

Declaration of Dr. Joseph Bick

I declare, under penalty of perjury and pursuant to 28 U.S.C. § 1746, as follows:

I. Background and Qualifications

1. I am Dr. Joseph Bick, Director, Healthcare Services at California Correctional Health Care Services (CCHCS). I oversee all healthcare services, including medical, nursing, quality management, mental health, and dental. In that capacity, I have also led healthcare's response to COVID-19 since I assumed this role in July 2020.
2. I have worked for the California Department of Corrections and Rehabilitation (CDCR) for over 28 years. From January to July of 2020, I served as Director of Healthcare Services for Mental Health and Dental. Prior to that role, I served in several roles at the California Medical Facility (CMF) in Vacaville, including as the Chief Medical Executive, Chief Deputy of Clinical Services, and the Chief Medical Officer.
3. I received a Medical Doctorate from the University of Michigan Medical School and am board-certified in internal medicine. I completed a fellowship in infectious diseases at Rush-Presbyterian-St. Luke's Medical Center in Chicago.
4. I have authored numerous publications in peer-reviewed journals concerning infectious diseases in correctional settings and am an internationally recognized expert in the field of correctional healthcare. I have served as a federal court-appointed monitor to oversee healthcare in the Alabama Department of Corrections in the matter of *Leatherwood v. Campbell*, 02-cv-02812-KOB (W.D. Ala.). I have also served as an International Technical Expert on Prisons for the United Nations Office for Project Services in Myanmar and as a consultant on infectious diseases for the Malaysian prison system.

II. Impact of COVID-19 on Incarcerated Patients

5. As of July 25, 2021, at least 49,467 people incarcerated by CDCR have been infected with COVID-19.¹ This represents approximately half of all those in CDCR custody. Of those who have contracted COVID-19 in CDCR custody, 227 have died.² Some of those who survived have long-term—perhaps lifelong—symptoms and complications.
6. Many institutions are located in rural areas with very few hospital beds in the community. In these institutions, outbreaks among incarcerated persons can rapidly fill all or most of the nearby hospital beds, leaving no room for future

¹ California Department of Corrections and Rehabilitation, Population COVID-19 Tracking, <https://www.cdcr.ca.gov/covid19/population-status-tracking/> (accessed July 25, 2021).

² *Id.*

COVID patients from either the community or the prison. CDCR medical staff work routinely with local health authorities to manage this issue.

7. When COVID outbreaks occur in CDCR institutions, the workload associated with both testing those who have been exposed and clinically monitoring patients who are either on quarantine or in isolation increases dramatically. As a result, staff effort and resources must be focused primarily upon urgent and emergent care. This creates challenges with respect to the timely provision of routine healthcare services.
8. COVID is readily transmitted during aerosol generating procedures. As a result, widespread COVID outbreaks in 2020 required curtailing routine dental services and focusing primarily upon urgent and emergent dental matters.
9. Group therapy is an important component of the treatment that is provided to patients who are in the mental health delivery system. During outbreaks, COVID related concerns regarding physical distancing created a significant impediment to the delivery of group therapy. In addition, patients who are on quarantine due to exposure to an infected staff member are unable to attend programming during the period of their quarantine.
10. Patients who require a higher level of mental health treatment than is typically available at their assigned institution regularly require transfer to other institutions for inpatient care. During outbreaks, concerns regarding the potential for transmitting COVID from one location to another complicate the movement of patients for higher level mental health care, both within the CDCR and also back and forth from the Department of State Hospitals.
11. COVID-related quarantine requires patients to spend the vast majority of time in their cells or living quarters. Over time, this can negatively impact patients by depriving them of access to outdoor exercise and other programming and services.
12. The prolonged COVID pandemic has placed a great strain upon the CDCR and CCHCS workforce. Employees have seen an increased workload and more involuntary overtime. The personal protective equipment requirements are onerous and have contributed to a more stressful working environment. Staff have been impacted emotionally by the constant stream of COVID-related illness and death in their patients, their coworkers, and family members. These factors have contributed to the challenge of maintaining sufficient staff to provide medical care to our patients.

