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## Implementing Pharmacy-Based Travel Health Services: Insight and Guidance from Frontline Practitioners

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### Comments

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## Implementing Pharmacy-Based Travel Health Services: Insight and Guidance from Frontline Practitioners

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### PURPOSE

In California, the passage of SB493 in July of 2013 was a milestone in advancing pharmacy practice. Among other things, the new legislation allows pharmacists to provide routine immunizations without a protocol and furnish medications for international travelers for conditions not requiring a diagnosis. When developing a pharmacist-run travel health service, consideration must be given to multiple important factors, including pharmacist training, physician partnership, logistics, from scheduling to documentation, and the resources necessary to provide a travel health service.<sup>5</sup> This article sets out to provide guidance and insight to pharmacists seeking to implement a travel health service.

### SUMMARY

Travel health requires providers with knowledge regarding epidemiology, transmission, and prevention of travel-associated infectious diseases, a complete understanding of vaccine indications and procedures, and prevention and management of noninfectious travel-associated health risks. Pharmacists seeking to implement travel health services need to seek out appropriate resources for pharmacist training, workflow and logistical considerations, and travel health-specific resources to optimally provide this service.

### CONCLUSION

The traveling population is at significant risk for travel-related diseases, but only a small number actually get the advice, vaccines and medications they need. With the passage of SB493 in California, the 40,000 registered pharmacists and 6,000 pharmacies across California could provide the essential access, convenience and expertise that a growing traveling population needs to stay healthy while abroad. Whether in a community pharmacy or ambulatory care clinic, pharmacists must ensure they can provide or arrange for personalized, comprehensive travel health services.

### Introduction

In California, the passage of SB493 in July of 2013 was a milestone in advancing pharmacy practice. SB493 expands pharmacist services in areas such as hormonal contraception, smoking cessation, immunizations, administering drugs and biologics, and travel medicine, and also created an Advance Practice Pharmacist (APP) license category. The APP designation gives pharmacists a broader scope of practice.<sup>1</sup> However, APP designation is not necessary to perform all the expanded-scope practices allowed for in SB493, such as routine immunizations without a protocol and furnishing medications for international travelers for conditions not requiring a diagnosis.<sup>1</sup> The term “travel medicine” is a practice specialty devoted to the

health of international travelers pre- and post-travel. Travel health is often used to describe the pre-travel services of travel medicine providers. Tropical and geographic medicine entails the provision of medical care internationally. Pharmacists can provide the full range of travel health services nearly independently. This role is an appropriate next step, as pharmacists have consistently demonstrated that they can provide evidence-based care and improve patient compliance and satisfaction in the travel clinic setting.<sup>2,3</sup> Having this new level of trust and professional responsibility necessitates optimal practice standards to ensure the safety and quality of the services pharmacists will provide to their patients. According to the Infectious Diseases Society of America, travel health requires

providers with knowledge regarding epidemiology, transmission, and prevention of travel-associated infectious diseases, a complete understanding of vaccine indications and procedures, and prevention and management of noninfectious travel-associated health risks.<sup>4</sup> When developing a pharmacist-run travel health service, consideration must be given to multiple important factors, including pharmacist training, physician partnership, logistics, from scheduling to documentation, and the resources necessary to provide a travel health service.<sup>5</sup>

### Pharmacist Training

Travel health is truly a specialty practice, one that requires a specific body of knowledge by the clinician providing this service. Pharmacists have access to

training programs and resources to prepare them for the provision of travel health services as well as to ones that serve to maintain the most current information in travel medicine. The current proposed text by the California Board of Pharmacy requires pharmacists to obtain the following in order to provide travel health services: (1) Completion of an immunization certificate program that meets the requirements of Business and Professions Code section 4052.8, (2) completion of an approved travel medicine training program, which must consist of at least 10 hours of training and cover each medication- and vaccination-related element of the International Society of Travel Medicine's Body of Knowledge for the Practice of Travel Medicine, (3) completion of the CDC Yellow Fever Vaccine Course, and (4) current basic life support certification.<sup>1</sup>

The discipline of travel health involves a comprehensive knowledge and resource base, including infectious diseases, epidemiology, and environmental, geographic and consular matters related to travelers' health and safety.<sup>4</sup> Since this field is unique, dynamic, and a rapidly growing area of practice for pharmacists, it is important to maintain a high standard of practice amongst all providers, including physicians, nurses and pharmacists.

