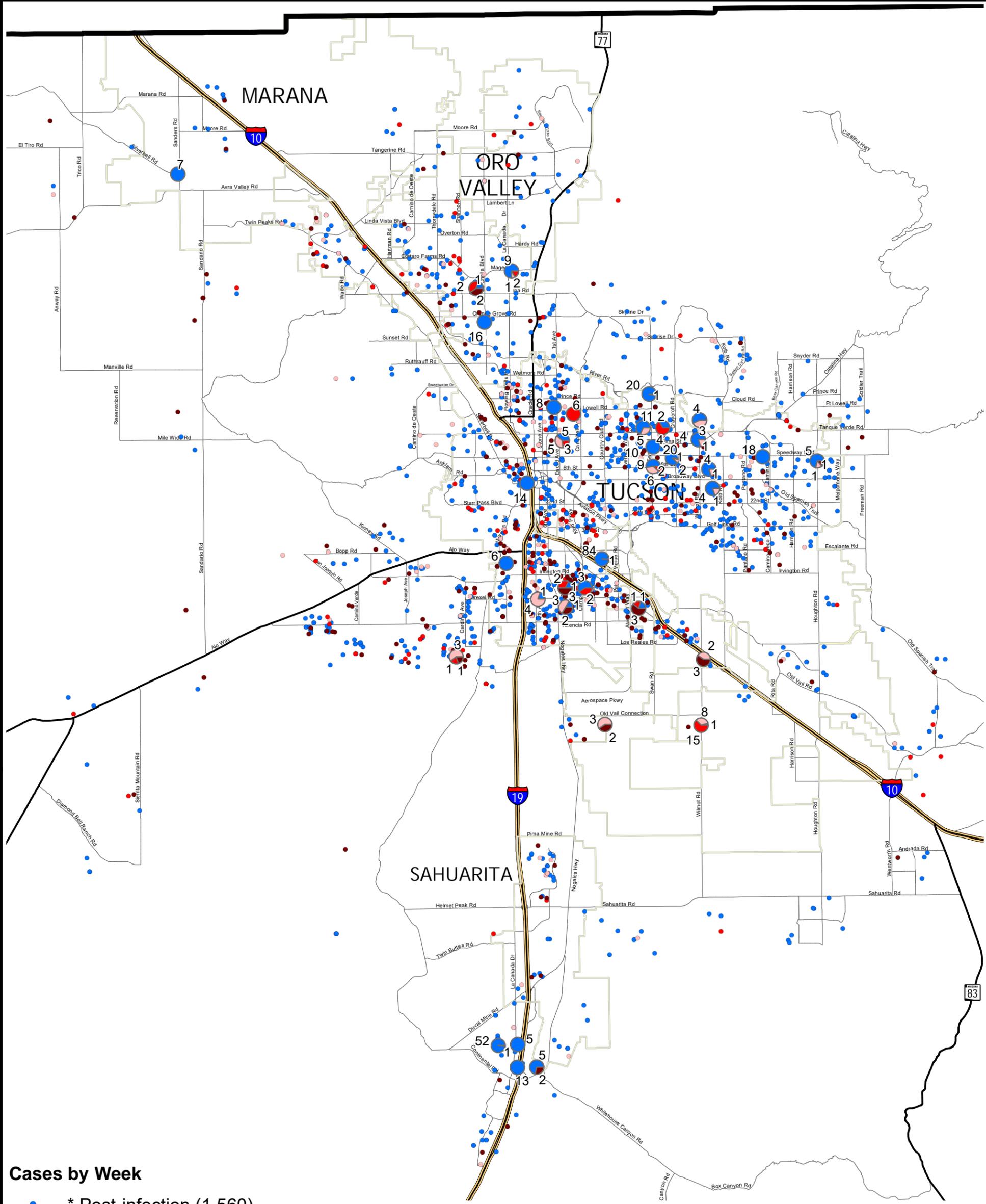


Chart 8: ADHS Dashboard for Arizona Weekly Percent (%) of COVID-Like-Illness (CLI) Visits Inpatient VS Emergency Department (ED) Visits



ATTACHMENT 2



Cases by Week

- * Post-infection (1,560)
- 5/10 thru 5/16 (234)
- 5/17 thru 5/23 (214)
- 5/24 thru 5/30 (296)

Locations where Cases >= 5

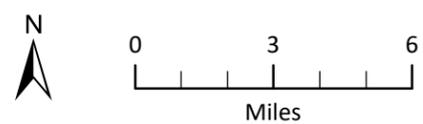
- * Post-infection
- 5/10 thru 5/16
- 5/17 thru 5/23
- 5/24 thru 5/30

* Over 21 days since identified

NOTE:
55 Locations not mapped due to invalid address, PO Box, Not in Pima County etc.

COVID-19

2368 Cases Reported between March 1 and May 30

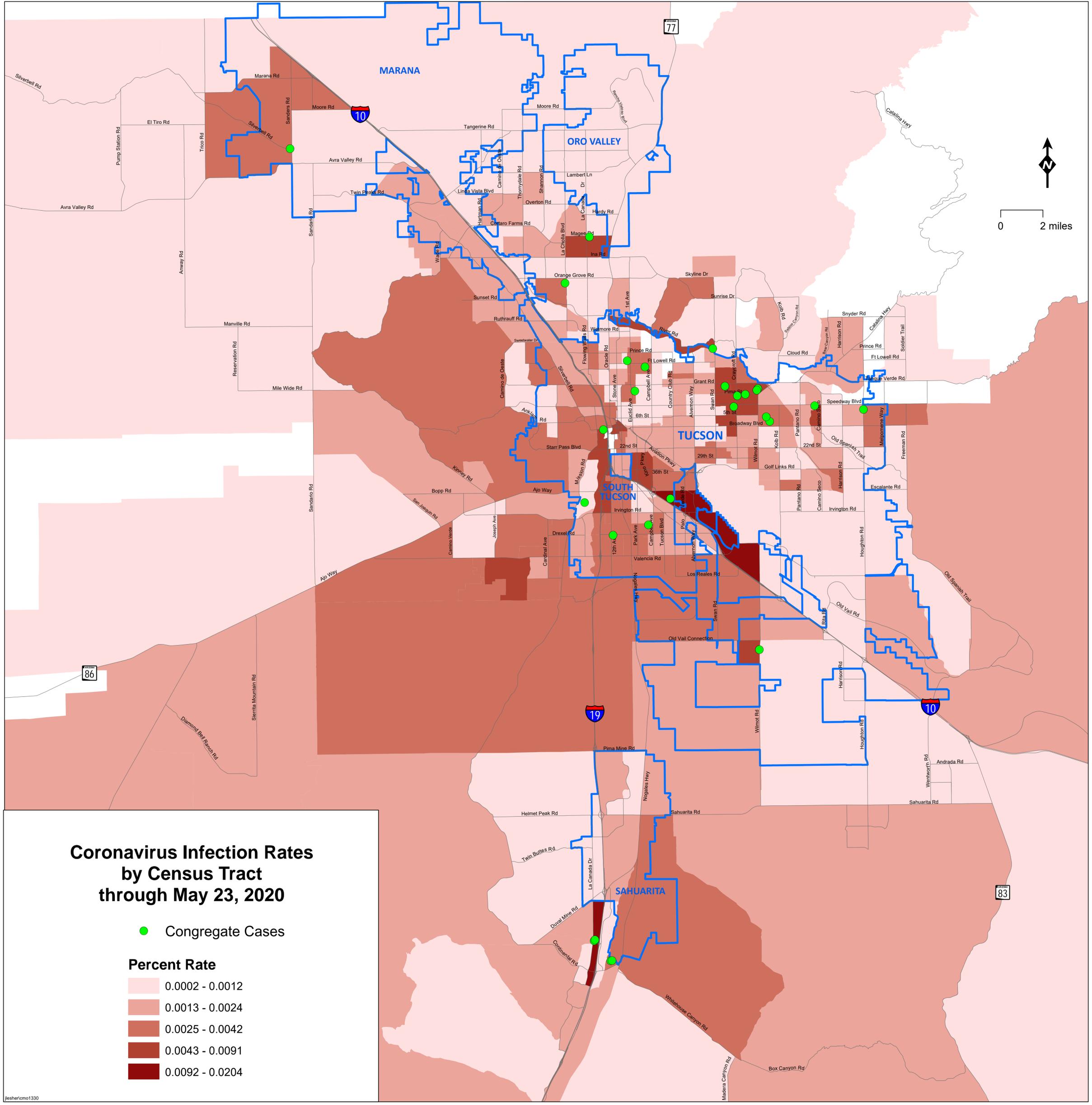


GEOGRAPHIC INFORMATION SYSTEMS

Pima County Info. Tech. Dept.
33 N. Stone Ave., 15th Floor
Tucson, AZ 85701-1207
phone: (520)740-6670
fax: (520)798-3429

6/1/2020

Attachment 2
Figure 1



0 2 miles

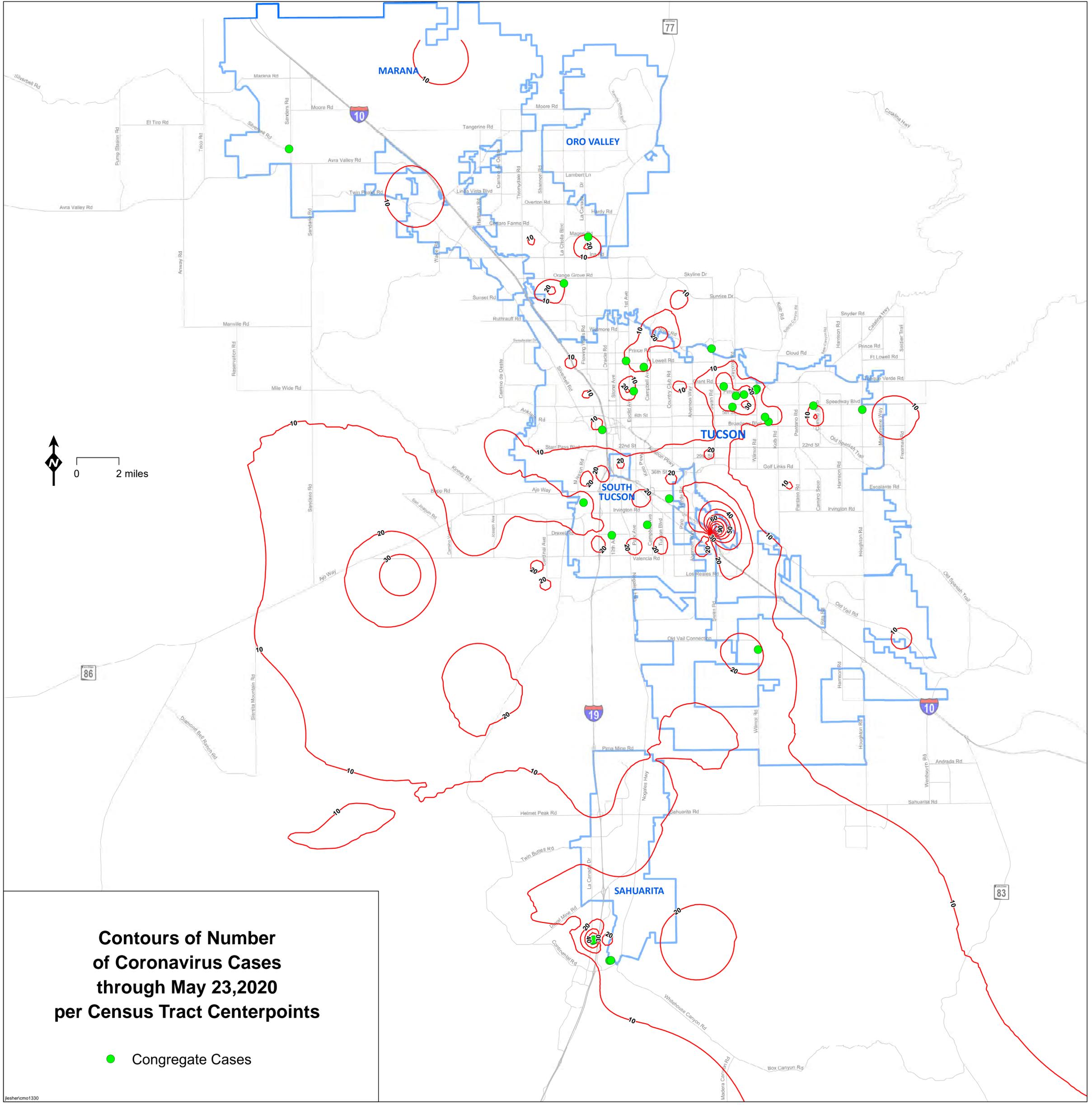
Coronavirus Infection Rates by Census Tract through May 23, 2020

