Vaccination delivery by chain pharmacies in California: Results of a 2007 survey

Tammy Pilisuk, Jeffery Goad, and Howard Backer

Abstract

Objective: To better understand the practice standards and scope of pharmacistadministered vaccination services at chain pharmacies in California.

Design: Cross sectional.

Setting: California in 2006–2007.

Participants: Eight state-level immunization coordinator corporate liaisons to chain pharmacies' immunization programs.

Intervention: Key informant phone survey with follow-up written survey.

Main outcome measures: Policies, procedures, and vaccine usage.

Results: All eight chains provided immunization services to adults; four chains also vaccinated adolescents. More than 1,000 California pharmacists employed at chain pharmacies have been trained to vaccinate; more than 500 locations participate with evening, weekend, and walk-in hours. Influenza and pneumococcal vaccines were the most common vaccines administered. Other vaccines were used less frequently. Respondents expressed interest in partnering with public health to improve record sharing, build awareness, receive vaccine news updates, and explore other activities.

Conclusion: Chain pharmacies in California have started to vaccinate adults and adolescents—two commonly undervaccinated age groups. To date, patients seeking vaccination at pharmacies are most likely to receive influenza and pneumococcal vaccines. Community locations and extended hours offer patients convenience, although out-of-pocket fees may be a barrier to some patients. Opportunities exist to build and strengthen partnerships among public health, the medical community, and pharmacists in order to vaccinate and protect patients not vaccinated in traditional settings.

Keywords: Vaccinations, public health, collaboration.

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Vaccination at pharmacies is an emerging trend in the United States. The American Pharmacists Association (APhA) first launched their National Certificate Training Program for Pharmacists on Immunization Delivery in 1996.¹ A 2006 survey found that 41 states had formal laws permitting vaccination by pharmacists; several others were working on legislation.² As of July 2009, 50 states allowed pharmacists to vaccinate.³ At the time of this publication, California law did not address immunization practice standards or specific immunization training requirements for licensed pharmacists.

Despite the apparent growth of pharmacy vaccination authority, the acceptance and awareness of pharmacy vaccination services among physicians remain unclear. A study in North Carolina from 2003 indicated that physicians were neither knowledgeable nor supportive of pharmacist vaccinators.⁴ Some providers may be uneasy about pharmacists providing vaccinations partly because of the concern that medical care best resides with a patient's primary care physician (PCP).^{5–7} However, public health officials appear to have acknowledged pharmacists' role in vaccination. The American College of Physicians, the director of the National Center for Immunization and Respiratory Diseases, and the National Vaccine Advisory Committee have indicated support for pharmacy delivery of vaccination.^{8–10}

A survey commissioned in 2003 by the California Department of Public Health (CDPH) Immunization Branch indicated that the practice of administering seasonal influenza vaccine

At a Glance

Synopsis: Eight chain pharmacies in California were surveyed to determine the practice standards and scope of pharmacist-administered vaccination services, including patient age groups served, vaccines offered, training requirements for vaccinators, and on-site immunization practice standards. More than 1,000 pharmacists employed at California chain pharmacies have been trained to vaccinate, with more than 500 locations participating with evening, weekend, and walk-in hours. Although all eight chains offered seasonal influenza vaccine, seven of eight chains had begun to offer many or all of the Advisory Committee on Immunization Practices–recommended adult and adolescent vaccines. Most doses provided in 2006–2007 were adult formulations such as influenza and pneumococcal vaccines.

Analysis: Public health can play a key role in recognizing pharmacies as important complementary vaccine providers for California adolescents and adults. Maintaining a high-volume vaccination practice is likely to necessitate business practice changes at already busy pharmacies. Prescription dispensing automation and workflow enhancements could alleviate this problem. Continued monitoring of the distribution, volume, type, practice protocols, and reimbursement of vaccinations provided by pharmacies is warranted. in California pharmacies was widespread but that other routine vaccines were rarely available.¹¹ With the recent introduction of several new vaccines, vaccination practice has been undergoing a paradigm shift. What used to be primarily an activity targeted toward children and seniors has now broadened to include all age groups.