### **Certificate Training Programs**

Providing comprehensive travel health services involves determining patients' specific travel health needs, providing immunizations, furnishing necessary medications, and counseling patients on health and safety risks specific to their destination and itinerary. Pharmacists interested in providing travel health services should begin by completing a comprehensive immunization training program such as the American Pharmacists Association's (APhA) Pharmacy-Based Immunization Delivery Certificate Training Program, composed of a self-study and live training seminar offering 20 hours continuing education (<https://www.pharmacist.com/pharmacy-based-immunization-delivery>). Although a general immunization training program such as this one does not address specific travel-related vaccines, it provides a very robust and strong foundation of knowledge, practices, decision-making skills, regulations, and techniques related to immunizations necessary in patient care and travel health.

APhA has developed the Advanced Competency Pharmacy-Based Travel Health Services Training Program to prepare pharmacists to offer travel health services (<https://www.pharmacist.com/pharmacy-based-travel-health-services>). The successful completion of the APhA Pharmacy-Based Immunization Delivery Certificate Training Program and being an authorized provider of immunizations in their state, which pharmacists in California are, are prerequisites to enroll in the APhA Pharmacy-Based Travel Health Services Training Program. This program, which offers 10 hours of continuing education, includes self-study and live seminar components that will prepare pharmacists to evaluate travel itineraries, assess health and safety risks based on travelers' destinations, reasons for travel and medical history, and create and communicate a plan for patients to receive the necessary medications, immunizations, counseling and nonprescription medications and supplies for their trip.

The gold standard in travel health knowledge is the Body of Knowledge developed by the International Society of Travel Medicine (ISTM). This Body of Knowledge serves as the basis for the Certificate of Knowledge examination that is available through the ISTM for all travel health professionals. Those who successfully complete the exam are awarded the Certificate in Travel Health (CTH®) by the ISTM. The CTH® is one of few credentials offered across health disciplines and recognized internationally by health care providers (<http://www.istm.org/bodyofknowledge>).

### **Continuing Education**

According to the California board proposed text, pharmacists must complete two hours of ongoing continuing education focused on travel medicine, separate from continuing education in immunizations and vaccines, from an approved provider once every two years.<sup>1</sup> The Centers for Disease Control and Prevention (CDC) offers brief and focused online continuing education courses related to travel medicine (<http://wwwnc.cdc.gov/travel/page/ce-courses-training>). These programs include webinars and other types of web-based courses discussing topics including emerging threats such as chikungunya virus and Zika, yellow fever, malaria, and tuberculosis and rabies risk assessments. These courses are intended for practicing travel

health providers needing updates on current topics of interest in travel medicine.

### **References and Resources**

Certificate training programs provide a solid foundation on which to build a travel health practice. Once initial training is complete, pharmacists should maintain a comprehensive knowledge base of travel-related issues in order to be prepared for any itinerary that may come their way. A well-informed travel health provider must have the appropriate resources to remain up to date on information such as disease outbreaks, changes in country entry requirements, and vaccine recommendations.<sup>4</sup> The current proposed text from the board of pharmacy in California requires that pharmacists use the CDC's Health Information for International Travel, commonly known as the Yellow Book, when determining what medications may be furnished.<sup>1</sup> However, multiple other resources may also be consulted in the decision-making process. Outlined below are some resources and suggestions for staying up to date on travel medicine.

#### **ISTM Body of Knowledge**

The ISTM Body of Knowledge is the scope and extent of knowledge required for professionals working in the field of travel medicine. Major content areas include the global epidemiology of health risks to the traveler, vaccinology, malaria prevention, and pre-travel counseling designed to maintain the health of the traveling public (<http://www.istm.org/bodyofknowledge>).

#### **CDC Yellow Book**

One of the most comprehensive travel health resources written specifically for health care professionals, the Yellow Book is available both online and in print. It contains information on everything travel related, from updated vaccine requirements and recommendations to guidance for travelers with special needs (<http://wwwnc.cdc.gov/travel/page/yellowbook-home>).