● Congregate Cases

Percent Rate

	0.0002 - 0.0012
	0.0013 - 0.0024
	0.0025 - 0.0042
	0.0043 - 0.0091
	0.0092 - 0.0204

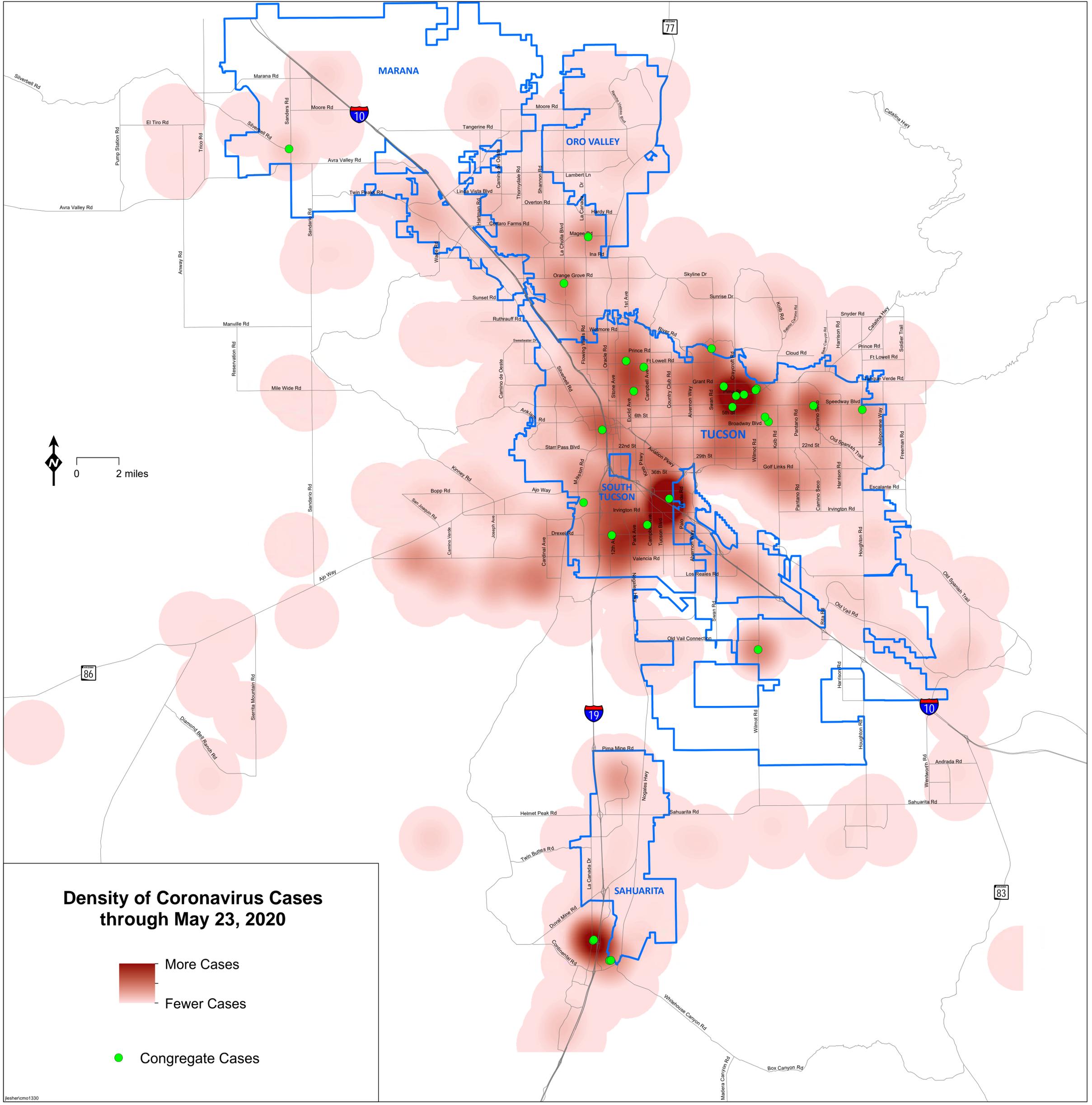
Attachment 2
Figure 2



Contours of Number of Coronavirus Cases through May 23,2020 per Census Tract Centerpoints

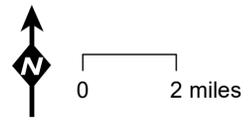
● Congregate Cases

Attachment 2
Figure 3



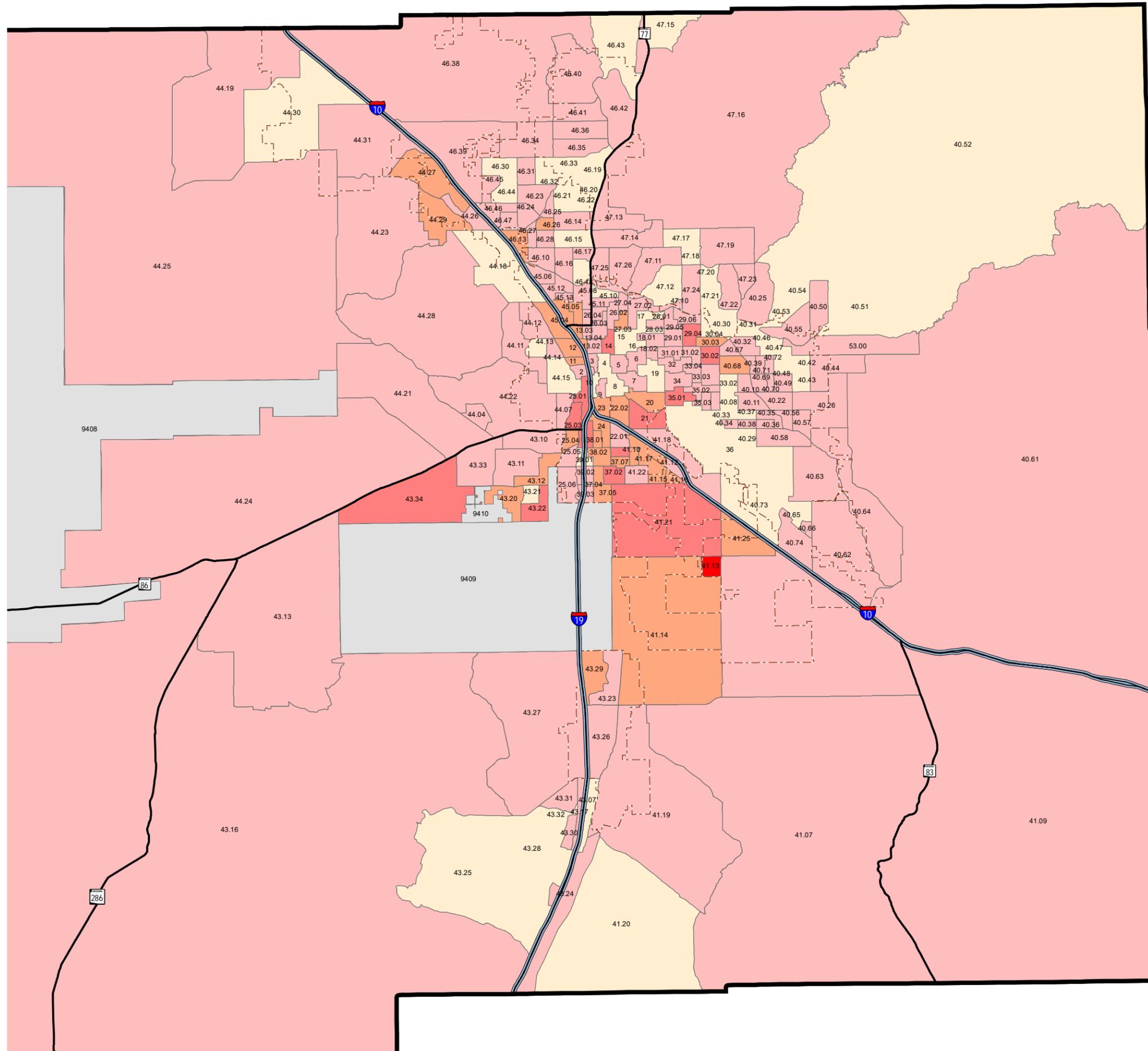
Density of Coronavirus Cases through May 23, 2020