Preteens and adolescents are among the hardest-to-reach patient groups.^{12,13} According to a recent literature review, 29% of female patients and 39% of male patients aged 11 to 21 years had forgone medical care during the previous year.⁵ For those who do receive medical care, missed opportunities to vaccinate represent an ongoing challenge.¹⁴ An expert panel recommended including pharmacies among complementary vaccination sites to better reach adolescents.¹²

Vaccinating adults also has been difficult. Lack of health coverage or a stable medical home may be one reason, especially for younger adults. Young adults aged 19 to 29 years are among the least covered by health insurance,¹⁵ and nonelderly insurance coverage appears to be decreasing overall.¹⁶ Despite Medicare coverage, older adults also tend to be underimmunized. Recent data indicate that pneumococcal vaccination rates among seniors are suboptimal: more than 3 in 10 adults 65 years or older reported that they had not received their recommended pneumococcal vaccination.¹⁷

Patient convenience is an important factor contributing to the expansion of health care services in retail settings.¹⁸ Pharmacy-based vaccination may offer both convenience and access advantages to adult and adolescent hard-to-reach groups.^{19–26} The rise of retail clinics entering the market also suggests that offering convenience is a strategy in which corporate entities are willing to invest to reach patients.²⁷ Uninsured adults may pay less for a single vaccination at the local pharmacy than at the physician's office, where an additional visit charge would also be assessed.²⁸ Nonetheless, convenience may not offset out-of-pocket costs for price-conscious consumers, especially with the increased cost of newer vaccines.

In California, pharmacists may initiate and administer immunizations pursuant to a signed protocol with a prescriber (California Business and Professions Code 4052). The prescriber only has to oversee the development of the program but does not have to provide direct supervision or sign off on individual immunizations given by pharmacists. There are no restrictions on age or type of vaccine that may be administered by pharmacists; however, a 2010 state bill has raised the possibility of proposing practice protocols in lieu of a medical prescriber for adult influenza vaccinations.

Objectives

This study was conceived in order to gain a greater understanding of immunization practices, beyond influenza vaccination, at California chain pharmacies. In June 2007, the CDPH Immunization Branch collaborated with the University of Southern California (USC) School of Pharmacy to design and conduct a survey of California chain pharmacies. The objectives of this survey were to (1) define the scope and geographic distribution of vaccination services at California chain pharmacies; (2) determine the vaccines being offered and the operational protocols that are in place, including minimum ages served, training requirements, patient screening, and other practice standards; and (3) establish contact with these large corporate entities to gauge their interest in (a) receiving additional vaccine-related information from the state and (b) collaborating on various outreach or practice issues in the future.

Methods

A telephone survey instrument (Appendix 1 in the electronic version of this article, available online at www.japha.org) was developed and used to interview key respondents in June and July of 2007 at eight pharmacy chains with stores in California. Participants were assured anonymity of chain affiliation. Respondents were state-level corporate managers with responsibility for overseeing their company vaccination programs and serving as liaison to pharmacist vaccinators. Respondents also were asked to supply additional information on vaccine usage, pharmacy store locations, and screening and protocol documents using a follow-up survey instrument (online Appendix 2). Responses and supplemental information were compiled and summarized in a collaborative effort between CDPH and USC. Analysis of data is intended to show trends and to give an overview of pharmacy-based vaccinations in California.

Results

Locations and vaccination availability

Eight California pharmacy chains, representing more than 2,500 store locations statewide, were surveyed. All eight chains offered influenza vaccination from either staff pharmacists or outside contractors, typically from October to December.

Staff pharmacists at seven of the eight chains offered additional vaccinations year-round at 538 store locations (22% of existing community chain store locations in the state). The one remaining chain started vaccination services in fall 2008, after the survey period. Each of the seven chains providing vaccinations (beyond influenza) allowed clients to either walk in or make appointments for vaccinations. Two chains also had in-store clinics where nurse practitioners provided routine health care services that included vaccination.

Ages served

All pharmacy chains offered vaccinations to adults, whereas only four offered them to adolescents. Minimum ages served varied from 9 to 18 years of age, depending on the chain.