#### **Web-Based Subscriptions**

There are several web-based subscription resources available for use by travel health providers. Many of them now include information, training, and resources specifically tailored for use by pharmacists. Research into each reference prior to committing to any one reference or subscribing to multiple references may be advisable, as contradictory information

can be found among even reputable web resources.<sup>6</sup> The Infectious Diseases Society of America has a comprehensive list of available resources available for use by travel health providers.<sup>4</sup>

### Pharmacist and Physician Partnership for Travel Vaccination Protocols

According to California pharmacy law, when administering vaccines that are routinely recommended by the Advisory Committee on Immunization Practices (ACIP) to individuals three years of age and older, a protocol is not required.<sup>1</sup> However, since the ACIP statements are not written in a protocol, standing orders or standard operating procedure format, pharmacists should develop their own documents consistent with ACIP statements or use ones readily available from other sources, such as the Immunization Action Coalition (<http://www.immunize.org/standing-orders/>). When administering non-ACIP routinely recommended vaccines for travel (e.g., yellow fever, rabies, Japanese encephalitis, and typhoid fever vaccines), a physician-signed protocol is still required. Information on what to include in such a protocol is covered below; however, it is important that this protocol be up to date and evidence based, using the ACIP recommendation for these vaccines as a guide.<sup>7</sup>

According to the APhA Immunization Certificate Training Program; items that should be included in any vaccine protocol include:

1. Statement of physician authorization for the pharmacist to administer vaccines
2. Qualifications of person(s) administering vaccines
3. Vaccine(s) covered in the standing order/protocol
4. Policies
5. Screening patients for indications and contraindications
6. Information to provide to patients (e.g., VIS)
7. How to administer vaccine (e.g., dose, route, anatomic location)
8. Documentation requirements
9. Communication to physician and reporting requirements
10. Emergency precautions (e.g., use of epinephrine for allergic reactions), including specific protocol

Below are some ways in which pharmacists can partner with a physician in order to establish a travel vaccine protocol.

1. Contact the local/county health department. Physicians involved in public health may be more inclined to collaborate with a pharmacist on such a protocol. Information on California county health departments can be found here: <https://www.cdph.ca.gov/services/Pages/LocalServices.aspx>
2. Partner with a physician through a local university or college of pharmacy. This may be advantageous if the pharmacist also serves as a preceptor for that university or college of pharmacy.
3. Reach out to those physicians who most commonly prescribe medications at your pharmacy. These physicians may be more willing to sign off on a travel vaccine protocol given that there may be more history between the individual physician and pharmacy/pharmacist.
4. Partner with an infectious diseases physician. Physicians specializing in ID, particularly tropical medicine, make great referral sources for ill returned travelers, but also may want to partner with you to take care of the pre-travel patients.

If necessary, pharmacies/pharmacists may need to pay a physician to be their immunization protocol consultant, but this relationship must never be construed to mean that physicians are being paid for individual referrals to a clinic. Once a physician has been identified who will sign off on a travel vaccine protocol, it is important to apply for a yellow fever stamp through the California Department of Public Health (California Yellow Fever Vaccine Provider Application). Without a yellow fever stamp, yellow fever vaccine cannot be ordered or shipped to the pharmacy. Information on applying for a yellow fever stamp can be found on the California Department of Public Health's website (<https://www.cdph.ca.gov/programs/immunize/Pages/CaliforniaYellowFeverVaccineProviderProgram.aspx>). Please note that only physicians can apply to become yellow fever vaccine stamp holders, but they can designate other appropriate licensed individuals at designated yellow fever vaccine centers (<http://wwwnc.cdc.gov/travel/yellow-fever-vaccination-clinics/search>) to administer yellow fever vaccine and sign the ICV-P. Both the physician and pharmacist need to complete the California Yellow Fever application and take the CDC Yellow Fever

Immunization online course.