- More Cases
- Fewer Cases
- Congregate Cases

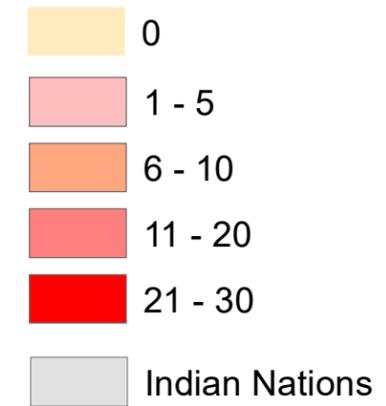


Attachment 2
Figure 4

COVID-19 Reported Cases May 10 Through May 30 by Census Tract



Number of Cases per Census Tract



759 Total Cases
Not Mapped (13)
i.e. PO Box, Outside County,
Invalid County Address



GEOGRAPHIC INFORMATION SYSTEMS

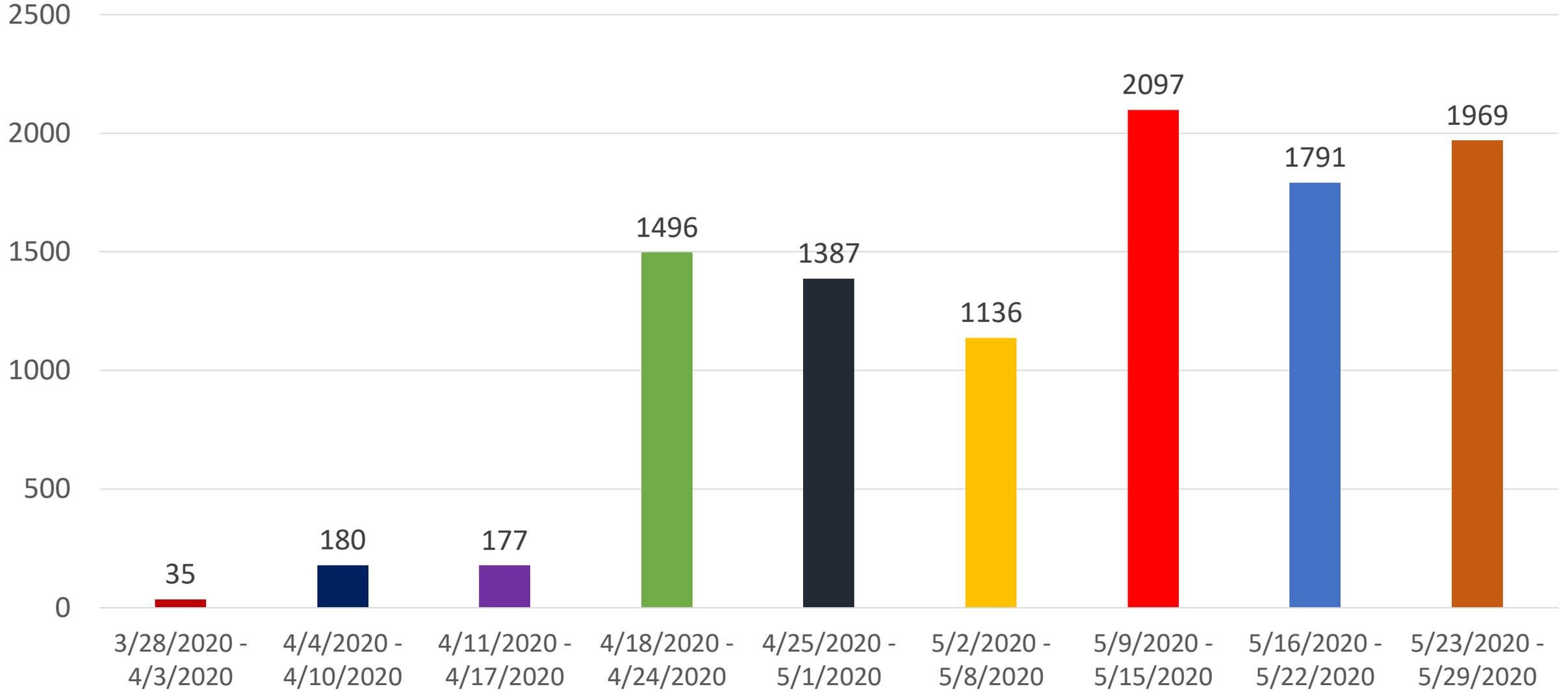
Pima County Info. Tech. Dept.
33 N. Stone Ave., 15th Floor
Tucson, AZ 85701-1207
phone: (520)740-6670
fax: (520)798-3429

6/1/2020

ATTACHMENT 3

Number of Test Kits Deployed By Week

Grand Total: 10268

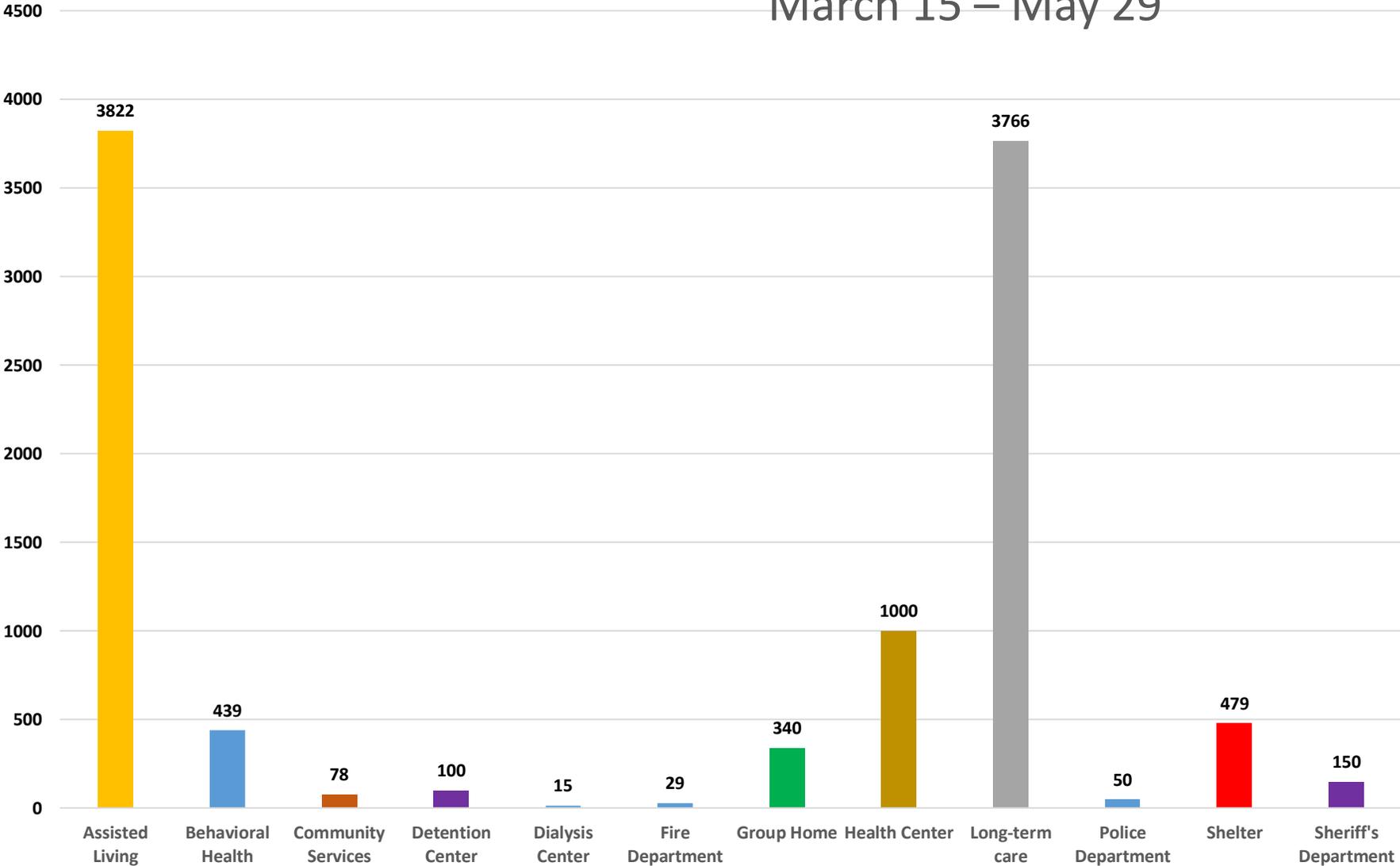


Data reported as of 6/1/20

Attachment 3
Figure 1

Number of Test Kits Deployed, by Facility Type

March 15 – May 29

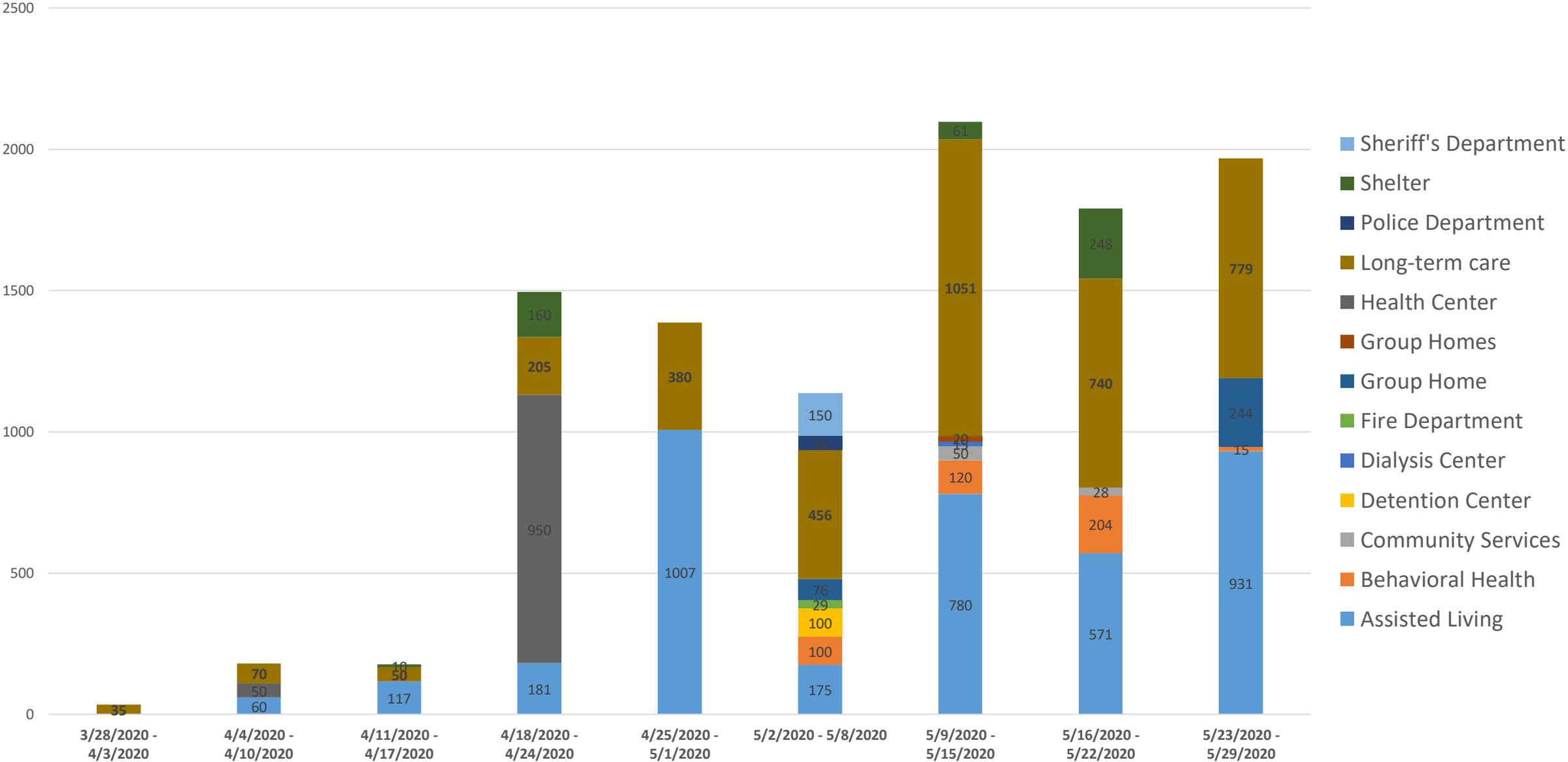


Row Labels	Quantity
Assisted Living	3822
Behavioral Health	439
Community Services	78
Detention Center	100
Dialysis Center	15
Fire Department	29
Group Home	340
Health Center	1000
Long-term care	3766
Police Department	50
Shelter	479
Sheriff's Department	150
Grand Total	10268

