The California Dental Association Foundation is providing this report to summarize and conclude the work done under the Vaccine Confidence Contract (#20-10886) of the California Department of Public Health Office of Oral Health beginning on April 27, 2021, and concluding June 30, 2023.

This report provides a background of the grant, a detailed scope-of-work analysis and next steps.

BACKGROUND
The primary activities of the Vaccine Confidence Contract included:

1. Learning California dentists’ viewpoints on vaccination.
2. Developing and offering free curriculum regarding proper COVID-19 vaccination storage, delivery and reporting.
3. Creating a toolkit for dentists to share with patients and colleagues regarding COVID-19 vaccination.
IMPACT AT A GLANCE

94% of surveyed California dentists were vaccinated against COVID-19 as of July 2021.

High vaccination rates among the dental team, with more than 8 in 10 dental team members fully vaccinated as of June 2021.

Pockets of vaccine hesitancy were apparent in Southern California, rural areas and those under age 40.

Vaccine rates among dental team members were lower in those areas.

Dentists see a role for themselves in encouraging patients to get vaccinated.

Staff are less comfortable with discussing vaccination but are not opposed; they feel most comfortable talking about the importance for community safety/protection, the ability to avoid serious illness and the fact that you cannot get COVID-19 from the vaccine.

CDA is a top trusted messenger.

68% of dentists and 52% of staff ranked the CDA as a trustworthy source for COVID-19 vaccination information.
As of April 2021, 28 states allowed dentists to vaccinate.

6,728 DOSES

As of June 13, 2023, approximately 6,728 vaccine doses were delivered by dentists in dental offices.

Orange County had the highest vaccination by dentists, accounting for 88% of all doses by dentists.
COVID-19 CURRICULUM

The following course offerings were provided to help inform dentists on the dental practice considerations and clinical training required to administer vaccines.

1. Clinic practice considerations webinar co-hosted with CDPH, March 2022
2. Clinic practice considerations course, May 2022, CDA Presents Anaheim
3. Vaccine administration training, September 2022, CDA Presents San Francisco
4. Clinic practice and advocacy considerations, November 2022, American Public Health Association Annual Meeting
5. Vaccine administration training, 2 sessions, May 2023, CDA Presents Anaheim
6. Vaccine administration training, launched January 2023, online (accessed 311 between 1/1-6/13)
7. Vaccine administration training, April 2023, Yosemite Dental Society
This toolkit was created to help dentists and the dental team understand the COVID-19 vaccine, its distribution landscape and the process for vaccine administration as a licensed dentist. Additionally, the toolkit provides best practices and resources for dentist employers and their staff who have questions about the vaccine.

**Vaccine Infographic Flyers**
Two printable flyers to display in the dental office to support COVID-19 vaccination for total health. “Prevention Looks Like” is appropriate for dentists scheduling vaccines, while “Formula for a Healthy Smile” is appropriate for dentists supporting vaccinations.

**Social Medial Posts**
Two square-sized social media posts to promote COVID-19 vaccination for total disease prevention. “Prevention Looks Like” is appropriate for dentists scheduling vaccines, while “Formula for a Healthy Smile” is appropriate for dentists supporting vaccinations.

**COVID-19 Vaccination Tips for Dental Teams**
Talking points for dental providers on motivational interviewing for vaccine confidence and answers to common questions dental team members may receive regarding COVID-19 vaccines and booster shots.

**“Offering and Promoting COVID-19 Vaccine” Dental Flyer**
Sample announcement for a dental office offering COVID-19 vaccinations with language for patient messaging and follow-up campaigns. A flyer is included to answer common questions for COVID-19 vaccinations for both kids and adults.

**“Addressing Hesitancy” Flyer**
Resources to understand more about vaccine hesitancy and how to best respond to patients who are unsure about COVID-19 vaccination.
Goal 1: Conduct at least four provider trainings throughout California that will address the following topics/modules:

1) Patient scheduling
2) State vaccine registries
3) Vaccine administration billing
4) Vaccine record keeping

Trainings were conducted online unless it was safe to conduct in person. This included hosting live interactive virtual trainings and creating recordings for on-demand viewing. Trainings were made available to all California dentists and dental team members.

Three vaccination trainings were offered in person, a CDA Presents between 2022-2023, in partnership with the University of Pacific Arthur A. Dugoni School of Dentistry.

Training materials were developed in both a slide deck and resource toolkit format.

Proper reporting and training were conducted by CDA, which included logistics for addressing issues that vaccine providers may face, such as temperature-controlled refrigeration and storage of vaccines.

CDA supported dental offices in complying with state and federal requirements for COVID-19 testing as well as ordering and administering vaccinations.