### Logistical Considerations of a Travel Health Service

Appropriate staffing and resources for starting a travel health clinic are critical for program success, to limit the interference with everyday operations and services, and create time for the pharmacist to dedicate to the travel service. Below are some areas for consideration and suggestions for effectively incorporating a travel health clinic into a pharmacy or ambulatory care clinic. It is important that the pharmacist in a community pharmacy or ambulatory care setting ensure that patients get comprehensive travel health services. The basic elements that must be provided or arranged are:

- Patient education (provided)
- Immunization (provided and/or arranged)
- Prescription medications (provided and/or arranged)
- Travel-related supplies (provided and/or arranged)

### Workflow

To create time for the pharmacist to provide patient care, one should identify all essential tasks performed in the pharmacy or practice setting and consider redefining roles and activities as needed. In a travel clinic, the pharmacists' primary responsibilities are to perform the risk assessment based on the patient's pre-travel health history, prepare patient-specific education documents and recommendations, provide travel consultation, and provide appropriate immunizations and documentation.<sup>5</sup> Other tasks involved in a travel clinic, such as marketing, patient scheduling and reminders, and vaccine/prescription input and billing can be designated to a pharmacy technician, clerk, or intern. In an ambulatory care setting, nurses may be utilized to perform clerical responsibilities and administer vaccinations. A pharmacy intern may also assist in the preparation of the consultation documents and recommendations, and preparation and administration of vaccinations if appropriately trained. Performing a time-motion analysis or estimation can help your site better determine the required time and personnel needed.

### Space

The space used for existing services

such as medication therapy management or routine immunizations is usually appropriate for providing travel health services. A private clinic room is ideal, as patients may feel more comfortable discussing medical history and receiving immunizations in an enclosed area. However, in a pharmacy not equipped with a private room, a designated semiprivate space with a desk or table and seating for a pharmacist and one or more patients is sufficient.

## Scheduling of Patients

Developing an effective scheduling system for your practice will increase patient, provider, and staff satisfaction, and boost overall productivity and minimize interference with normal workflow and services. Travel clinic services can be provided by appointment, on a walk-in basis, or through a combination of both. Appointment-based services tend to be less disruptive to the pharmacy's normal workflow, as patient volume is planned and expected; however, they can limit the number of patients who can be accommodated. Walk-in-based services are more convenient for patients, but may cause disturbances to the normal workflow to accommodate the patients. Walk-in services might also mean that the pharmacy has to stock a wide range of, if not all, vaccines at all times, because the required vaccines and patient/destination risk assessments cannot be determined in advance. For walk-in-based services, patients may also not come prepared or with all required information for the pharmacist to make a proper assessment and plan.

Establishing specific travel clinic hours of operation may also help the pharmacist and site anticipate and adjust workflow needs in advance. For example, the pharmacy or site may only schedule travel appointments on specific day(s) of the week or do block scheduling where only certain blocks of time in the day are set aside for travel appointments. A combination of these two methods may also work, depending on the needs of the site, and the hours can always be expanded as patient volume increases. Other considerations for scheduling appointments are consultations for multiple travelers with the same itinerary (e.g., a family, a study abroad cohort, or a group of friends). When all travelers have the same itinerary, group consultations regarding fundamental risks and hazards of the

group's destinations can be conducted with all travelers at once. However, the individual risk management and individualized care plan must be conducted individually with each traveler, since each patient's specific vaccination history, allergies, medical conditions, and recommendations must be taken into consideration.

The time it takes to provide comprehensive pre-travel consultation service can vary depending on the number of pharmacists or student pharmacists available, pharmacy dispensing volume, insurance billing versus paying out of pocket, completeness of the patient's pre-travel history form, number of patients traveling with the same itinerary, and individual patient needs. For each appointment, the pharmacist's primary responsibilities in a travel clinic, stated above, should take between 30 to 60 minutes, with the face-to-face travel consultation between the pharmacist and the patient ideally taking between 20 and 30 minutes. When scheduling patients, these estimations of time should be considered.

Consideration should also be given to the fact that immunity generally takes approximately two weeks to develop after vaccination, and some vaccines may require multiple doses to provide immunity. Travelers should be scheduled and seen at least four to six weeks before departure. However, many travelers often seek out travel consultations shortly before their departure date. Such travelers should still receive consultation, appropriate medications and vaccinations, after a thorough discussion of risks, benefits and efficacy of medications and vaccinations so close to departure.