III. Introduction of COVID-19 to CDCR Institutions

13. In an effort to limit the spread of COVID-19 within CDCR facilities, CDCR has limited transfers of incarcerated persons into and between its institutions and also quarantines all new arrivals for 14 days. As a result, incarcerated persons are quarantined between their contacts with the community outside the institution and their contact with the inmates and staff at the institution. Incarcerated persons

who neither work outside of CDCR institutions nor participate in in-person visitation do not present a significant risk of introducing SARS-CoV-2 into CDCR institutions.

14. By contrast, institutional staff enter and leave CDCR institutions daily and have significant contacts with the broader community in their daily lives. These contacts create a danger that staff could contract COVID-19 through community transmission and inadvertently introduce SARS-CoV-2 to the institution in which they work.
15. When an outbreak of COVID-19 occurs in a CDCR institution, CDCR performs contact tracing to determine how the outbreak developed. CDCR also performs genomic sequencing to identify the variant involved. These techniques allow CDCR to identify with some certainty how an outbreak likely originated.
16. The data obtained from contract tracing and genomic sequencing confirm that CDCR staff are a primary vector for transmission of COVID-19 into CDCR institutions.
17. During May, June, and July of 2021, analysis conducted by CCHCS indicates that staff have been identified as the source of at least 50% of all CDCR COVID outbreaks among incarcerated persons. Analysis of the remainder of the outbreaks is ongoing.³
18. People can be infected with SARS-CoV-2 and transmit the virus even if they are not symptomatic. Because CDCR conducts surveillance testing of asymptomatic individuals at far higher rates than seen in non-correctional settings, CDCR identifies more positive tests of asymptomatic people than captured in the outside community. Nearly half of all individuals who tested positive in the CDCR system reported having no symptoms at the time. It is very likely that many staff and patients in CDCR have spread COVID with cases that went undetected.
19. Unvaccinated institutional staff are now tested weekly for COVID-19. The CEO and Warden of each institution are responsible for tracking compliance and imposing progressive discipline on staff who are out of compliance.
20. It can take three to five days after infection for an individual infected with COVID-19 to build up a sufficient viral load to test positive. It also often takes days to receive the results of a COVID test. As a result, staff members in compliance with the weekly testing regime could nevertheless be asymptomatic but infectious, spreading COVID for a week or more before learning they are infected. These limitations of testing's effectiveness mean that, while more frequent testing reduces the length of time during which someone may spread COVID between tests or while waiting for test results, symptom screening and

³ Exhibit A.

testing alone are inadequate to prevent contagious staff members from entering CDCR institutions between becoming infected and receiving a positive test result.

21. Because many staff members move throughout an institution in the course of performing their daily duties, a staff member infected with COVID-19 can come into contact with many inmates and staff, including inmates and staff from multiple housing units and yards, potentially spreading SARS-CoV-2 throughout the institution. Healthcare staff have close contact with patients when providing treatment and corrections staff have frequent close contact with inmates when applying restraints, escorting them throughout an institution, performing rounds, and providing security.

IV. Transmission of SARS-CoV-2 within CDCR Institutions

22. SARS-CoV-2 is transmitted by inhalation of aerosolized particles, deposition on exposed mucus membranes, and fomite transmission (i.e. touching an object with live virus on it).⁴ As a general matter, the greater the amount of the virus an individual is exposed to, or the more prolonged exposure to the virus an individual has, the more likely the individual is to contract the virus. Prisons put individuals in continuous close contact: They share close spaces for the vast majority of the day and touch many of the same surfaces repeatedly. Compared to people not living in a congregate environment, incarcerated persons are much more likely to be exposed to the virus more frequently and for longer periods of time.
23. Incarcerated persons in CDCR custody share relatively small spaces with a large number of people throughout the day. SARS-CoV-2 spreads very easily by respiratory transmission under such conditions. Incarcerated persons also share bunk beds and communal living spaces, cafeterias, bathrooms, showers, telephones, and other common spaces. In such an environment, and in the absence of high rates of vaccination, routine public health measures such as physical distancing and environmental cleaning are insufficient to prevent spread of SARS-CoV-2.
24. The CDC defines close contact as 15 minutes spent within six feet of a person infected with COVID-19 cumulatively over the course of a day.⁵ In an environment like a prison in which incarcerated persons typically spend the large majority of the day in close proximity to other people, a typical incarcerated

⁴ Centers for Disease Control and Prevention, SARS-CoV-2 Transmission (May 7, 2021), <https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/sars-cov-2-transmission.html>.