Seven in-person courses and one online course focused on vaccine administration and compliance requirements were made available to California licensed dentists at no cost between January 2021 and June 2023. Over 130 dentists attended in-person courses hosted at various locations throughout the state and over 300 dentists participated in the online course.
Goal 2: Conduct a COVID-19 vaccine confidence survey of California dental offices and CDA members.

CDA completed a Vaccine Confidence Survey in June 2021.

- Recovery continues but is uneven. Despite having the highest vaccination rates in the state among dental teams, LA and the San Francisco areas lag behind other regions when it comes to capacity and patient levels. Dentists remain worried about increased costs and staff shortages, and concerns about infection rates have increased.

- The vaccination rate is unchanged and likely unchangeable. While vaccination rates among California dental team members far outpaces the general public, the numbers have not moved significantly since May 2021, and opposition is more firmly set. The Delta variant and breakthrough cases provide additional ammunition for their opposition. Most dentists feel comfortable recommending the vaccine to patients, but these numbers are down slightly from May 2021, suggesting more trepidation in this climate.

- CDA’s position is supported by dentists and dental teams. The vast majority agree with both CDA’s position on recommending vaccination AND on treading carefully with office policies in the wake of staffing shortages. CDA remains the top trusted messenger for dentists and tied for the top trusted messenger with dental staff.

Data to target toolkit included identifying the counties and dental societies with the highest opportunity for increased vaccination. These include:

- Northern California Dental Society (1 of 32 state dental societies) was identified as the highest opportunity component.

- Lassen County: Lowest percentage of fully vaccinated individuals at 28.4%.

- Mariposa County: 43.8% fully vaccinated (64.9% at least one dose).

- Tehama County: 44.1% fully vaccinated (48.4% partially vaccinated); only 40% of ages 18-49 are vaccinated.

- Modoc County: 41.3% fully vaccinated (44% at least one dose); the ethnic group with the lowest percentage of vaccines is Latinx at 32%.

- Butte County: Largest proportion to still get vaccinated in the 10 lowest percentage rates (large population size): 51.3% fully vaccinated (55.9% at least one dose). Only 49% of ages 18-49 are vaccinated. Approximately 100,000 individuals to still vaccinate!

- San Bernadino County: Large proportion still needs vaccination, with only 58% fully vaccinated.
**VACCINATION STATUS**

**June 2021**

Dental Staff

- **At least partially vaccinated** 87%
- **Not vaccinated** 7%
- **Prefer not to say** 6%

94% of dentists and 81% of staff were fully vaccinated when 62% of U.S. adults had been at least partially vaccinated.

**RECOMMENDING THE VACCINE**

Dentists and Staff

- In all categories, dentists were more Comfortable encouraging patients to get other vaccines.
- Staff were more comfortable addressing patient concerns about COVID-19 vaccines than recommending the vaccine to patient.
VACCINATIONS BY DENTISTS* for COVID-19 as of June 13, 2023

*not all doses by a dentist but at a site with a registered dentist vaccinator

<table>
<thead>
<tr>
<th>Admin Name</th>
<th>Admin County</th>
<th>COVID-19 Doses Administered</th>
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<tbody>
<tr>
<td>AHF Pharmacy Downtown</td>
<td>Los Angeles</td>
<td>3,044</td>
</tr>
<tr>
<td>American Dental &amp; Medical Institute</td>
<td>Los Angeles</td>
<td>16</td>
</tr>
<tr>
<td>Dental Arts- Dr. Batchaeva</td>
<td>San Francisco</td>
<td>8</td>
</tr>
<tr>
<td>Eureka Dental Group</td>
<td>Placer</td>
<td>63</td>
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<tr>
<td>Jeffrey G. Hibbard, DDS, Inc</td>
<td>Fresno</td>
<td>27</td>
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<tr>
<td>Karl M Zander, DDS, APDC</td>
<td>Sacramento</td>
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<tr>
<td>Kwokman Diagnostics</td>
<td>Orange</td>
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<td>Lombard Dental Studio</td>
<td>Ventura</td>
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<td>Nevada</td>
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<td>Ventura</td>
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<tr>
<td>Sabine A. Purps, DDS, APC</td>
<td>San Diego</td>
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<tr>
<td>Taylor Cosmetic and General Dentistry</td>
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<td>TruCheck Health - Tustin</td>
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<td>21,236</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>27,964</strong></td>
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GOALS

**Goal 3:** Coordinate the provision of in-office COVID-19 vaccine administration in targeted counties.

COVID-19 vaccination data was analyzed via the statewide dashboard. This was compared to the dental districts of CDA. The highest opportunity dental society for vaccination was the Northern California Dental Society. There is a continued effort to build vaccine confidence in Butte, Glenn, Lassen, Modoc, Shasta, and Siskiyou counties.