## Furnishing Medications

According to California law, pharmacists may furnish all prescription medications not requiring a diagnosis as recommended by the CDC for international travel. This is in addition to the authority to initiate and administer vaccines as recommended by the Advisory Committee on Immunization Practices.<sup>1</sup> The medications recommended for international travel are relatively limited in number (see Figure 1 for a list of conditions), and their directions for use generally do not vary significantly between patients. For these reasons, many travel health practices opt to use prepopulated checklist-type prescription forms. This may help to increase efficiency and consistency

and potentially reduce furnishing errors. All furnishing pharmacists need to obtain an individual National Provider Identification (NPI).

## Vaccines

With the exception of yellow fever vaccine, most immunizations are available to order through pharmacy wholesalers or other vaccine distributors. Yellow fever vaccine is supplied directly by the manufacturer and may only be ordered by facilities associated with an official yellow fever vaccine provider. As with basic immunization services, it is important that all necessary supplies and equipment for administration are available and easily accessible. This includes syringes and needles, alcohol swabs, cotton swabs, gloves, adhesive bandages, sharps containers, diphenhydramine for hives, and emergency supplies such as injectable epinephrine. In addition, a refrigerator with continuous temperature monitoring is necessary, as nearly all currently available travel vaccines require storage between 2° and 8°C (35° and 45°F). Close attention should be paid to the storage requirements of all vaccines. See the CDC's recommendation for proper storage and handling of all vaccines (<http://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/index.html>).

## Ordering Tests

California law allows all pharmacists to "order and interpret tests for the purpose of monitoring and managing the efficacy and toxicity of drug therapies"(B&P4052(a)(12)). In the course of providing a travel consultation, laboratory monitoring may become necessary in certain situations, such as looking for antibody titers for a patient with an unclear vaccination history or checking for contraindications to medications.<sup>5</sup> The Joint California Pharmacist Association and California Society of Health-Systems Pharmacists Sub-Committee on SB493 Travel Medicine Provision document provides a list of commonly ordered tests used in travel medicine.<sup>5</sup> In order to be adequately prepared for these situations, a working relationship with a laboratory must be established. For pharmacists at ambulatory care sites, this may mean undergoing credentialing within their institution to obtain lab-ordering privileges. For pharmacists practicing in a pharmacy setting, this will involve getting approval and beginning a



relationship with a commercial laboratory to obtain a contract and lab-ordering privileges in order to send patients to laboratory locations for blood draws. California law requires that a laboratory test order be "done in coordination with the patient's primary care provider or diagnosing prescriber" and documented within 24 hours in a system readily accessible by the PCP.

## Documentation

It is important to ensure proper documentation of patient care activities to serve as a legal record of care and as a communication tool when shared with other health care providers. Specific requirements for documentation of travel health services are put forth in the board of pharmacy's proposed text regarding travel health services:

1. For each travel medication furnished by a pharmacist, a patient medication record shall be maintained and securely stored in physical or electronic manner and be readily retrievable during the pharmacy or facility's normal operating hours.
2. The pharmacist shall provide the patient's primary care provider, or the patient themselves, if the PCP is unknown, with a progress note that fully documents the clinical assessment and travel medication plan. An example of an appropriate and comprehensive progress note is available on the board's website.<sup>1</sup>

There are also important documentation essentials for vaccine administration, including:

1. Documentation of the administration of vaccines (vaccine name, lot number, expiration date, site vaccine administered, initials of pharmacist, date vaccine given, date of VIS).
2. Documentation of yellow fever vaccination on the International Certificate of Vaccination or Prophylaxis (ICV-P) with associated official stamp from the state health department when yellow fever vaccine is administered. The ICV-P can be purchased through the Government Printing Office at <https://bookstore.gpo.gov/products/sku/017-001-00566-5>.
3. Documenting refrigerator and freezer temperatures at least twice

a day following CDC recommendations. Please note that this is also a requirement of being a yellow fever vaccine provider.