Data reported as of 6/1/20

Attachment 3
Figure 2

Number of Test Kits Requested By Facility Type Per Week

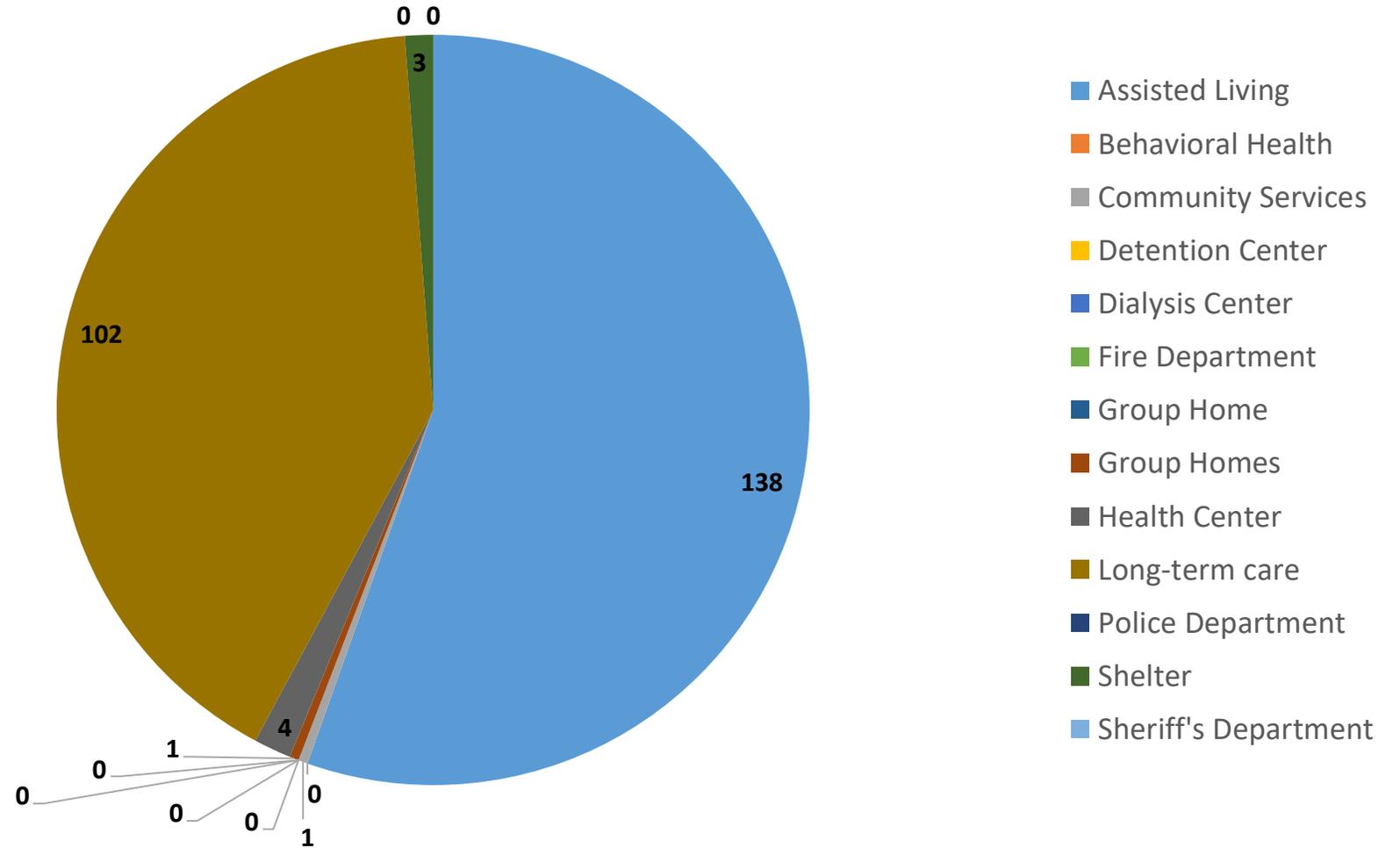


Data reported as of 6/1/20

Attachment 3
Figure 3

Number of Positive Results by Facility Type

Facility Type	Positive Results
Assisted Living	142
Behavioral Health	0
Community Services	1
Detention Center	0
Dialysis Center	0
Fire Department	0
Group Home	0
Group Homes	1
Health Center	4
Long-term care	102
Police Department	0
Shelter	3
Sheriff's Department	0
Grand Total	253

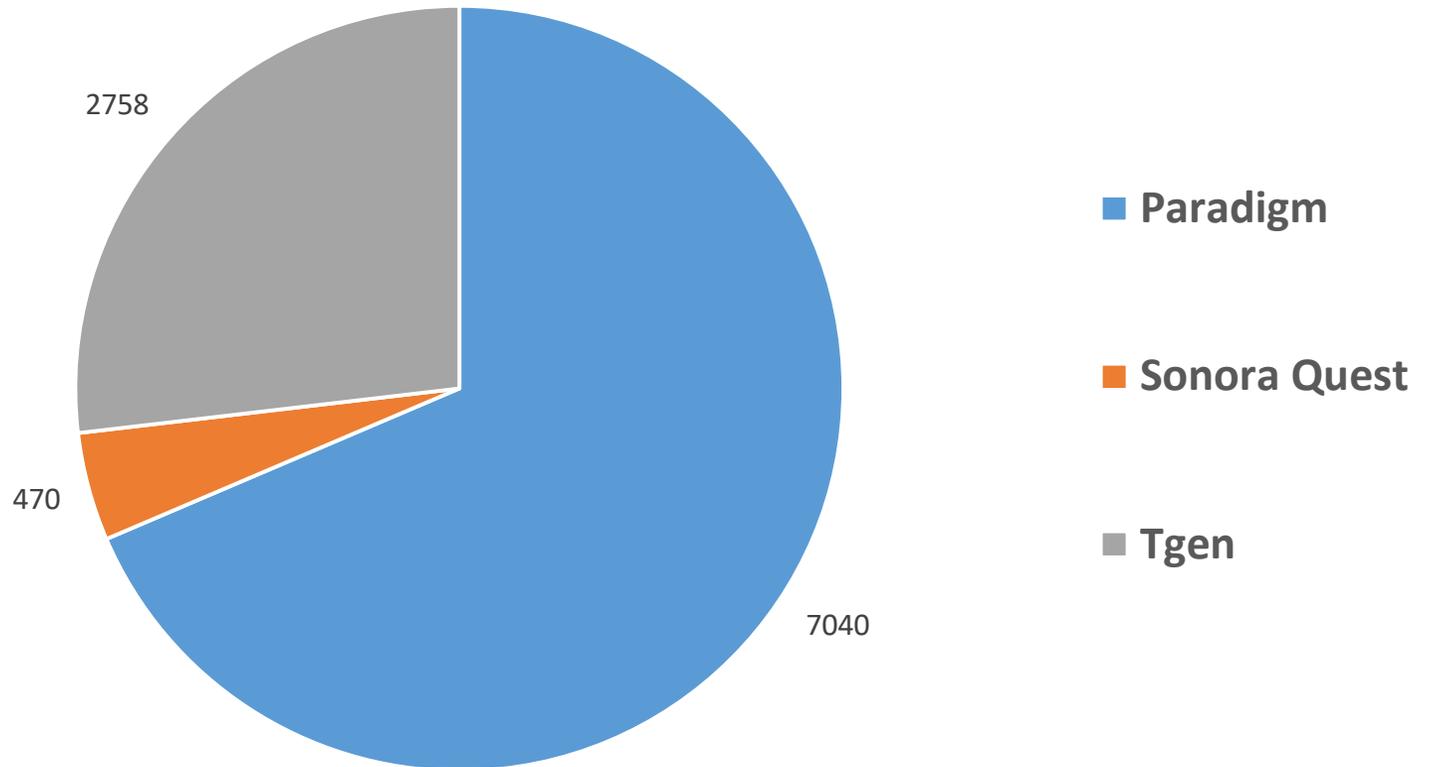


Data reported as of 6/1/20

Attachment 3
Figure 4

Lab Use Breakdown

Lab	Number of Tests
Paradigm	7040
Sonora Quest	470
Tgen	2758
Grand Total	10268



Data reported as of 6/1/20

ATTACHMENT 4



MEMORANDUM

Date: May 26, 2020

To: The Honorable Chairman and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator

A handwritten signature in black ink, appearing to read "CHH", is written over the printed name "C.H. Huckelberry".

Re: **Approved COVID-19 Case Reporting and Contact Tracing Plan**

Please see the attached plan from our new, Appointed Public Health Director Dr. Terry Cullen. Dr. Cullen has outlined a very aggressive and specific plan for improving contact tracing. I have approved the plan and have asked both our Procurement and Human Resources Departments to facilitate implementation of the plan.

In addition, Dr. Cullen provides valuable information regarding contact tracing and other activities related to minimizing the spread of a communitywide communicable disease such as COVID-19. I suggest you review the attached memorandum in detail as it forms the County's basic policy to confront and minimize the spread of COVID-19.

I fully support our public health professionals in this effort and I ask that you join me in doing so.

I will be providing a memorandum to you regarding testing practices and how these testing practices can be applied to minimize the spread of COVID-19 to our most vulnerable population. These practices follow established public health guidelines. I also understand other agencies may choose to emphasize other alternatives. Such is their decision to make, but our priority for the use of our resources will be as guided by Pima County public health officials.

CHH/anc

Attachment

c: Jan Leshner, Chief Deputy County Administrator
Francisco García, MD, MPH, Deputy County Administrator & Chief Medical Officer,
Health and Community Services

Date: May 22, 2020

To: C.H. Huckelberry
County Administrator

From: Theresa Cullen, MD, MS
Appointed Public Health Director 

Via: Francisco García, MD, MPH 
Deputy County Administrator & Chief
Medical Officer

Re: COVID-19 Case Reporting and Contact Tracing Plan

The Pima County Health Department (PCHD) routinely conducts case reporting and contact tracing for reportable infectious diseases. PCHD conducts on average 8,600 communicable disease investigations (CDIs) within a usual year, with a focus on vaccine preventable diseases, foodborne, vector borne and hospital acquired infections. Case reporting includes initial contact with the patient diagnosed with the infection (referred to as the case) to provide education and instructions on appropriate care and treatment. Case reporting also includes the identification of close contacts who may be at risk for becoming ill. These identified 'contacts' are subsequently contacted by a contact tracer and evaluated for potential exposure and risk when appropriate for the illness.

Our CDI response to the COVID-19 Pandemic is based on this past experience and documented in the attached Pima County Standard Procedure for Case Reporting and Contact Tracing. This standard procedure has been adapted from other areas, including Maricopa County. The procedure incorporates best practices as well as lessons learned over the past few months, and assumes that every case requires contact tracing.

Since the pandemic began, Pima County has had an active case reporting and contact tracing initiative that follows this standard procedure. Initially, case reporting and contact tracing staffing included six PCHD epidemiology staff. Once the increase of COVID-19 case investigations occurred, additional PCHD staff were deployed (up to 17 staff at different times). The ongoing high case load continued to result in the need for additional support; 11 retired healthcare volunteers (equivalent to 3 FTEs) from MRCSA (Medical Reserve Corp of Southern Arizona) working on a rotating basis were deployed in mid-March and volunteer college students from the Mel and Enid Zuckerman College of Public Health were deployed in April. Since March 1, 2020, 1903 COVID-19 cases have been reviewed; 84% have been reviewed by PCHD staff while 16% were reviewed by MRCSA and college students.

In addition to the high case load, COVID-19 has presented unique challenges for case reporting and contact tracing. These challenges have included delays in laboratories reporting tests results with subsequent delay in notification of cases, evolving science and public health recommendations, and the need to identify and follow contacts for a 14 day period to assess their symptoms and refer to care as appropriate.

Our increased staff, equivalent to 24 FTE, is currently unable to meet the increased CDI needs of COVID-19 in a timely manner. Our goal is to significantly expand our ability to achieve timely and effective contact tracing to ensure control of the current pandemic. To meet this goal, consistent with best practices and based on experience of others as well as a contact tracer calculation tool, we have estimated the overall need for 16 ‘managers’ and 140 contact tracers for a 6 month period. These 140 contact tracers would include up to 10 contact tracers that would staff field based investigations. Current PCHD staff will meet 23 of these positions; additionally, we estimate that volunteers will be able to fill an additional 6 FTEs, leaving the need for 127 positions. Ideally, we would use local organizations through a contracting vehicle to support a portion of this need.

Staff Designation	FTEs
PCHD Epidemiology and CDI Staff	8
PCHD Support and Administrative Staff	4
PCHD Nursing Staff *	8
Medical Reserve Corp of Southern Arizona	3
University of Arizona MEZCOPH students **	1.25
Anticipate Additional Support	127
Peak Total	151.25

- * Public Health Nursing Staff assigned to assist in contact tracing
- ** 50 hours per week of student staffing from UA

At the current time, we are able to initiate a case report on 68% of cases within a 2 day period. Ideally, timely case investigation would ensure that at least 80% of cases have initial interview with a CDI within 48 hours of PCHD notification of report. We aim to identify and notify contacts of exposure and test at least 75% of symptomatic contacts within 48 hours of initial contact. Additional staff will also support case investigations and contact tracings after normal working hours and on weekends. We will report these and other metrics, including time to interviews, number of contacts notified, contacts who complete full 14 days of monitoring on a regular basis to the Board of Supervisors as well as the public.