⁵ Centers for Disease Control and Prevention, Community-Related Exposures (December 3, 2020), <https://www.cdc.gov/coronavirus/2019-ncov/php/public-health-recommendations.html>.

person will accumulate that level of exposure to a large number of people in the course of a day.

25. It is not possible to consistently maintain physical distancing in congregate living environments such as jails and prisons. This is especially true in sleeping quarters, common areas, dining halls, and bathrooms.
26. While compliance with mask guidance helps slow the spread of COVID-19 in CDCR institutions, it alone cannot prevent transmission. In addition, incarcerated persons cannot wear a mask while eating or sleeping, yet there is a very significant risk of transmission during those times.
27. The CDC recommends that incarcerated individuals in close contact with a person infected with COVID-19 be quarantined individually in “a single cell with solid walls and a solid door that closes.”⁶ Many institutions in CDCR’s system do not have a sufficient number of such cells to quarantine individuals during a significant outbreak.
28. CDCR has not been able to lower the risk of COVID to high-risk patients by moving them to alternative housing before they are exposed. Moving large numbers of people during a pandemic risks spreading an infection to other housing units and yards.

V. Mutation of SARS-CoV-2 and the Delta Variant

29. The Delta variant of SARS-CoV-2 is more than twice as transmissible as the Wuhan strain. On average, a patient infected with the Delta variant sheds 1,000 times more virus than an average patient with an earlier strain.
30. Case rates have increased more than 500% among staff members in recent weeks, most of whom are infected with the Delta variant.
31. Natural immunity acquired through infection with COVID-19 appears to wane over time, possibly within months, and natural immunity from an earlier strain of COVID-19 may be ineffective against the Delta variant. As a result, unvaccinated people who previously contracted COVID may be re-infected with the Delta variant at a higher rate than was true of prior strains of COVID-19. The potential decreased effectiveness of natural immunity is another reason that vaccination is imperative.
32. With such a transmissible strain, it is particularly important that staff be vaccinated to limit the introduction of COVID into CDCR institutions because,

⁶ Centers for Disease Control and Prevention, Interim Guidance on Management of Coronavirus Disease 2019 (COVID-19) in Correctional and Detention Facilities (June 9, 2021), <https://www.cdc.gov/coronavirus/2019-ncov/community/correction-detention/guidance-correctional-detention.html>.

once introduced, it is extraordinarily difficult to prevent the spread of COVID-19, which could lead to large-scale outbreaks.

33. The virus is likely to continue to mutate, potentially creating even more transmissible strains than Delta, as it has done repeatedly in the past. These strains may be even more difficult to constrain using basic public health precautions like masking, social distancing, and frequent cleaning of high touch surfaces.

VI. Role of Vaccination in Limiting the Spread of SARS-CoV-2

34. The number of cases in CDCR institutions over the late spring and early summer is a small fraction of the number of cases in earlier phases of the pandemic, particularly the winter of 2020-2021.⁷ Vaccination is substantially responsible for the decrease in cases. Vaccination is far more effective than other public health measures such as masking, social distancing, and frequent cleaning of hands and high touch surfaces.
35. With the Delta variant's higher rate of transmissibility, the risk to unvaccinated persons has markedly increased. Although some vaccinated people will become infected with COVID-19, based on current information, their symptoms will generally be far less serious and they will be less likely to spread the disease. Future variants may prove more resistant to the vaccine, but the vaccine currently provides robust protection against all known variants. Given the likelihood of spread of COVID-19, vaccination of as many people as possible is critical.
36. Given the particular danger of the Delta variant to the unvaccinated, a much higher vaccination rate is necessary to provide protection for those who are unvaccinated. With the very high transmissibility of the Delta variant, only extremely high levels of vaccination could provide an adequate level of protection.
37. CDCR staff are vaccinated at far too low a rate to reduce the risk of mass outbreaks in CDCR institutions. According to CDCR data regarding vaccination rates of institutional staff, just 53% of all institutional staff and only 42% of corrections officers have received at least one dose of a COVID-19 vaccine.⁸ By contrast, patients have accepted vaccination at very high rates. Voluntary efforts to increase the rate of vaccination have made very little progress over the four

⁷ Iris Lee & Sean Greene, *Tracking the coronavirus in California state prisons*, LA Times (updated July 24, 2021), <https://www.latimes.com/projects/california-coronavirus-cases-tracking-outbreak/state-prisons/>.