As of Sept. 2, 2022, 5,888 vaccines were delivered by dentists in dental offices. A general/cosmetic dental office in Orange County accounted for 42% of these vaccines. This data is from HCAI. Further exploration with Dr. Taylor, from “Taylor Cosmetic and General Dentistry”, anecdotally uncovered that many patients who came to their office for cosmetic procedures also used that time to get a COVID-19 vaccine and did not engage with other health providers.
Goal 4: Educate dental professionals and patients on COVID-19 vaccine safety.

**BOoster Shot?**

- **YES,** I will get it every time I need it: 81%
- **YES,** but starting next year and not this fall or winter: 8%
- **YES,** but I will only get the one this fall or winter and not after that: 2%
- No, I won’t ever get a booster shot for COVID: 9%

**Survey results showed vaccine confidence among dental team members:**
- Dental teams are significantly more likely to be vaccinated than the general population (94% of dentists and 81% of staff compared to 61% of adults nationwide) as of June 2021.
- When asked about trustworthiness of sources providing accurate information regarding the COVID-19 vaccine, 68% of dentists reported CDA as a trustworthy source while 44% said CDC.
- 87% of dentists reported they were likely or extremely likely to recommend the COVID-19 vaccine to patients. 75% of dental team staff reported they were likely or extremely likely to recommend the COVID-19 vaccine to patients.
16 CDA NEWSROOM ARTICLES
Between June 2021 and June 2023

* COVID-19 vaccine toolkit for dentists featured in CDA Journal (July 2021)

* 94% of California dentists vaccinated against COVID-19, CDA survey shows (July 2021)

The COVID-19 delta variant: FAQ addresses transmission, vaccine effectiveness (July 2021 – unpublished due to currentness, relevance)

California health care workers must show proof of COVID-19 vaccination; unvaccinated workers must get tested regularly (July 2021 – unpublished due to currentness, relevance)

Recommendations versus requirements: Managing unvaccinated employees (Aug 2021 – unpublished due to currentness, relevance)

CDA resources will help dentists comply with state order requiring COVID-19 vaccination or regular testing (Aug 2021 – unpublished due to currentness, relevance)

* COVID-19 booster shot now available to dentists fully vaccinated with Pfizer vaccine (Sept 2021)

Federal rules require COVID-19 vaccination for more workers by Jan. 4 with no testing option for health care workers in Medicare and Medicaid facilities (Nov 2021 – unpublished due to currentness, relevance)

* CDC endorses COVID vaccine booster for all Americans 18 and over (Nov 2021)

For many California health care workers, fully vaccinated against COVID-19 now means getting booster (Dec 2021 – unpublished due to currentness, relevance)

State, local COVID-19 vaccination orders still apply to California dental practices (Dec 2021 – unpublished due to currentness, relevance)

* Dental practices can reduce the spread of monkeypox through awareness, screening and infection control (July 2022)

What practice owners should know about unemployment eligibility for employees who don’t comply with COVID-19 vaccine, testing mandates (Aug 2021 – unpublished due to currentness, relevance)

* New COVID vaccination flyers and infographics for dental offices made possible through state grant (Sept 2022)

* Vigilance urged in dental offices this flu season – and staff vaccination may be required (Nov 2022)

Local health department resources can help dentists stay on top of COVID and flu guidance, trends (Dec 2022 – unpublished due to currentness, relevance)

* Vaccination administration C.E. course free for California dentists through June (Feb 2023)

* Click on article title to read published story
CONCLUSION
And Next Steps

The funded efforts to increase vaccine confidence among dentists, dental teams and their patients have yielded positive results.

The CDA Foundation successfully implemented various activities to achieve the goals outlined in the grant. These activities included conducting surveys to assess vaccine attitudes among dental professionals, developing and offering training on COVID-19 vaccine administration, creating a comprehensive toolkit for dental teams and coordinating in-office vaccine administration in high-need communities. The survey results indicated high vaccination rates among dental team members and dentists, with pockets of hesitancy in certain regions and age groups. Dentists expressed a willingness to play a role in encouraging patients to get vaccinated, while staff members showed less comfort but were not opposed. CDA Foundation and CDA emerged as trusted messengers with the dental audience, and the vaccine curriculum and toolkit provided valuable resources for dental professionals.

We made significant progress in enhancing vaccine confidence among dentists, dental teams and patients, which has opened opportunities for further engagement in disease prevention efforts.

Despite the success of the grant-funded activities, challenges were identified. Dentists faced barriers in terms of billing and reimbursement for vaccination services, and the requirement for temperature controlled refrigeration posed logistical challenges for dental practices. This resulted in lower than anticipated interest in in-person training programs. However, the grant has laid the foundation for future efforts to support dentists as vaccinators, promote disease prevention practices, and highlight the importance of medical-dental integration for areas such as electronic health record integration across providers and settings.
APPENDIX A

Vaccine Toolkit