We are committed to rapidly enhancing our case reporting and contact tracing to meet the needs of the community, and enhance our local capacity to respond to future needs. I recommend the following immediate steps that would be eligible for federal reimbursement:

- Issue an RFP for comprehensive case investigation, contact tracing and contact monitoring supplemental service. This includes provision for local staffing, training; and/or continuum of services;
- Develop and implement supplemental data collection, management and analysis supporting epidemiological investigation and modeling; identify and obtain appropriate data collection platform;

Mr. Huckelberry

Re: COVID-19 Case Reporting and Contact Tracing Plan

May 22, 2020

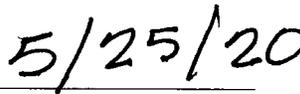
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- Supplement existing workforce with temporary/intermittent staff supporting contact tracing.

Approved Disapproved



C.H. Huckelberry, County Administrator



Date

Attachments

1. Overarching Contact Tracing Steps/ Proposed Metrics
2. Pima County Case Investigation and Contact Tracing Plan

c: Jan Leshar, Chief Deputy County Administrator

ATTACHMENT 1

Overarching Contact Tracing Steps/Proposed Metrics

Pima County May 20, 2020 Best Practices Contact Tracing Process	Challenges
<p>Identification and notification of cases with instructions on isolation and treatment.</p>	<ul style="list-style-type: none"> • Laboratories are providing specimen testing for patients that are not aware of ADHS laboratory reporting requirements, with a delay in notification to provider and patient • Routine education on isolation at time of specimen collection is not documented • PCHD may contact patient first before provider notifies patient of positive test result • Laboratory results transmitted electronically to ADHS with variable degree of lag time • ADHS sends to PCHD with minimal lag time • Limited data set included with report; clinical information including hospitalization information not provided • Case identification impeded by lack of demographic data (phone number, address) requiring PCHD to 'find' patient • Once located, contact tracing begins
<p>Interviewing index cases to help identify contacts as well as public gatherings (weddings, funerals) attended, and their risk of exposing COVID-19 to their contacts during their infectious period</p>	<ul style="list-style-type: none"> • Adequate Staffing • Case reluctance in identifying contacts • Inability to easily locate contacts • Case engagement with interview process • Rapidly changing public health guidance (antibody, antigen, PCR testing algorithms) • Usability of Software
<p>Providing notification to contacts of potential exposure. For each contact, assessing exposure risk, determining if they are experiencing compatible symptoms, and for those symptomatic, provide testing options and appropriate referrals. For each contact to the index case with compatible symptoms, obtain their close contact(s) name and contact information.</p>	<ul style="list-style-type: none"> • Adequate staffing for daily 14-day monitoring • Changing public health guidance • Tools and knowledge to assess exposure risk in different populations/cultures • Ability for individual assessment of current symptoms • Need for potential testing and referral • Contact engagement in education • Contact commitment to quarantine if appropriate • Support to meet quarantine needs

Overarching Contact Tracing Steps/Proposed Metrics

Pima County May 20, 2020 Best Practices Contact Tracing Process	Challenges
Monitoring of contacts, daily reporting on each contact's symptoms and temperature for 14 days after last contact with the index cases while they were infectious, and referring for testing and care when indicated	<ul style="list-style-type: none"> • Adequate Staffing • MEDSIS not designed for reporting daily contact information • Labor intensive process • Lost to Follow Up without active engagement with Contact Tracer • Incentive for contact participation • Unanswered questions about employment/ unemployment

Proposed Metrics:

1. Case
 - a. Time to interview from symptom onset and diagnosis
 - b. Time to interview from date assigned to interview completion
 - c. Absolute number and proportion interviewed
2. Contacts
 - a. Median number of contacts elicited;
 - b. Number of contacts notified
 - c. Time from exposure/case notification to contact notification
3. Contact Follow up
 - a. Contacts with daily contact
 - b. Contacts with symptoms evaluated within 24 hours of symptoms
 - c. Contacts who complete full 14 day of monitoring
4. Efficacy
 - a. Number of new COVID -19 cases arising among contacts during self- isolation period

ATTACHMENT 2

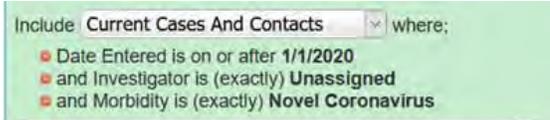
TRIAGE & CASE ASSIGNMENT PROCESS:

Triage Team – triage per the triage protocol

- For the cases that need investigations per the triage protocol, mark all as “active” status & leave case as unassigned
- Classify “confirmed” for PCR & “suspect” for antigen

Investigators

- Use the following filter for selecting cases from the MEDSIS queue (TO BE MODIFIED)



- Scroll to the bottom of the queue & select only cases marked as “active” status (some may be classified as confirmed & some suspect)

1. Investigator receives provider/facility report of positive/presumptive positive COVID-19

- Check for a duplicate case in MEDSIS
- Positive reports may be received from IP MEDSIS entry, ELR report, or ASPHL result report
- If no lab report is attached or linked per ELR, investigator must obtain the report

2. If case is known to be part of an existing COVID-19 outbreak or cluster

Investigator

- Link the case to the correct outbreak in MEDSIS (refer to the COVID MEDSIS Documentation Guide)
- Notify the Team of the MEDSIS number & the Outbreak Name
- DSO completion may be held for residents of facilities listed in Outbreak Module (OBM), but all other documentation should be completed per investigator
- Staff linked to an existing outbreak will need a standard interview per investigator

Cluster Response Team

- Ensure line lists are received & UTD – reach out to facility if line list not UTD
- Batch enter DSO information from obtained line lists for residents of facilities

3. Investigator to call case & notify of positive/presumptive positive results

- Obtain the following information (if not entered already in MEDSIS):

Demographic information

Name:
Gender:
DOB:
County of Residence/Zip Code:
Email:
Contact phone number:
MR#:

Template information as follows

Age:
Reporting provider name & contact #:
Facility:
Onset date:
Hospitalization (Y/N & admit dates):
ICU (Y/N):
Lives or works in congregate Housing (Y/N):
History of Diabetes/Cardiac disease/Hypertension/Chronic pulmonary disease/Chronic kidney disease/Chronic liver disease (Y/N):
Daycare/school attendee (Y/N) (Name of facility & dates of attendance while potentially infectious):
Household contacts & intimate partner (Name & DOB):

Next steps

Notified case of positive COVID-19 results & reviewed calculation of home isolation duration
Provided home isolation guidance
Provided household and close contact exposure information to case
Obtained HH & intimate partners & created contact cases
Will follow up with case in 14 days to complete HH & intimate partner contact tracing

CASE INVESTIGATIONS STEPS:

- 4. Obtain information for each household or intimate contact**
- 5. Utilize the [ADHS Case Definition](#) for COVID-19 to determine if case classification based on case interview information and laboratory testing.**
- 6. Send follow up email to case with attachments using the *Public Health Notification***
 - o Home Isolation Guidance
 - o Quarantine & Social Distancing Guidance
 - o Public Health Statement of Medical Absence form

Note: When attaching the Medical Absence form for your case, be sure to save it as a pdf before sending
- 7. Fill in DSO in MEDSIS**
 - o Consider requesting medical records/contacting hospital IP/contacting ordering provider's outpatient facility to complete the case DSO
 - o Children <18 - Please interview parent/ guardian or obtain permission from parent/ guardian to interview minor
 - Please fill out foster care questions in DSO
 - o Intubated/Hospitalized patients unable to speak
 - Attempt to fill out the DSO as complete as possible by:
 - Calling the IP/bedside nurse to obtain next of kin or emergency contact information
 - Review of medical records
 - Calling the IP/bedside nurse and asking DSO questions
 - o Cases who do not speak your native language
 - Please utilize the Language Line to complete interview
 - Must obtain permission from case prior to completing interview with family or friend
- 8. Investigator to determine if case is high risk or not**
 - o EMS or Healthcare facilities (both inpatient & outpatient) - No exposure notification
 - o Childcare facility exposure - Notify your Investigations Lead
 - o Correctional facility exposure - Notify your Investigations Lead
 - o Workplace/ Businesses- Notify your Investigations Lead
 - o Residential Treatment Centers – Notify your Investigations Lead
 - o Homeless/unstable housing shelter facility exposure - Notify your Investigations Lead
 - o LTCF/Assisted Living/Group Home/Behavioral Health residential facility exposure - Notify your Investigations Lead and refer to the LTCF Follow Up Process section in this document for next steps
 - LTCF Liaison can assist with training an investigator in this process or to consult on complex situations
 - Verify name and address of facility and unit type
 - Utilize LTCF Guidance for LTCF/Assisted Living/Group Home facilities
 - Utilize Behavioral Health Guidance for Behavioral Health residential facilities
- 9. Investigator to close and submit case**
 - o Follow COVID MEDSIS Documentation Guide (in addition to the Investigation Protocol) for step by step on COVID documentation.

**If you need a records request done or records pulled from a health care facility send an e-mail to the Investigator Lead with the case number & your requested task.

HOUSEHOLD (HH) & INTIMATE CONTACTS TRACING:

Investigator (NB- THIS FORM MAY BE MODIFIED)

- Gather the information for each household or intimate contact **using the Appropriate Form**
 - A contact is considered a person who was <6ft for >10mins during the case’s infectious timeframe
 - All contacts can be captured on the same Contact Tracing Fillable Form by making a new tab for each contact (instructions included on form)
- Provide quarantine/home isolation guidance to case to share with their HH & Intimate contacts
- Laboratory confirmed, symptomatic contacts should be Epi-linked to the index case
- Symptomatic persons without laboratory confirmation with high-risk professions and/or at risk for poor outcomes referred their PCP or 211 for testing
 - Investigator should assign self as investigator for contacts
- Asymptomatic contacts can be entered & completed per the Contact Tracing Data Entry Team members
- Save the completed Contact Tracing Fillable Form to the Index Case’s attachments
- Notify Investigator Lead of need for asymptomatic contact entry by emailing with the index case MEDSIS number & “Requesting contact entry” in the subject line

DEMOGRAPHICS	
1	Investigator of Index Case
2	MEDSISID of Index Case
3	Type of Contact
4	First Name
5	Last Name
6	DOB or Age
7	Gender
8	Contact phone number
9	Preferred contact method
10	Email address (if preferred is email)
11	AZ resident OR will be in AZ for duration of monitoring period?
12	IF NO: State of residence
13	IF YES: AZ County of residence
14	Date of last exposure to index case (if unknown, enter the date the index case was interviewed)
CURRENT SYMPTOMS	
15	CURRENTLY MEETING CASE DEFINITION? No
16	WHO ENTERS CONTACT INTO MEDSIS: DATA ENTRY
17	Fever?
18	Onset Date
19	Cough?
20	Onset Date
21	Sore throat?
22	Onset Date
23	Shortness of breath?
24	Onset Date
25	Difficulty breathing?
26	Onset Date
27	Rigors?
28	Onset Date
29	Chills?
30	Onset Date
31	Olfactory and taste disorders (newly developed)?
32	Onset Date
33	Headache?
34	Onset Date
35	Myalgia?
36	Onset Date

Contact Tracing Data Entry Team member

- Receives case number & enters contacts
- **Under Contacts section in MEDSIS Index Case**
 - Click “Add”
 - Enter First Name, Last Name, DOB, and Gender; click “Search”
 - If results found, click the add symbol next to the name, if no Novel Coronavirus case listed OR click the add symbol next to the Novel Coronavirus case under the name, if listed

First Name	Middle Name	Last Name	Date of Birth	Gender
SAM				
20-5506838		Novel Coronavirus		

- If “No results found” click “New Person”
- Enter Information from the Contact Tracing Fillable Form attached to the index case in MEDSIS. The numbers in the table correspond to the fields below:

Contacts
 This Patient was exposed to:
 This person was not exposed to any known contact or case.
 This Patient exposed:
 This person did not expose any known contact or case.