⁸ Exhibit B.

weeks between June 30, 2021 and July 29, 2021. In that period, the total number of fully vaccinated and partially vaccinated staff each increased by just 1%.⁹

I declare that the foregoing is true and correct.

Executed on this 4 day of August, 2021, at Sacramento, California.



Joseph Bick, M.D.

⁹ ECF No. 3623 at 6.

EXHIBIT A

Which May-July 2021 COVID-19 Case Clusters Among Patients Can Be Traced with Some Certainty to Infected Staff?

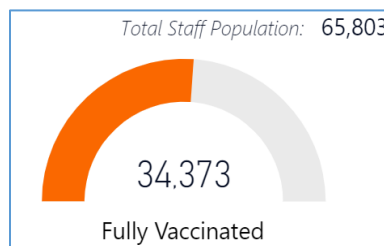
CCHCS Public Health and Employee Health Staff
August 3, 2021

Summary

Of the 14 clusters of Coronavirus Disease 2019 (COVID-19) cases that occurred among CDCR/CCHCS inmate-patients in May-July 2021, 7 (50%) can be traced to staff at this time. However, additional data may either provide stronger evidence for the linkage between a cluster and a positive staff member, or may provide evidence for linkages not found in this preliminary analysis.

Background

As of August 1, 2021, of 99,215 inmate-patients in CDCR institutions, 72,376 (73%) had been fully vaccinated against COVID-19. In contrast, of 65,803 staff working in CDCR/CCHCS, only 34,373 (52%) had been fully vaccinated.¹



The Prison Law Office, which represents the plaintiffs in *Plata v Newsom*, has called upon CDCR/CCHCS to mandate vaccinations for staff. For example, in the Joint Case Management Conference Statement of July 29, 2021,² states in part:

We continue to believe that vaccination against COVID-19 should be mandated for all CDCR and CCHCS staff in the prisons. Staff are the primary vector for coronavirus getting into the prisons, and those who are unvaccinated pose a much higher risk of infecting residents and other staff.

¹ CDCR/CCHCS. Population COVID-19 Tracking. Available at: <https://www.cdcr.ca.gov/covid19/population-status-tracking/>. Accessed August 1, 2021.

² Available at: <https://prisonlaw.com/wp-content/uploads/2021/07/21.07.27-Doc-3623-Joint-Case-Management-Conference-Statement.pdf>.

This paper attempts to preliminarily assess the evidence for first part of the second sentence. That is, to show that “staff are the primary vector for coronavirus getting into the prisons,” it would be necessary to calculate the percentage of inmate-patients found positive for SARS-CoV-2 (the virus that causes COVID-19) who were probably infected by a positive staff member, whether directly or indirectly.

However, due to resource constraints,³ the CCHCS Public Health and Employee Health teams were unable to evaluate each COVID-19 patient case that has occurred to determine whether the infection could be ultimately traced to staff. Instead, on August 2, 2021, the teams instead decided to focus on case clusters⁴ among patients in the period May-July 2021. The evidence for staff introduction is both qualitative and epidemiological.

Methods

CCHCS Public Health research staff provided data on the occurrences of COVID-19 case clusters among patients by date of first patient case, institution, and facility. CCHCS Public Health nursing staff in institutions commented on whether each of the patient case clusters could have been linked to staff cases based on contact investigations and other information. The Employee Health program provided data on occurrences of case clusters among staff by date of first staff case, institution, and facility.

Results

The total number of COVID-19 cases among patients during the period was 361. Of these, 307 cases occurred in 14 case clusters during the period May-July 2021. That is, 54 cases occurred outside a known cluster.