Workforce and training

Approximately 1,000 pharmacists at chain pharmacies in California have been trained to administer vaccinations. The proportion of each chain's pharmacists that received vaccination training varied from 8% to 61%. All pharmacy chains required their vaccinators to complete the APhA Pharmacy-Based Im**Table 1.** Expressed interest in partnership activity by chain pharmacies, 2007 (n = 8)

Potential partnership and collaboration				
activities	No. chain pharmacies			
Receive immunization information from				
the state	6			
Prepare for mass vaccination clinics	6			
Assist with patient awareness on				
immunization topics	5			
Expand patient awareness of pharmacy				
immunizations	5			
Contribute to a statewide website on				
pharmacy immunizations	5			
Join the California Immunization				
Registry	5			
Improve communication with medical				
providers	4			

munization Delivery program and basic life support. Seven of eight chains also required annual training in blood-borne pathogen exposure precautions.

All California pharmacists are required to complete 30 units of continuing education (CE) every 2 years, although no CE requirement related to vaccination exists. (Pending state legislation may change this.) Four chains reported offering in-house vaccination-related training opportunities to their pharmacists. Only one chain required its vaccinating pharmacists to complete annual CE units related to vaccination. Four chains indicated that they announced training opportunities to their pharmacist workforce; two chains offered incentives for CE.

All chains surveyed said that their corporate offices provided vaccine-related information to their pharmacist vaccinators. Information sources were not identified. Four chains had developed intranet communications on vaccination. When asked, six chains indicated that they would be interested in receiving and distributing routine updates from CDPH.

Ability to pay

Specific estimates on self-pay patients were not available from our survey respondents. Survey respondents provided the observation that pharmacy-delivered vaccinations are primarily given to patients who pay out of pocket. Some noted that a major contributing factor appears to be the limited reimbursement infrastructure available from private health insurers. Although all eight pharmacy chains indicated that they billed Medicare, five billed Medi-Cal (California's Medicaid program) and three billed private insurance. Medi-Cal and private insurance reimbursement included fee-for-service plans only, thus excluding public and private managed care networks. Some respondents also mentioned that when reimbursement was provided by private insurance, it included the vaccine cost but not the administration fee. This necessitated patient payment of the additional fee.

Vaccines offered

The number of pharmacy sites offering vaccinations varied by pharmacy chain, from a low of 30 to a high of 180. We asked respondents to roughly estimate the number of doses of each vaccine their chain locations administered across all participating sites in California during the previous year (Figure 1). All chains reported using more than 5,000 doses of influenza vaccine. After influenza, pneumococcal vaccine was given most often; six of seven chains already offering a range of vaccines reported administering more than 500 pneumococcal doses in the previous year. Two chains reported administering greater than 500 doses of hepatitis B and the herpes zoster vaccines. Fewer than 500 doses were administered for other vaccines.

Documenting and sharing vaccination records

Sharing information with the patient's medical home remains one of the biggest challenges for nontraditional vaccination venues. All pharmacy chains reported that they informed a patient's PCP about vaccinations given, but the method varied among the chains. Some had more than one way to communicate with the patient's PCP. Seven chains indicated that they updated the PCP by phone, fax, or letter. Two chains did this only when the patient requested it. All chains reported giving the patient a printed record of vaccination. All but one pharmacy chain reported maintaining paper records of their vaccinations. All chains maintained electronic records. Four chains had their pharmacists routinely update patient vaccination records. All issued a receipt for the vaccination.

Practice protocols

Survey respondents also provided pharmacy chain protocols for vaccination services. All included basic support such as screening eligible patients for indications and contraindications, giving a copy of the Vaccine Information Statement to each patient, reporting vaccine reactions to the Vaccine Adverse Events Reporting System, and having standing orders for epinephrine in case of an anaphylactic reaction. All pharmacies vaccinating patients younger than 18 years of age had a consent procedure for minors. All protocols had been signed by a California licensed physician and were consistent with the Advisory Committee on Immunization Practices (ACIP) guidelines for indications and contraindications. All pharmacies complied with Occupational Safety and Health Administration guidelines on use of engineered sharps, biohazardous waste disposal, protection of hepatitis B transmission, and vaccination of employees. All but one chain provided employees with annual blood-borne pathogen training.