LAST ON THIS PAGE: SAVE

First Name: Last Name: DOB: Gender: Show Fewer Fields Save

Search

Contact Information

Same as index case

Home Address: Street Unit City State: ZIP Code

Country: United States Reservation

Patient

Age at Event: is the patient immunocompromised? is the patient pregnant?

Case Management

Exposure

Exposure Category:

Date/Time of First Exposure: Date/Time of Last Exposure: Follow-up needed:

Prophylaxis

Was prophylaxis provided? Prophylaxis date: Provided by: Type of Prophylaxis:

Type of medication: Dose: Duration:

- **Under Case Management: Investigator section**
 - Assign contact to index case investigator (Form row #1)
- **Under Patient Details: Phone/E-mail section**
 - Add email in the field below (Form row #10, if obtained)

Phone/E-mail

Type	Primary	Phone/E-mail
Home	<input checked="" type="checkbox"/>	

Phone Type: E-mail Primary E-mail address

Phone Number: Suggested format: example@azdhs.gov

Notes (2000 character max):

Save Cancel

- **Under Case Details: Classification section**
 - Classify as “Confirmed” in local classification dropdown
 - Mark Investigation Status as “Completed” and add date of completion (date of contact entry)
- **Under Case Details: Comments section**
 - Enter the following comments in the text box (copy and paste as needed; example below)

asymptomatic

Phone OR *Text* OR *Email*

Contact of <<<MEDSIS Number (Form row #1)>>>; quarantine/isolation guidance provided; informed of monitoring process.

Classification

State Classification: Local Classification: Disease Imported: Binational: Detection Method: Is the patient immunocompromised: Investigation Status: Date Completed: Patient Outcome:

Comments

asymptomatic *phone*
 Contact of ; quarantine/isolation guidance provided; informed of monitoring process.

- Under Jurisdiction section
 - Click “Submit to ADHS”

Start	Stop	Action	Jurisdiction Name	User
4/22/2020		Primary	MARICOPA COUNTY DEPARTMENT OF PUBLIC HEALTH	Karen Zabel
4/22/2020		Shared	ARIZONA DEPARTMENT OF HEALTH SERVICES	Karen Zabel

LOST TO FOLLOW UP PROCESS:

LTF Investigator Process:

Please ensure that we have made every attempt to reach our cases. If you are new to investigations, please ask a more experienced investigator for ideas on how to reach persons/obtain updated contact information. Below is guidance to help with those investigations where interview is unsuccessful after multiple attempts using multiple modalities.

- Please ensure you attempt to contact each case by multiple modalities (including calling facilities to determine next of kin and verifying contact information using hospital EMR) over a period of 48 hours after receiving the positive laboratory result.
- At minimum, 3 attempts by phone should be made as soon as case is assigned. Multiple call attempts can be made on the same day.

If we are still unable to make contact through this process: send a certified letter with educational materials and the Home Isolation & Home Quarantine & Social Distancing Guidance to the unverified home addresses. Indicate “Confidential” and “Only to be opened by recipient” on the outside of the letter.

Request to mail LTF Letters:

Investigator steps –

- Ensure at least 3 attempts have been made over at least 48 hours utilizing at least two modalities available (phone, text) per above LTF process
- Create the *Positive Letter* with the case’s name and your e-mail signature
- Attach to case
- Verify home address is correct in MEDSIS
- Consider requesting medical records, contacting hospital IP or contacting ordering provider outpatient facility to complete the case DSO
- Send e-mail to Triage Team to request *Lost to Follow Up Letter Mailed*
- Please include LTF in e-mail subject line
- Complete case documentation & close case

Triage team steps –

- Receive e-mail from investigator & reply all to confirm who will complete the task
- Retract case & print the attached Positive Letter Template letter
- Include the Home Isolation Guidance and Home Quarantine & Social Distancing Guidance with the Positive Letter Template
- Indicate “Confidential - Only to be opened by recipient” on the outside of the letter above the recipient’s name
- Ensure that a ‘Public Health Barcode’ is attached to the lot of letters that are to be mailed out

Investigator steps --

- Add the following note to the case “COVID-19 positive notification and case mediated contact tracing guidance mailed to case.” Under “Case Investigation & Contacts”. Document date written education sent
- Notify Team Lead ready to submit case to ADHS
- CONSIDER FIELD BASED INVESTIGATION FOR CERTAIN CASES

DECEDENT REPORTS PROCESS:

. Death Review Team will address these reports

- Search the case in MEDSIS
- Attach the PIR or HRRF report to the case
- Mark the case a “died” with the date in the demographics section and mark *patient outcome* as “died” in the classification section
- Re-submit case to ADHS, if previously investigated or assign for investigation, if not completed.

LTCF/ASSISTED LIVING FOLLOW UP PROCESS:

1. Epi Team Lead to request to enter facility into the OBM.
 - Team Lead will send email to ADHS
 - Subject Line: New OBM
 - Message to include:
 - MEDSIS ID, facility name, facility type/ facility address/ phone number (if known)
*Limited information requested initially to expedite creation of OBM
2. PHN LTC Team Liaison to reach out to facility to obtain the following information and communicate the recommendations verbally and via email. Use LTCF/Assisted Living Intake Form (see below)
 - Resources to be included in the email are: LTCF guidance, HCW Post Exposure Guidance, Home isolation, Social Distancing Guidelines, Facility Testing request form, CDC PPE optimization web link, proper PPE donning and doffing web link, and the “COVID-19 Line List” Excel sheet to report symptomatic residents and staff with instructs to report back to PCHD per e-mail, blank template letter link at <https://www.maricopa.gov/5496/Long-Term-Care-Facilities>
 - After collecting information, if needed, Investigator and LTCF Liaison or Investigations Lead to discuss the needs, barriers and plan next steps.
 - All facility communication should be noted in the OBM notes.
 - Each associated case be linked to outbreak in MEDSIS.
 - Copy LTC lead on follow up e-mail to facility so that the OMB can be updated
3. PHN LTC Team Liaison to communicate PPE request instructions directly to facility and the Logistics Team responds directly with PPE request follow-up information.
4. If testing is requested
 - a. Testing Need Determination – PCHD liaisons determine need, number and training required for facilities they are assigned to.
 - b. Test Request – Liaisons submit test request form to Test Management Group via email.
 - i. Test request is entered into Test Request Log and sent to Test Management team (including warehouse)
 - c. Test Delivery and Training
 - i. Warehouse fills orders.
 - ii. TMT logistics contact sites and coordinate delivery, training, testing and pickup.
 - iii. Fulfillment documented by EOB on log.
 - d. Liaison Team Updated - Test Kit Distribution log is shared daily at 0830 and 1600 via email to group.
 - e. Test Results – Paradigm:
 - i. Portal is accessed daily for results and validated by Aggregate Report sent directly from Paradigm; also daily
 - f. Test Results – TGen:
 - i. TGen sends emails daily with lab results securely accessed through link and bundled by facility
 - g. Result Response - Liaisons coordinate with assigned sites to manage and mitigate further contagion.
 - h. Additional Supply Request - Each site, once trained, may submit requests for additional supplied for follow up testing by submitting another test request form.

Tracker Review Weekly - Data Management reviews all test requests and results for the week and reports discrepancies or missing information to TM Lead.

5. Epi receives & attaches "COVID-19 Line List" to the OBM. (NEEDS EPI SIGN OFF)

*Try to keep the most up-to-date version attached.

6. Epi Team to create contact cases from attached "COVID-19 Line List"

- a. If an individual is marked as staff on the line list, Cluster Response Team will call the facility and obtain a contact phone number for the staff and document in MEDSIS.
- b. Case specific details (e.g. onset, symptoms, comorbidities) for LTCF residents should already be captured in the DSO from the information in the "COVID-19 Line List".

7. ASPHL results are received to Data Team

- a. Data team to update MEDSIS Local Case Classification to Confirmed or Not a Case
- b. Staff positive cases will be placed back into the COVID-19 Confirmed Unassigned queue for Case Investigation
- c. Staff negative results will be communicated to facility by Cluster Response Team
- d. Resident results will be followed up by the Cluster Response Team with any consultation needed

8. Commercial results of known staff or residents are received to PCHD

- a. Commercial lab result received via CDR, ELR, etc. will appear in MEDSIS queue
- b. Testing Management Team forwards lab reports to LTC Liaison Team. Liaisons report test results to point of contact at the facilities and update line lists.
- c. EPI team checks line lists for cross-reference.
- d. Investigate per normal investigation protocol (for both staff and residents)

*Independent Living is not a congregate setting.

Appendix:

LTCF/Assisted Living Intake Form:

LTC/ALF Team Member Liaison: _____/Date: _____

Facility Name: _____/Address: _____

Contact Info:

Name of primary contact: _____

Email: _____

Phone #(s): _____

Facility Type (check all that apply – many LTCs have multiple service lines):

SNF ALF Memory Care Other (describe):

- Total Bed Capacity: _____
- Current Occupancy (%): _____
- # of Short-Term residents: _____
- # of Long-Term residents: _____
- Total # of Staff: _____
 - # of clinical staff: _____
 - # of non-clinical staff: _____
- Total # of Patients on dialysis: _____

Facility layout: Please describe the layout of your facility. (Prompts: Are residents in different buildings? Are they on different floors?)

Are you currently experiencing staff shortages? (If yes, please describe)

Implementation of COVID-19 Infection Prevention Measures:

- Visitation restrictions (describe & date implemented):
- Suspension of group activities including congregate meals:
- Symptom monitoring of staff and residents (describe & date implemented):
- COVID-19 PPE Measures (describe & date implemented):
- Policy for staff return to work (describe & date implemented):
- Enhanced environmental disinfection measures (describe & date implemented)
- Protocols for new admissions (describe & date implemented)
- Protocols for residents returning to the facility after discharge from a hospital or Emergency Room visit (describe & date implemented)
- How patients are transported to and from the facility

Testing capabilities:

- Do you currently have COVID-19 test kits?
- Current criteria for testing?
- Where do you send tests?
- Do you have staff with training sufficient to administer NP/OP tests?

As you refine your plans to prepare or respond to COVID-19, here are a few things to think about.

- Cohorting residents and staffing based on symptoms or COVID-19 status
 1. Clean: no symptoms and no exposure
 2. Quarantine: no symptoms but exposure (e.g., roommate of case, all new admits)
 3. Isolation-symptoms: symptoms but no test results with probable exposure
 4. Isolation-positive: COVID-19+ (until recovered regardless of symptoms)
- Given the set-up of your facility, do you think you could cohort patients into these four groups? How would you do this?

Personal Protective Equipment (PPE) information.

- Do your clinical staff use N95s?
 - Do you have enough
 - Do you have any strategies for reuse?
- What do your staff use for eye protection? (Prompts: Goggles? Face shields?)
- Do you have enough gowns?
 - What kind? (Prompts: Disposable? Cloth? Plastic/other)
- Any strategies for dealing with shortages?

Consider prioritization and extended use guidelines

Email EOCLogchief@pima.gov to request supplies

Continue to order from your regular supply chains

What are your plans to procure additional staffing if needed?