Of the 14 patient case clusters, 7 (50%) could be linked to staff (Table 1). There were a total of 172 patients in the 7 clusters linked to staff. The percentages of staff who were fully vaccinated at the seven institutions involved in the case clusters were below the state average.

For the remaining seven patient case clusters (Table 2), including 135 patients, there is no evidence yet that staff introduction of SARS-CoV-2 into the patient population caused the cluster.

³ The request was received on Friday, July 30, with a deadline of Tuesday morning, August 3.

⁴ A “case cluster” is a set of cases linked in time and space. In contrast, the word “outbreak” suggests a linkage among the cases in a cluster, for example by being exposed to a “common source” or by one person spreading a disease to another. See “Legionnaires’ disease outbreak investigation toolbox” from the European Centre for Disease Prevention and Control at <https://legionnaires.ecdc.europa.eu/?pid=205>. In this report, we prefer the former term to describe all the groups of cases observed.

Table 1. Characteristics of Seven May-July 2021 Case Clusters Among Patients That Were Linked to Staff

Date of First Patient Case in the Cluster	Institution Where Cluster Occurred	Staff Vaccination Rate at Institution*	Facility or Facilities Involved in the Cluster	Number of Patient Cases in the Cluster
5/3/2021	WSP	45%	WSP-H	4
5/26/2021	MCSP	47%	MCSP-C	24
6/1/2021	CCC	33%	CCC-X22**	7
7/16/2021	SCC	39%	SCC-A, SCC-C, and SCC-X01	113
7/21/2021	PBSP	30%	PBSP-B and PBSP-A	11
7/23/2021	SATF	44%	SATF-G	4
7/26/2021	PVSP	39%	PVSP-A	9
Total number of cases in the seven case clusters				172

Table 2. Characteristics of Seven May-July 2021 Case Clusters Among Patients That Were Not Linked to Staff, as of 08/03/2021

Date of First Patient Case in the Cluster	Institution Where Cluster Occurred	Staff Vaccination Rate at Institution*	Facility or Facilities Involved in the Cluster	Number of Patient Cases in the Cluster
5/12/2021	CHCF	61%	CHCF-B	6
5/21/2021	SOL	54%	SOL-A	82
5/29/2021	SOL	54%	SOL-B	11
5/30/2021	NKSP	47%	NKSP-B	9
6/4/2021	CCC	33%	CCC-C	9
6/14/2021	CCC	33%	CCC-B	8
6/23/2021	CCC	33%	CCC-C	10
Total number of cases in the seven case clusters				135

* "% Fully Vaccinated" staff from <https://www.cdcr.ca.gov/covid19/population-status-tracking/>.

** The case cluster at CCC beginning on 6/1/2021 was associated with CalFire staff, not with CDCR/CCHCS staff.

Discussion and Conclusions

These preliminary analyses are limited in several respects. First, at this time we are unable to use results of whole genome sequencing (WGS) of SARS-CoV-2 to support our arguments. Although WGS can be used to support linkages between cases of COVID-19, WGS results take weeks or months to obtain from the California Department

of Public Health. We do not have enough WGS results from the period May-July 2021 to make meaningful conclusions.

Second, data are incomplete for some of the clusters listed in Table 2. It is possible that in the future, some of these clusters could be classified as linked to staff.

Third, we are not yet able to address the second part of the second sentence in the excerpt from the Joint Case Management Conference Statement above. That is, we have not yet determined whether “those [staff] who are unvaccinated pose a much higher risk of infecting residents and other staff.” We do note that staff vaccination rates tended to be low in the institutions where the seven patient case clusters linked to staff occurred. In addition, we note that the new Delta variant of SARS-CoV-2 may be easier to transmit than previous variants, regardless of vaccination status.⁵

Finally, additional analyses are needed to assess disease severity and hospitalizations for patients and staff. That is, the number of patient cases in each cluster may not fully represent the impact of introductions of COVID-19 into the CDCR/CCHCS patient and staff populations.