Figure 1. Estimated annual vaccine doses delivered by California chain pharmacies, 2007 Abbreviations used: Hep, hepatitis; HPV, human papillomavirus; MCV4, meningococcal conjugate; MMR, measles, mumps, and rubella; Pneumo, pneumococcal; Tdap, tetanus, diphtheria, and pertussis.

Partnership opportunities

All pharmacy chains were interested in exploring opportunities to communicate with CDPH on a variety of issues. Six chains expressed interest in distributing CDPH Immunization Branch information to their pharmacist workforce. Six chains wanted to partner with public health departments to learn more about emergency planning for mass vaccination clinics. Five chains were interested in collaborating on patient awareness campaigns for either vaccination in general or pharmacy-based vaccination services in particular. Five chains liked the idea of sharing information about their vaccination services on a statewide website. Five chains stated that they would be interested in joining the California Immunization Registry (CAIR), and two others said they might be if they understood more about the program. Last, four chains favored building communication between vaccinating pharmacies and the medical community to foster greater mutual understanding.

Discussion

Our 2007 survey of chain pharmacies indicated that vaccination services available at California chain pharmacies have expanded since a 2003 survey of California pharmacists. At the time of our survey, nearly 1,000 trained pharmacists working at more than 500 outlets of these chains offered vaccination services. Chain pharmacies appear to be positioning themselves to meet patients' growing demand for convenience.

Although all eight pharmacy chains offered seasonal influenza vaccine, seven of eight California pharmacy chains had begun to offer many or all of the ACIP-recommended adult and adolescent vaccines. Most doses provided in 2006–2007 were adult formulations such as influenza and pneumococcal vaccines. This appears to be generally consistent with national uptake of vaccines, with fewer doses overall for vaccines such as zoster for older adults and tetanus, diphtheria, and pertussis; meningococcal; and human papillomavirus for adolescents. One-half of the chains surveyed offered vaccinations to adolescents, but these represented a relatively small proportion of the total vaccine doses given. No chains vaccinated children younger than 9 years of age.

The survey respondents also indicated that chain pharmacies have the appropriate procedures to support vaccination. All used necessary patient screening forms, required consent for minors, distributed Vaccine Information Statements, and had procedures for handling and documenting vaccine adverse reactions. All chains also maintained their own record systems for recording patient vaccines administered and had methods to send vaccination or vaccine-related updates to their pharmacist employees. Additionally, key contacts were interested in receiving additional vaccine-related information from the state that could be distributed to their pharmacist networks.

Pharmacy reimbursement by insurance companies remains a key issue. Despite the expansion of pharmacy-based vaccination services, the inability of patients to use medical insurance to pay for immunization services at the pharmacy remains a potential barrier to greater patient use. This suggests that for most patients, pharmacy vaccinations are paid for out of pocket. Increasingly expensive vaccines may add to the disincentive if patients have to shoulder more of the cost. Patients should be able to use their private or public managed care insurance where they receive the vaccination.

Exchange of vaccination information poses another potential challenge because returning records of vaccination to patients' PCPs is important for optimal care. Keeping the PCP fully informed helps Healthcare Effectiveness Data and Information Set performance measures, reduces missed opportunities to vaccinate, and avoids redundant vaccinations. Although all chains reported having standard systems to document vaccination and policies to transfering this information to the patient's PCP, the acceptance of their methods is not known and should be examined.

Efficient sharing of vaccination data, particularly by electronic means such as an immunization registry, could resolve vaccination record sharing. The respondents reported interest in improving communication with the medical community or joining CAIR, both of which could improve flow of information to primary providers. Currently, few pharmacies access CAIR, but it is anticipated that this will change in the future.

Pharmacies also indicated an interest in collaborative efforts to promote vaccination. Many respondents expressed an interest in working on patient awareness campaigns and in contributing service information to a collective statewide website. Nearly all were interested in assisting with mass vaccination in the case of a public health emergency. This may be an important resource to explore because pandemic influenza requires a large number of vaccine providers to administer the vaccine efficiently. Increasing the number of pharmacists participating in interpandemic vaccination campaigns could decrease the need for just-in-time training by providing an experienced workforce that can be called on when needed.