If you are experiencing staffing shortages: Email EOCVolunteer@pima.gov to request assistance in finding qualified personnel.

Have you confirmed DNR status and ensure there are clear Advanced Directives?

COVID-19 Investigation Process

If a resident with COVID-19 is diagnosed in the facility:

- Encourage residents to remain in their room - restrict movement except for medically necessary purposes
- Implement universal use of face mask while in the facility for staff
- Healthcare personnel should wear all recommended PPE (gown, gloves, eye protection, facemask) for the care of all residents, regardless of symptoms. Implement protocols for extended use of eye protection and facemasks.
- PPE request for investigation should be requested through EOCTestKits. Maria Chaira will send the request to Miguel Soto and he will pull the items from the warehouse for pick-up by the investigator.
- Use designated staff and dedicated non-critical equipment for patient care
- Cohorting may be necessary if multiple patients are diagnosed with COVID-19
- If possible, designate a ward or section of the facility for COVID-19 patients with dedicated staff.
- Implement protocols for having dedicated healthcare personnel caring for cohorted residents with COVID-19.
- Environmental cleaning and disinfection – per CDC guidance
- Isolate any symptomatic resident and ensure all recommended PPE (gown, gloves, eye protection, facemask) for the care of symptomatic residents
- Facility to internally assess PPE supply and fill out PPE survey to initiate the request for PPE. Facility to continue to place PPE orders through normal supply chains.
- Provide notifications and weekly updates to residents and their representatives regarding diagnoses of COVID-19 cases and/or identification of clusters of respiratory symptoms within the facility as per CMS guidance.
- Continue adherence to recommended ICP practices – Hand Hygiene, use of PPE, and disinfection of environmental surfaces and resident care equipment
- Continue to follow MCDPH LTCF Guidance

*Please use this template for your initial note in OBM to ensure we have the needed information for all to reference.

APPENDIX A - COVID-19 TRIAGE PROTOCOL TABLE (SUBJECT TO CHANGE)

Novel Coronavirus (COVID-19) MAY NEED TO BE MODIFIED

Morbidity	Test Performed	Test Results	Local Classification	Investigation Status	Action	Investigators
Novel Coronavirus (COVID-19)	PCR (rapid included) OR SARS coronavirus 2 RNA (SARS-CoV-2 RNA, QL REAL-TIME RT-PCR (COVID-19))	Positive/ Detected		New	High priority investigation	Any Investigator on the Positive Case Response team (see daily Round up) – Investigators to pull cases from active unassigned queue
Novel Coronavirus (COVID-19)	SARS COV-2 Antigen	Positive / Detected		New	High priority investigation	Any Investigator on the Positive Case Response team (see daily Round up) - Investigators to pull cases from active unassigned queue
Novel Coronavirus (COVID-19)	PCR OR SARS coronavirus 2 RNA (SARS-CoV-2 RNA, QL REAL-TIME RT-PCR (COVID-19)) OR Pan-SARS RNA	Negative/ Not detected OR Pending	Not a Case	Complete	Submit to ADHS	

Novel Coronavirus (COVID-19)	IgM OR Combination IgM/IgG	Positive / Detected	Suspect	Complete	Submit to ADHS	
Novel Coronavirus (COVID-19)	IgG Only OR IgM only OR Combination IgM/IgG	Negative OR Indeterminate OR Pending	Not A Case	Complete	Submit to ADHS	
Novel Coronavirus (COVID-19)	IgG Only	Positive	Suspect	Complete	Submit to ADHS	

ATTACHMENT 5

The Pima County EOC Logistics team has been tracking all requests and distributions since the start of the Covid-19 Response, March 10th, 2020. Our top priority, since the declaration of emergency, has been health care settings that include Adult Care, Skilled Nursing and Long Term Care Facilities. During this time we have gone through different stages that affected our ability to supply the local demand. The initial Strategic National Stockpile allowed us to distribute many goods such as N95 masks, Isolation Gowns and Nitrile Gloves. This was quickly depleted two weeks after the last shipment arrived. Pima County had started procuring before the Emergency Operations Center was activated but the supply chain globally was disrupted.

We quickly built a request tool based on a FEMA system, Survey 123, to take in requests for the health care agencies and continue to onboard accounts. The requests from this system allowed us to gauge the total need of the community. We ran into an issue with particular items not being available that would linger on the request line. We needed a method to see the current need of PPE instead of the total overtime; we implemented Refresh Dates.

Refresh Dates give the logistics team an important update of the current need of PPE supplies and it also to help our procurement team focus on purchasing the right items. Refresh dates occur every third Thursday. This process zeros out previous orders which can skew data to show that no delivery was given per the request, however we ask all users to enter their PPE requests on the Refresh dates (Thursdays). We work with the Liaisons to give notice to all agencies that the refresh date will occur and they can submit a new request. The table below includes all requests, including those zeroed out, since the start of the response.

The following dates have been refresh dates:

April 23rd

May 14th

(Upcoming) June 4th

Supply Requests Received by Pima County to Date						
March 10 th – May 25th	All Agencies Requesting	All Number of Items Requested	(PRE Survey123) 3.10- 3.29.2020	3.29-4.22.2020	4.23-5.13	5.14-6.3.2020
Surgical Masks	450	1,468,170	569,933	507,463	331,390	88,048
N95 Masks	430	361,181	158,638	108,709	61,122	44,765
Nitrile Gloves, Small	185	937,720	444,800	403,540	63,001	38,027
Nitrile Gloves, Medium	326	1,793,554	654,300	949,700	120,386	109,759
Nitrile Gloves, Large	319	1,680,117	519,800	867,332	182,683	134,044
Nitrile Gloves, Extra Large	186	714,068	300,600	300,518	87,141	40,883
Face Shields	307	197,001	127,699	52,340	11,780	8,798
Goggles	247	32,867	12,164	12,607	5,612	3,853
Gowns (Iso, Surg)	490	1,038,930	367,975	434,274	178,874	59,231
Total # of Requests:	Unique Requests:		Requests 96	Requests 171	Requests 218	Requests 219
696	282					

Isolation Gowns and N95 masks were the hardest items to procure. In the last 2 weeks we have been able to stock both items and meet the need of the agencies on almost all items. We are now receiving about 10k isolation gowns a week to help meet the need.

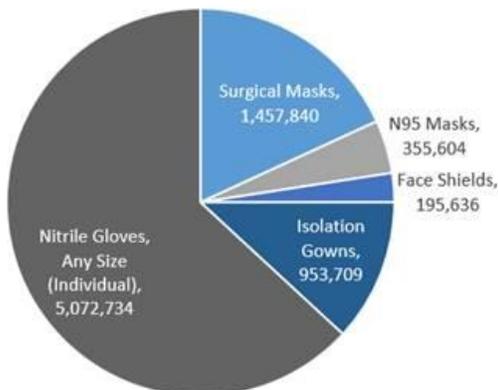
The table below shows the totals from March 10th – May 28th.

Pima County PPE Distribution breakout for Adult Care and Skilled Nursing Facilities vs Total Distribution 3/10/2020 through 5/28/2020									
	Surgical Masks	N95 Masks	Nitrile Gloves, Small	Nitrile Gloves, Medium	Nitrile Gloves, Large	Nitrile Gloves, Extra Large	Face Shields	Goggles	Isolation Gowns
Request	131,571	50,903	68,279	156,777	194,252	89,416	14,300	12,043	119,091
Distribution	108,083	15,287	43,300	108,400	90,700	41,140	7,982	3,204	10,220
% of Request vs. Distribution for Adult Care and Skilled Nursing Facilities	82.15%	30.03%	63.42%	69.14%	46.69%	46.01%	55.82%	26.60%	8.58%
Percentage of Total Distribution	22.62%	56.11%	23.01%	29.04%	29.47%	27.80%	24.62%	41.94%	29.12%

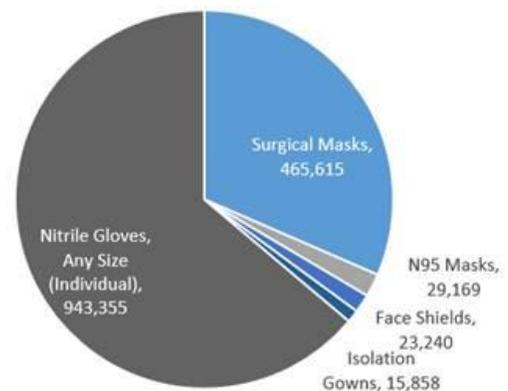
The graphic below is for items being requested by all types of agencies and not specific to Adult Care Facilities.

Isolation gowns comprise 11% of major PPE items requested and 1% of items distributed, while **surgical masks** comprise 18% of items requested and 31% of items distributed.

Major PPE Items Requested to Date, by Item Type



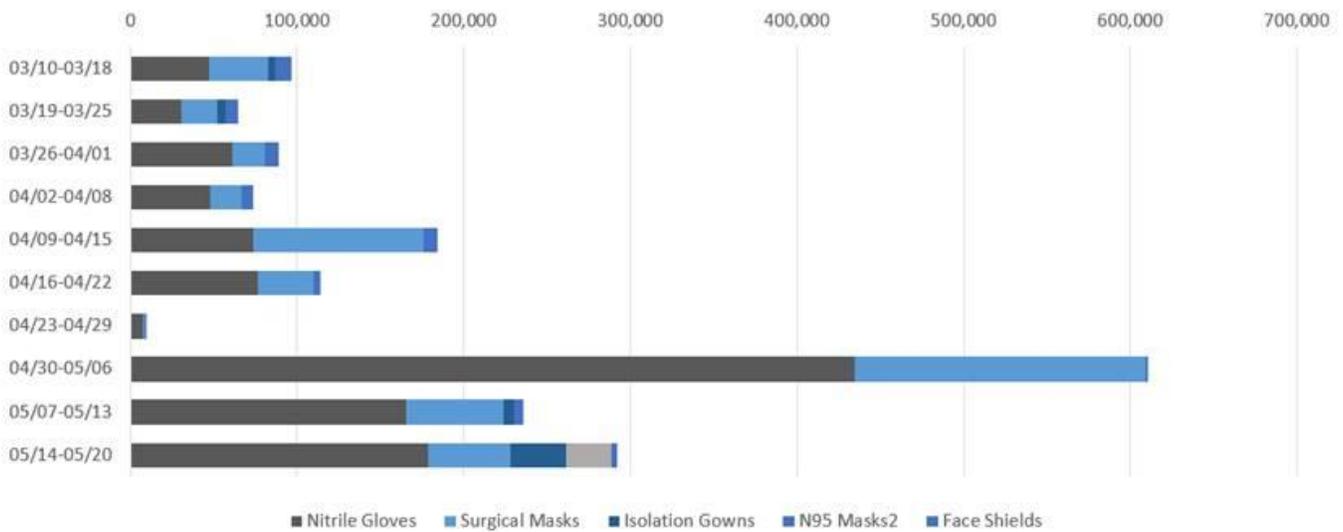
Major PPE Items Distributed to Date, by Item Type



The Graph below shows that distribution can only occur if there are items to be disbursed. All agencies involved understand this to be the case hence the creation of a PPE supply chain being led by the County. If items were plentiful there would not be a need for the County to provide purchasing power in order for the smaller facilities to get PPE. This graph is inclusive of distribution to all types of agencies.

Quantities of other major PPE items distributed vary from week to week.

Major PPE Items Distributed, by Type and Week



Let me know if you have more questions. It is hard to understand without the concept of refresh dates that are in place to show current need and not need at the height of requests. Supplies are becoming more available and that is why the distribution numbers are increasing recently.