⁵ A study of one outbreak published by the Centers for Disease Control and Prevention on July 30, 2021, found that the concentration of virus detected in infected vaccinated people (as measured by “cycle threshold”) was similar to the concentration of virus detected in infected unvaccinated people. This suggests that the Delta variant can spread from vaccinated and unvaccinated people equally well. See: Brown CM, Vostok J, Johnson H, et al. Outbreak of SARS-CoV-2 Infections, Including COVID-19 Vaccine Breakthrough Infections, Associated with Large Public Gatherings — Barnstable County, Massachusetts, July 2021. MMWR Morb Mortal Wkly Rep. ePub: 30 July 2021. Available at: <https://www.cdc.gov/mmwr/volumes/70/wr/mm7031e2.htm>.

EXHIBIT B

Institution	ALL					Healthcare					Custody				
	Total number of staff	Completely Vaccinated		Vaccinated with at Least 1 Dose		Total number of staff	Completely Vaccinated		Vaccinated with at Least 1 Dose		Total number of staff	Completely Vaccinated		Vaccinated with at Least 1 Dose	
		#	%	#	%		#	%	#	%		#	%	#	%
SW	55541	27925	50%	29218	53%	10800	7753	72%	8016	74%	26769	10812	40%	11339	42%
ASP	1400	623	45%	668	48%	176	96	55%	107	61%	726	286	39%	308	42%
CAC	728	310	43%	330	45%	110	85	77%	91	83%	386	116	30%	122	32%
CAL	1292	788	61%	831	64%	142	98	69%	104	73%	727	425	58%	443	61%
CCC	1078	352	33%	372	35%	101	66	65%	67	66%	597	149	25%	160	27%
CCI	1682	601	36%	651	39%	220	123	56%	132	60%	973	271	28%	283	29%
CCWF	1336	707	53%	745	56%	298	196	66%	202	68%	536	222	41%	238	44%
CEN	1328	873	66%	912	69%	152	103	68%	107	70%	740	481	65%	500	68%
CHCF	3847	2327	60%	2435	63%	1755	1350	77%	1390	79%	984	446	45%	473	48%
CIM	1853	1049	57%	1087	59%	361	267	74%	277	77%	858	418	49%	428	50%
CIW	1354	763	56%	804	59%	364	272	75%	285	78%	484	252	52%	266	55%
CMC	1928	1044	54%	1090	57%	390	312	80%	319	82%	887	349	39%	364	41%
CMF	2745	1646	60%	1686	61%	825	677	82%	693	84%	885	491	55%	503	57%
COR	2153	958	44%	988	46%	387	266	69%	272	70%	1155	380	33%	389	34%
CRC	1316	670	51%	697	53%	184	129	70%	137	74%	749	318	42%	330	44%
CTF	1469	931	63%	963	66%	210	177	84%	180	86%	724	381	53%	394	54%
CVSP	893	426	48%	443	50%	113	77	68%	80	71%	433	170	39%	179	41%
DVI	318	192	60%	195	61%	34	27	79%	27	79%	132	67	51%	70	53%
FSP	1195	653	55%	667	56%	168	138	82%	139	83%	599	294	49%	303	51%
HDSP	1311	340	26%	355	27%	192	99	52%	103	54%	747	118	16%	126	17%
ISP	1361	614	45%	658	48%	124	71	57%	76	61%	689	264	38%	280	41%
KVSP	1629	755	46%	783	48%	238	161	68%	164	69%	992	365	37%	386	39%
LAC	1692	836	49%	908	54%	341	224	66%	235	69%	826	330	40%	352	43%
MCSP	1817	859	47%	904	50%	394	280	71%	286	73%	871	269	31%	292	34%
NKSP	1461	683	47%	712	49%	263	174	66%	178	68%	771	285	37%	297	39%
PBSP	1369	405	30%	425	31%	146	62	42%	63	43%	865	180	21%	187	22%
PVSP	1329	519	39%	545	41%	178	96	54%	99	56%	770	224	29%	242	31%
RJD	2214	1187	54%	1241	56%	474	360	76%	375	79%	1057	461	44%	482	46%