With their neighborhood locations, extended hours, and high patient traffic, pharmacies provide the public with a convenient option for vaccination. Nonetheless, the ability to maintain a high-volume vaccination practice is likely to necessitate some business practice changes at already busy pharmacies. Prescription dispensing automation and workflow enhancements could alleviate this problem. Continued monitoring of the distribution, volume, type, practice protocols, and reimbursement of vaccinations provided by pharmacies is warranted. Although this report does not provide detailed data on chain pharmacy vaccine use or costs, an overview of vaccination services available at chain pharmacies in California is provided. Considerable opportunities exist for collaboration and information sharing with chain pharmacy vaccination services. Public health can play a key role in recognizing pharmacies as important complementary vaccine providers for California adolescents and adults.

Limitations

Only chain pharmacies were surveyed because no practical method existed for identifying community-based independent pharmacies that administered vaccines or determining a single point of contact for all locations. In addition, chain pharmacies have less variation from pharmacy to pharmacy and represent the largest sector of pharmacy practice in California. Regarding the chain pharmacies in the survey, one respondent had not implemented that chain's vaccination program at the time the survey was conducted. Responses about immunization practices reflected corporate policies, as collected from state-level key informants: these may not account for variations in implementation at individual community chain locations. Additionally, responses on the number of vaccine doses administered were based on several ranges of doses given and do not reflect exact dose numbers; therefore, the effect on statewide immunization rates could not be assessed. Respondents also were not asked to specify how vaccine doses or vaccine types were distributed among store locations or by geographic region. Last, as a result of proprietary constraints, patient cost information for vaccines was not included in the survey.

Conclusion

This study met its stated objectives by providing the first-ever statewide examination of pharmacy delivery of immunizations, including patient age groups served, vaccines offered, training requirements for vaccinators, and on-site immunization practice standards. The result is a snapshot that suggests that vaccination services are commonly offered to adults and sometimes to adolescents at pharmacy chain locations across California with some variations by chain.

Equally important, survey respondents shared their interest in further collaboration with the public health sector and in receiving additional vaccine-related information from the state. Opportunities exist to enhance collaboration among public health departments, physicians, and pharmacy chains to improve access to immunizations and prevent vaccine-preventable diseases in the general population.

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TELEPHONE SURVEY CALIFORNIA PHARMACY CHAINS AND IMMUNIZATION PRACTICES

Survey Goals

- To learn what vaccines (besides flu) are being administered at California chain pharmacies and to which age groups
- Determine the magnitude of chain pharmacy delivery of immunizations in California, including geographical dispersion
- Assess current practices (and barriers) to sharing and updating patient immunization records between a pharmacy and the patient's medical home
- Develop a communication structure with pharmacy chains delivering immunizations to enable the Immunization Branch to distribute up-to-date information and training materials to vaccinators
- Foster relationships with pharmacy chains to partner in delivering consumer immunization messages and assess opportunities to increase public awareness of pharmacy immunization services

SURVEY QUESTIONNAIRE

I. Screening Questions

- 1. How many pharmacy locations does your chain have in California?
- 2. Does your pharmacy chain currently offer immunization services in any of your California locations? (Check all that apply; If b, c or d proceed to guestion # 3 then end: If a, then proceed to question #4))
 - □ a) Staff pharmacists administer immunizations (*If yes, proceed to question #4*)
 - b) Contract immunization services or flu shot clinics (e.g., Maxim)
 - □ c) Other
 - □ d) No immunization services offered
- 3. If no immunization services are offered by STAFF PHARMACISTS, do you intend to offer this service within the next 12 months to them?
 - □ Yes (Thank you, skip to question 10-15 rephrasing for future tense AND 25-27)
 - □ No (Thank you, end of survey)

II. Magnitude/Geographic Distribution of Services

- 4. Are immunization services (beyond flu vaccine) offered in all your California pharmacy locations?
 - □ Yes
 - □ No

- 5. Is the selection of vaccines offered the same at all your pharmacy locations?
 - □ Yes
 - □ No
- Are immunization services (aside from flu shots) offered year round?
 □ Yes
 - □ No
- 7. How are immunizations delivered at your pharmacies? (*check all that apply*) □ By appointment only
 - □ Walk-in on designated days
 - □ Walk-in any time the pharmacy is open
 - Other_____
- 8. Are your immunization services provided in an in-store clinic setting where other medical services are also provided?