ATTACHMENT 6

COVID-19 Reimbursable Expenses

I. Federal Legislation

The Coronavirus Relief Fund is authorized by Section 601(a) of the Social Security Act, as added by Section 5001 of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act).

In the guidance released on April 22, 2020, Treasury stated three major conditions for the allowable use of Coronavirus Relief Fund awards to cover costs that:

1. are necessary expenditures incurred due to the public health emergency with respect to the Coronavirus Disease 2019 (COVID-19);
2. were not accounted for in the budget most recently approved as of March 27, 2020 (the date of enactment of the CARES Act) for the State or government; and
3. were incurred during the period that begins on March 1, 2020, and ends on December 30, 2020.

II. Summary of Extraordinary County Actions in Response to COVID-19 During Initial Phases of Public Health Emergency

1. Families First Coronavirus Response Act HR 6201 – This Act substantially expands upon employee leaves, particularly when there has been a shelter-in-place Order by a State or local government. The Shelter in Place Order from the City of Tucson and the State of Arizona should qualify eligible employees to take advantage of the leave provided in the Act effective April 1, 2020 or before. Federal Emergency paid sick time for self at 80 hours, 100 percent paid (prorated for part-time employees) is provided. Employees are permitted to use this leave while the Governor’s Executive Order to stay-at-home is in effect. This leave is used after the Pandemic Leave offered by Pima County has been exhausted.

In addition, Federal Emergency paid sick time-caregiving provides up to 80 hours of additional pay at not less than two-thirds of regular pay for qualifying conditions. The Families First Act also provides emergency family and medical leave expansion for up to an anticipated 8 to 10 weeks for caring for school-aged children who are affected by school closures.

2. Procurement of public health related supplies and services, including personal protective equipment, medical and testing supplies and other essential services necessary to respond to the COVID-19 pandemic. A large number of supplies have been ordered through the Logistics Section of the Emergency Operations Center

(EOC). Most of these supply orders have not been received or partial receipt of shipments have occurred. A detailed list of all pandemic related procurement actions will be provided by the Procurement Director, including the order number, the specific product ordered and the monetary value of the order.

3. Sheriff's Department law enforcement and support costs

a) Early in the process, homeless shelters were overwhelmed with increasing amounts of individuals requiring meals. The Sheriff's Department, through the Pima County Adult Detention Complex kitchen, has been providing 300 sack meals per day since March 30, 2020 and will continue to do so into the future. These meal are provided to the Casa Maria Soup Kitchen and distributed to homeless individuals and/or shelters. The meals are transported by Library staff who otherwise would be on leave. These specific Library staff are operating trucks now used to distribute the meals produced by the Sheriff's Department. The aggregate cost of meal production and distribution is approximately \$3.00 per meal.

b) The Sheriff continues to house inmates who have been convicted of a crime and sentenced to the Department of Corrections in the Pima County Adult Detention Complex. The Department of Corrections has placed a longer transfer hold on these inmates due to the COVID-19 infection threat within the State Department of Corrections. Therefore, there is a cost to hold these inmates who would have normally been transferred to the Arizona Department of Corrections. This cost is approximately \$154 per day and the Sheriff has been keeping records of the timeframe between when the convicted inmate should have been transferred and actually transferred. Those additional days are a cost to the County as a result of the COVID-19 pandemic.

c) COVID-19 individual field responses. The Sheriff produces a Daily Situational Awareness Report on COVID-19 where all specific law enforcement responses related to COVID-19 calls are characterized. These calls can then be categorized and identified for possible specific case cost billing or specific caseload increase as a result of the COVID-19 pandemic.

4. COVID-19 Premium Pay – The Board of Supervisors has approved premium pay for all essential employees who remain at their specific duty/assignment. This is for employees who cannot meet necessary social distancing requirements or have access to personal protective equipment and must directly interact with various members of the public in a direct manner. These employees are afforded an additional COVID-19 Premium Pay at \$2.00 per hour for their work period.

5. Facilities Management Janitorial Services – Public buildings that have high volume access and utilization have been provided with additional janitorial services, including disinfection. This has resulted in increased cleaning frequency for facilities that were open until the shelter-in-place order was issued or that continue to be open today for essential service delivery. These locations will continue to receive more frequent and intense janitorial services for the purpose of preventing the spread of COVID-19.
6. Wellness Check for a Safe Workplace - A number of essential County personnel are required to work during the Executive Order to stay-in-place. In order to secure a safe workplace to the extent possible, wellness checks are being implemented for all employees as well as any public persons entering the building. These are body temperature checks that require staffing at each worksite/location. The processes and staff are an additional expense to County operations based on the COVID-19 pandemic.
7. Food Security and Accessibility - A number of County staff are being reassigned who have specialized experience in large vehicle and/or forklift operations, generally, these are employees with Commercial Drivers Licenses. They are being deployed to assist the Community Food Bank of Southern Arizona to ensure food accessibility and security for individuals seeking food assistance from nonprofit community food bank organizations as well as food pantries in smaller rural communities. The assistance provided by assigning staff to food accessibility and security operations is also an added expense to the County as a result of COVID-19.
8. Protecting the Most At-risk Population - Through a combination of efforts including the public health agency and County Administration, steps were taken early to protect the most at-risk populations. These included individuals over the age of 65 and/or individuals with serious chronic health conditions. These actions include:
 - a) Retirement community awareness – early in the process, the County identified all organized retirement communities and/or homeowners associations through our Geographic Information System to communicate risk associated with COVID-19 to elderly populations and to population with chronic health conditions. These actions included notification to leadership of these communities and the issuance of appropriate guidance, including shelter-in-place with minimal contact recommendation. These actions created issues associated with individuals being able to meet medical appointments and to receive food and other supplies. Early coordination efforts with retirement community leadership resulted in the coordination of food delivery supplies and other supplies such as medication. In addition, many of the better-organized retirement communities and/or homeowner associations undertook wellness checks on the population within their communities who were most vulnerable to COVID-19.
 - b) Active Viral Testing – The County’s public health agency initiated significant additional testing capacity improvements so the locations where COVID-19 infections could easily spread was detected early through active viral testing and

isolation of patients contracting COVID-19 as well as staff and clinicians providing services to skilled nursing facilities, assisted living facilities and other congregate living centers. These activities continue and are being accelerated to significantly lower the risk of infections in these facilities from staff, vendors or clinicians who access these facilities on a regular basis.

- c) **Case Investigation and Contact Tracing** – The County has and will continue to significantly expand and reinforce our contact tracing function so we are able to actively monitor new cases of infection, detect infections and isolate infected individuals to monitor them for health concern and inform others who may have been in contact with an infected individual. These individuals are asked to report symptoms and self-isolate for the prescribed period.
9. **Securing Housing and Shelters for At-risk and Homeless Populations and Specifically for Homeless Populations that have been Released from County Detention Centers** – County Housing and Health staff have secured agreements with hotel/motel rooms to provide housing to homeless individuals at risk for COVID-19 during the shelter-in-place Order. This shelter effort is part of a coordinated activity with the City of Tucson and homeless services providers. To respond to this need the Sullivan Jackson Employment Center now operates seven days a week and coordinates the review and placement of homeless people in these setting. To date, more than 380 people were placed in these facilities and efforts are ongoing to provide employment services to people in the motels to further aid their transition. The County and its partners are now pivoting to fund permanent housing for the folks in the hotels through rapid rehousing funded by CARES Act ESG. Specifically, the County is developing contracts to fund CBI and Our Family Services for rapid rehousing for people in the motels

Shelter is also provided to homeless individuals who have been held in a detention facility for non-violent crimes, but then released by a Court to reduce jail/adult detention center population. CSET receives referrals from our DES partners located at the Manzanita and Whetstone units and provides employment services and referrals to other services for these individuals. In support of these efforts, the County will incur increased housing costs for homeless individuals as a result of COVID-19.

The County is currently in discussion with EMERGE to provide emergency shelter for those families fleeing from domestic violence to ensure they also have access to temporary housing in a non-congregate setting.

10. **County Employment and Training Staff** – Job matching and placement services by County staff has significantly increased to provide assistance to individuals who will become unemployed due to furloughs, layoffs or business closings associated with the COVID-19 pandemic, specifically the Order to close certain businesses such as

restaurants, bars and other facilities to reduce the spread of COVID-19. This unemployment assistance has accelerated significantly and caused significant additional workloads, processing and levels of assistance to those seeking alternative employment. This has significantly increased re-employment activities as a direct result of COVID-19.

11. At the beginning of the crisis, CSET set up a dislocated worker hotline to provide a point of access to impacted workers to job opening and referral, unemployment insurance information, small business resources, and updated social media posting. The hotline has average more than 150 calls per day. Responding to the call for physical distancing CSET set up online employability skills training and the feedback has been overwhelmingly positive. And CSET has enrolled more dislocated workers than any other local area: 500 to date compared to 200 in the Phoenix Metro area. The Dislocated Worker team is preparing for an increased demand of services in late July when federal unemployment insurance runs out.
12. The County Stood Up a Volunteer Program – for both volunteering of specific services that require skill levels associated with medical or health professionals, faith-based organizations and others, including the donation of materials and supplies associated with requested resupply activities of the Emergency Operations Center. These donations require collection and redistribution efforts. Collection occurs at 19 different fire stations throughout Pima County. Standing up this volunteer effort as well as the collection and distribution of supplies by County staff should be a reimbursable expense due to the necessity for volunteer services and donation of supplies as a result of COVID-19.
13. Superior Court, Prosecution and Defense Services Needed to Reduce the Pima County Adult Detention Complex Population – Pre- COVID-19, the average population of the Pima County Adult Detention Complex was 2,000 inmates on any given day. To reduce the need to house two inmates per cell and in order to have specific isolation cells associated with any inmate brought into the facility or housed in the facility who may have or contract COVID-19, the population needed to be substantially reduced. The Superior Court Criminal Bench along with County Attorney Prosecutors and Public Defenders worked to significantly reduce jail population, which is now less than 1,500. These activities should be a reimbursable expense associated with the COVID-19 pandemic.
14. Virtual Health Emergency Operations Center and Emergency Operations Center Operated by the Office of Emergency Management and Homeland Security – The Health Department stood up a Virtual Health Emergency Operations Center on January 31, 2020 and staffed it with health employees assigned to the specific task of monitoring the incidents and occurrences of COVID-19 throughout the State of Arizona, including Pima County. This activity transitioned to an Emergency Operations Center activation by the Office of Emergency Management on March 13, 2020. This full activation has been primarily staffed with County Health Department staff and Office of Emergency Management staff. In addition, as the pandemic

continues, we are adding additional staff to provide relief to staff who have been working continuously in the Emergency Operations Center. The full staffing associated with standing up the Virtual Health Emergency Operations Center and the Emergency Operations Center is an action directly related to COVID-19 and should be fully reimbursable.

15. Pima County Back to Business Taskforce – The County convened a large group of private sector individuals, 128 in total, to guide business reopening after stay-in-place and/or quarantine orders were lifted by the State government. This taskforce and its various subcommittees were assembled from the entire cross section of business impacted by isolation orders. In Arizona, the isolation order occurred on March 30, 2020 and was lifted on May 15, 2020. The processes for implementing physical distancing, sanitation and disinfection, notices and education will require additional resources such that small businesses and others can have access to certain essential public health supplies such as cloth masks, non-medical gloves, sanitation and disinfection supplies and hand sanitizers.
16. Public Awareness Campaign – To incentivize compliance with recommended public health practices to reduce the risk of spreading COVID-19, the County will embark on a public education awareness campaign concentrating on public health recommendations to avoid infection from COVID-19 and how best to protect the community during the ongoing pandemic. The County has procured the services of a company specializing in Spanish language and culturally sensitive communication.