Institution	ALL					Healthcare					Custody				
	Total number of staff	Completely Vaccinated		Vaccinated with at Least 1 Dose		Total number of staff	Completely Vaccinated		Vaccinated with at Least 1 Dose		Total number of staff	Completely Vaccinated		Vaccinated with at Least 1 Dose	
		#	%	#	%		#	%	#	%		#	%	#	%
SAC	1921	920	48%	953	50%	395	284	72%	295	75%	902	340	38%	354	39%
SATF	1963	864	44%	913	47%	391	221	57%	233	60%	990	362	37%	385	39%
SCC	1176	464	39%	491	42%	139	97	70%	97	70%	666	203	30%	221	33%
SOL	1416	769	54%	798	56%	214	174	81%	176	82%	724	319	44%	333	46%
SQ	2157	1264	59%	1336	62%	345	278	81%	292	85%	1015	604	60%	638	63%
SVSP	1989	1100	55%	1149	58%	413	325	79%	334	81%	944	431	46%	453	48%
VSP	1190	702	59%	722	61%	256	183	71%	187	73%	537	271	50%	277	52%
WSP	1631	731	45%	761	47%	307	205	67%	214	70%	828	270	33%	281	34%

Institution	Administrative, Maintenance & Operations Services					Contractor Staff				
	Total number of staff	Completely Vaccinated		Vaccinated with at Least 1 Dose		Total number of staff	Completely Vaccinated		Vaccinated with at Least 1 Dose	
		#	%	#	%		#	%	#	%
SW	12205	7480	61%	7729	63%	5763	1878	33%	2132	37%
ASP	399	200	50%	211	53%	98	41	42%	42	43%
CAC	159	87	55%	89	56%	73	22	30%	28	38%
CAL	322	225	70%	231	72%	101	40	40%	53	52%
CCC	283	104	37%	108	38%	97	33	34%	37	38%
CCI	340	163	48%	172	51%	149	44	30%	64	43%
CCWF	391	248	63%	259	66%	111	41	37%	46	41%
CEN	344	259	75%	271	79%	92	30	33%	34	37%
CHCF	587	379	65%	394	67%	521	152	29%	178	34%
CIM	419	280	67%	288	69%	214	84	39%	94	44%
CIW	282	202	72%	207	73%	224	37	17%	46	21%
CMC	467	324	69%	334	72%	184	59	32%	73	40%
CMF	415	303	73%	307	74%	620	175	28%	183	30%
COR	431	247	57%	255	59%	179	64	36%	71	40%
CRC	286	201	70%	206	72%	97	22	23%	24	25%
CTF	398	292	73%	300	75%	137	81	59%	89	65%
CVSP	274	156	57%	160	58%	73	23	32%	24	33%
DVI	122	83	68%	83	68%	30	15	50%	15	50%
FSP	315	190	60%	192	61%	113	31	27%	33	29%
HDSP	304	111	37%	113	37%	68	12	18%	13	19%
ISP	307	173	56%	183	60%	241	106	44%	119	49%
KVSP	370	208	56%	212	57%	29	21	72%	21	72%
LAC	332	198	60%	205	62%	192	83	43%	115	60%
MCSP	448	265	59%	273	61%	104	45	43%	53	51%
NKSP	336	189	56%	199	59%	91	35	38%	38	42%
PBSP	302	141	47%	151	50%	56	22	39%	24	43%

Institution	Administrative, Maintenance & Operations Services					Contractor Staff				
	Total number of staff	Completely Vaccinated		Vaccinated with at Least 1 Dose		Total number of staff	Completely Vaccinated		Vaccinated with at Least 1 Dose	
		#	%	#	%		#	%	#	%
PVSP	307	173	56%	175	57%	74	26	35%	29	39%
RJD	382	278	73%	290	76%	301	88	29%	94	31%
SAC	337	219	65%	223	66%	287	77	27%	81	28%
SATF	444	238	54%	246	55%	138	43	31%	49	36%
SCC	301	143	48%	147	49%	70	21	30%	26	37%
SOL	379	235	62%	245	65%	99	41	41%	44	44%
SQ	347	270	78%	278	80%	450	112	25%	128	28%
SVSP	412	275	67%	289	70%	220	69	31%	73	33%
VSP	307	215	70%	221	72%	90	33	37%	37	41%
WSP	356	206	58%	212	60%	140	50	36%	54	39%