🗆 No

 \Box Yes *If yes, who vaccinates*? MD \Box PA or NP \Box MA under supervision \Box Pharmacist \Box

- 9. Do you bill for pharmacist-administered immunizations?
 - □ No
 - \Box Yes (if yes, check which of the following)
 - □ Medicare
 - □ Medi-Cal

□ Private insurance

III. Pharmacist Training Protocols

- 10. How many pharmacists employed by your chain have received training to administer immunizations?_____ What percentage is this of your chain's pharmacist workforce in California?_____.
- 11. Does your chain have a policy to have a minimum number of pharmacist vaccinators in each store location?
 - 🗆 No
 - □ Yes If yes, □ 1 per store □ 2 or more per store
- 12. What type of training does your chain require pharmacists to complete in order to provide immunizations?
 - □ APhA Pharmacy-based Immunization Program
 - □ Other ACPE **spell out** approved certificate program
 - □ Class/elective in pharmacy school
 - □ other (please specify)_____
- 13. Does your organization require pharmacists to maintain current Basic Life Support (BLS) provider certification to provide immunizations?
 - □ Yes
 - 🗆 No

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- 14. Do you provide an annual blood borne pathogens training to your immunizing pharmacists?
 - . □ Yes
 - □ No
- 15. Do you require your pharmacists to obtain continuing education related to immunization practice?
 - □ Yes. If yes, how many hours per year?_____
 - 🗆 No
- 16. Do you offer any support for pharmacist vaccinators to get CEs?
 - □ Announce training opportunities to pharmacists
 - □ Offer incentives to complete training (e.g., paid time off work, or reimbursement for attending a training course)
 - □ Provide an in-house training curriculum or CE programs for pharmacist employees
 - \Box None of the above

IV. Immunization Services Practice Protocols

- 17. Do you have age restrictions to vaccination in your protocol?□ No
 - □ Yes If yes, what is the age restriction?
- 18. Do you use a screening form before administering immunizations?

□ Yes. If yes, do you maintain it as documentation? □ Yes □ No □ No

- *19.* Do your procedural guidelines for pharmacy vaccinations include any of the following?
 - Giving a Vaccine Information Statement (VIS) to every patient immunized
 - □ Standing orders for Epinephrine
 - □ How to respond if patient calls in hours or days after the vaccination to report a vaccine reaction
 - □ Reporting adverse events using the VAERS system
- 20. How are vaccine administration records maintained at the pharmacy? (Check all that apply)
 - □ Vaccine Administration Record (VAR) entered into the pharmacy computer
 - (if yes, can this information be accessed by pharmacists at other stores?) \Box Yes \Box No
 - □ Paper records are maintained in the pharmacy
 - Pharmacist updates patient's personal immunization record (e.g. yellow card) or issues a new one.
 - □ Pharmacist issues a receipt documenting patient vaccination(s) given.

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- 21. Does the pharmacy staff notify the patient's primary care physician after each immunization?
 - No. If no, why not? ______
 - □ Yes. If yes, which of the following are used to communicate with the PCP? (*check all that apply*)
 - □ fax
 - □ phone call
 - □ letter
 - □ patient is told to notify his/her primary care provider
 - □ electronic transmission
 - □ other (please specify)_____
- 22. Do you have a minor consent procedure for immunizing individuals 18 or under? □ No
 - \Box Yes (If yes, can you send a sample copy of your consent form?) \Box Yes \Box No
- 23. Do you offer free or discounted influenza vaccination to your pharmacists?
 - □ Yes
 - 🗆 No

V. Marketing and Ongoing Communication

- 24. Does your chain promote your pharmacy immunization services to consumers?
 - □ No, nothing from the corporate office
 - □ Marketing is left up to the local stores
 - □ Yes (*if yes, please specify*)
 - □ ads in newspaper
 - □ website URL:__
 - □ direct mail to consumers
 - □ in-store signage
 - □ pharmacy-area window sign
 - other (please specify)_____
- 25. Does your corporate office include vaccine updates or other immunization-related information in communications to your pharmacist vaccinators?
 - 🗆 No
 - □ Yes (*If yes, how?*)
 - 🗆 Email
 - □ Mass mailing
 - □ Individual phone contacts
 - Other_____

26. If the California Department of Public Health wanted to send timely immunization information out to pharmacist vaccinators in your chain, who would be the best point of contact?