4. Informing the patient's primary care physician that vaccines were administered. This can be accomplished through electronic health record documentation, phone calls, or faxes to the physician's office.
5. Immunizations must also be documented in the California Immunization Registry (CAIR) (<http://cairweb.org/pharmacies-and-cair/>).<sup>1</sup>

## Billing

In order to bill pharmacy insurance providers, both private and those administered through CMS, health care providers who prescribe or furnish medications are required to obtain an individual National Provider Identifier. This is in addition to the health care organization NPI issued to facilities such as pharmacies and clinics. An NPI can be obtained at no cost from the National Plan and Provider Enumeration System (NPPES). Required information for application includes demographics and contact information, Social Security number, practice location, provider type and state license number. After submission of an application, providers can expect an assigned NPI via email within three weeks. An individual DEA number is also required for providers who prescribe controlled substances.

## Conclusion

The traveling population is at significant risk for travel-related diseases, but only a small number actually get the advice, vaccines and medications they need. With the passage of SB493 in California, pharmacists now have the opportunity to provide vital comprehensive travel health services to the public. These enhanced practice abilities include independently furnishing prescription medications for travel-related conditions, ordering appropriate tests, and independently administering routine vaccines. Pharmacists are also now mandated to complete specific immunization and travel health training before starting their travel health service. Whether in a community pharmacy or ambulatory care clinic, pharmacists must ensure they can provide or arrange for personalized, comprehensive travel health services. With more than 40,000 registered pharmacists and 6,000

pharmacies, pharmacist-based travel health services could provide essential access, convenience and expertise that a growing traveling population needs to stay healthy while abroad.

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## References

1. "California Board of Pharmacy - Regulations." *Board of Pharmacy - Regulations*. Business and Professions code 4052. (a)(10)(A)(3) and [https://www.google.com/url?q=http://www.pharmacy.ca.gov/laws\\_regs/1746\\_5\\_pt.pdf&sa=U&ved=0ahUKEwiq5MHMqMHNA-hUL2WMKHMoA8sQFggEMAA&client=internal-uds-cse&usq=AFQjCNGoDnHQ-JLKZG6oCDKSeUIUwMVhLVg](https://www.google.com/url?q=http://www.pharmacy.ca.gov/laws_regs/1746_5_pt.pdf&sa=U&ved=0ahUKEwiq5MHMqMHNA-hUL2WMKHMoA8sQFggEMAA&client=internal-uds-cse&usq=AFQjCNGoDnHQ-JLKZG6oCDKSeUIUwMVhLVg)
2. Durham MJ, Goad JA, Neinstein LS, Lou M. A comparison of pharmacist travel-health specialists' versus primary care providers' recommendations for travel-related medications, vaccinations, and patient compliance in a college health setting. *J Travel Med*. 2011 Jan-Feb;18(1):20-5.
3. Hess KM, Dai CW, Garner B. Measuring

outcomes of a pharmacist-run travel health clinic located in an independent community pharmacy. *J Am Pharm Assoc* (2003). 2010 Mar-Apr 1;50(2):174-80.

4. Hill DR, Ericsson CD, Pearson RD, Keystone JS, Freedman DO, Kozarsky PE, et al. The practice of travel medicine: guidelines by the Infectious Diseases Society of America. *Clin Infect Dis*. 2006 Dec 15;43(12):1499–539.
5. Goad J., et al. Practice of Travel Health for Pharmacists. Joint California Pharmacist Association and California Society of Health-Systems Pharmacists Sub-Committee on SB493 Travel Medicine Provision. 01 Jun 2016 Web. 10 March 2016.
6. Keystone JS, Kozarsky PE, Freedman DO. Internet and computer-based resources for travel medicine practitioners. *Clin Infect Dis* 2001; 32:757–65
7. "ACIP Vaccine Recommendations." *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention, 22 Mar. 2016. Web. 28 Mar. 2016.

**Figure 1: CDC Conditions Not Requiring a Diagnosis**

Self-treatable conditions	Prophylaxis
Traveler's diarrhea	Malaria
Altitude Sickness	Traveler's Diarrhea
Jet lag	Leptospirosis
Motion sickness	Deep Vein Thrombosis (DVT)
Upper Respiratory Infection (URI)	Influenza
Neuraminidase inhibitors (NAI) for influenza treatment	
Urinary Tract Infection (UTI)	
Bacterial skin infections	
Vaginal yeast infections	
Human Immunodeficiency Virus Post-Exposure Prophylaxis (HIV PEP)	
Malaria Stand By Emergency Treatment (SBET)	

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