Name Title Mailing address Email Phone Fax

- 27. If the opportunity arose, would your chain be interested in participating in the California immunization registry? <*may need to explain what a registry is*>
 - □ Yes
 - 🗆 No
 - □ Maybe, would like to learn more
- 28. Would you be interested in collaborating with the California Department of Public Health's Immunization Branch and the California Pharmacist Association Foundation on future projects?
 - 🗆 No
 - □ Yes (If yes, are you interested in any of the following issues?)
 - increasing consumer awareness of immunizations in general
 - □ increasing consumer awareness of pharmacy-delivered immunizations
 - □ building communication between pharmacies with immunization services and the medical community;
 - □ distributing education and training materials to pharmacist vaccinators
 - □ sharing information about your chain's immunization services on a statewide webpage
 - □ partnering with public health to prepare for mass vaccination clinics during a public health emergency
 - □ Other____

TO BE SENT AFTER THE PHONE SURVEY AS FOLLOW-UP

 "Survey Follow-up Questions" regarding aggregate vaccine usage (Stress that individual companies will not be linked to data. All data will be presented in aggregate)

REQUESTED ITEMS FOLLOWING THE SURVEY

- o Completed written questions
- o List in EXCEL (preferably) of pharmacies with addresses
- Copy of their minor consent procedure
- Copy of their immunization protocol (not the signed copy)

SURVEY FOLLOW-UP QUESTIONS

CALIFORNIA PHARMACY CHAINS AND IMMUNIZATION PRACTICES

California Dept of Public Health, Immunization Branch, 850 Marina Bay Parkway, Bldg. P, 2nd Floor, Richmond CA 94804

Are you the primary contact for immunization activities in CA? If yes, complete line #1 below. If no, Complete line#1 with your information and line #2 with the primary contact information.

Name & Degree	Affiliation	Title	Address	Phone and Fax#	Email

Which pharmacist-administered vaccines does your pharmacy chain offer in California?

Vaccine type		Doses (last 12 mos – aggregate for all locations)		
Offer now	Plan to offer in next 12 months	<100 doses	101 – 500 doses	> 500 doses
	Pneumococcal			
	MMR (measles, mumps, rubella)			
	Dtap (pediatric diptheria, tentanus & pertussis)			
	☐ Tdap (adolescent/adult tetanus, diphtheria & pertussis)			
	Td (tetanus)			
	Hepatitis A			
	Hepatitis B			
	Twinrix (Hep A & B combo)			
	HPV (Human Papillomavirus)			
	MCV4 (meningococcal)			
	Zoster (shingles)			
	 Travel vaccines** Do you give Yellow Fever vaccine: 			
	Yes Do			

** Travel vaccines include: Yellow fever, Japanese Encephalitis, polio, typhoid, and rabies

Influenza Vaccine. <i>Check</i> : (We offer: □ Injectable □Nasal Spray) Last Influenza Season				
Offer now	Plan to offer in next 12 months	<500 doses	501 - 4,999 doses	> 5000 doses
	Influenza			

Please return this questionnaire by email (<u>goad@usc.edu</u>), fax (323-442-3431) or mail (Tammy Pilisuk, California Dept of Public Health, Immunization Branch, 850 Marina Bay Parkway, Bldg. P, 2nd Floor, Richmond CA 94804)

- A list (EXCEL spreadsheet preferred) of your California pharmacy locations (with addresses). Please indicate in the last column if immunization services are available or will be available in the next 12 months
- □ A copy of your immunization services screening form
- □ A copy of your consent for immunization form
- □ Unsigned copy of your immunization protocol

Thank you for your participation in this survey! If you have any questions, please call Jeff Goad at XXX-XXX-XXXX.

Please return this form and requested attachments by July 20, 2007

CA Dept of Public Health, Immunization Branch, June 2007