



A Guide for Travel Health Practices at Institutions of Higher Education

Of the reported over 19.7 million undergraduate and graduate college students in the U.S. from 2018-19 (National Center for Education Statistics, 2022), nearly 350,000 (1.8%) were studying abroad in for-credit programs, not-for-credit experiential learning, and volunteer activities. (Open Doors Data, 2021). Institutions of higher education (IHEs) have increasingly adapted curricular and co-curricular programs to include more study abroad programs to enhance students' global competencies. This growing trend has fueled a sharp and growing rise in international travel by college students, faculty, and staff. Because of this rise, the need for quality travel health services for IHE travelers has increased significantly in the past two decades and should continue to grow. In response, travel health programs are becoming increasingly common in college health and well-being settings.

The American College Health Foundation (ACHF) Guide for Travel Health Practices at Institutions of Higher Education aims to assist IHEs in addressing the unique aspects and challenges of providing travel health services at college health and well-being programs. This guide focuses on topics that are (1) either unique or very common in IHE settings and/or (2) have not been widely dealt with in other publications. The ACHF Guide for Travel Health Practices is meant to be used by any staff involved in student, faculty, or staff travel abroad. This includes clinicians, student affairs administrators, pharmacists, faculty trip leaders and others.

How to Use This Guide

Information can be found throughout the guide by using the detailed table of contents. Additionally, this quide includes:

- ◆ Topic-related appendices and checklists
- Traveler educational handouts
- Trustworthy resources

Sections and appendices are labeled to inform the reader of strictly clinical material versus material aimed at general audiences.





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INTRODUCTION AND OVERVIEW

Of the reported over 19.7 million undergraduate and graduate college students in the U.S. from 2018-19 (National Center for Education Statistics, 2022), nearly 350,000 (1.8%) were studying abroad in for-credit programs, not-for-credit experiential learning, and volunteer activities. (Open Doors Data, 2021). Although the COVID-19 pandemic decreased the number of U.S. students traveling abroad, it is not unrealistic to expect those numbers to rebound to pre-pandemic levels in the future.

World cultures and economies are increasingly interdependent. To prepare a workforce for this new environment, institutions of higher education (IHEs) in the U.S. have modified their degree programs and graduation requirements to ensure that their graduates can seamlessly transition to the workplace. These institutions have adapted curricular and co-curricular programs to include more study abroad programs to enhance students' global competencies. This growing trend has fueled a sharp and growing rise in international travel by college students, faculty, and staff.

Students travel for non-academic reasons including leisure, business, volunteering, faith-based experiences, and more. Graduates with international travel experience are more likely to travel for post-graduation work or pleasure. The IHE community consists of 1.5 million full- and part-time faculty at U.S. institutions (National Center for Education Statistics, 2022), and well over 3 million staff, many of whom travel for academic and non-academic reasons in any given year. In the past two decades, the racial and ethnic diversity of U.S. study abroad students has expanded from 15% to 30% of participants (National Center for Education Statistics, 2022). Given all these factors, the need for quality travel health services for IHE travelers has increased significantly in the past two decades and should continue to grow. In response, travel health programs are becoming increasingly common in college health and well-being settings.

IHE travel health services are vitally important to the health and safety of students, faculty, staff, hosting communities, and institutions as well as their families and surrounding communities. Even so, with a few exceptions (e.g., Richards and Rosselot chapter in Vaughn and Viera, 2021), the travel health, public health, and medical literature has not specifically addressed the unique aspects and challenges of providing travel health services at college health and well-being programs. This guide will attempt to fill some of that gap, focusing on topics that are (1) either unique or very common in IHE settings and/or (2) have not been widely dealt with in other publications. The authors will provide vetted, widely recognized resources in the field of travel health to advance the quality of college travel health services.

This guide includes appendices, checklists, and traveler handouts created by practicing college travel health and study abroad/student affairs professionals. The intent of this quide is to:

- examine ways to provide travel health services across the spectrum of colleges and universities of all sizes and resource levels and stress the importance of collaboration across campuses and within surrounding communities.
- provide guidance on delivering quality travel health services to marginalized individuals and groups facing health and other inequities.
- review the coordinated response to IHE traveler emergencies as well as approaches to mental health issues and emergencies that occur before, during and after travel.
- highlight travel health resources and opportunities for further training in travel health for college health professionals.

review travel health lessons learned during the COVID-19 pandemic and approaches to mitigate these issues moving forward.

WEST SERVICES OF THE TRAVEL HEALTH SERVICES

Travel health services have become increasingly common as part of U.S. college health centers and programs. Self-reported data from voluntary IHE participants in the American College Health Association (ACHA) Institutional Profile Survey (Hoban, 2018-2021) for three consecutive years (89 institutions, 2018-2021) showed that 65.2-68.5% offered travel health services. Over half of schools with travel health services were large (> 20,000 students) public, doctoral-level research institutions (as of publication time, this data has not been published). In the absence of broader national data, the authors estimate that 50-60% of U.S. IHEs currently offer on-campus travel health services of varying complexity.

Key Elements of a College Travel Health Program

There are key elements to consider when designing or modifying travel health services at an IHE. The authors hope that this broad discussion can be a useful tool, scalable for use across institutions of any size or resource restraints. This list is not comprehensive, nor must every element be considered essential. However, for a college travel health program to serve as a campus resource most effectively, it should feature:

- Intentionality
- Excellent communication
- Clear objectives and responsibilities
- Adaptability and flexibility
- Up-to-date services

Travel Health Staffing

Travel health services may be offered by a variety of travel health-trained clinicians (MD, DO, PA, NP, RN, PharmD). Staff provide clinical services as well as pre-travel education and training. One or more staff may provide travel health services on a full-time or part-time basis. Intentional and clear delineation of responsibilities and time required/allocated is essential. A travel health-trained individual should be identified as the leader or coordinator of travel health services. Roles in providing travel health services are not interchangeable with staff who do not have appropriate travel health training and experience in this specialty. A list of travel health training opportunities appears on page 57. Travel health services are in demand during certain parts of the academic year. It is important to recognize that staffing and scheduling adaptability should be anticipated due to fluctuations in demand for services

Services Offered and Patient Population

Travel health services may be offered following a variety of models and based on available options at a given IHE:

◆ IHE travel health services can include any combination of basic pre-travel education, clinical visits, travel vaccinations and medications, and post-travel care. Some travel vaccinations may be very expensive to stock. Federal, state, tribal, local, and IHE rules and regulations must be followed for any services offered.

Eligible patient populations are commonly students only but may also include faculty, staff, family members, and even the community at large. Services may be provided for IHE-associated travel only or for any international travel. If possible, it is helpful to get a sense of anticipated utilization numbers when designing and staffing services. The significant variability in demand for services over the calendar year must also be considered.

Location, Policies, and Resources

- **Location of travel health services** may be within the existing campus health service clinical area or space may need to be reallocated. Additional equipment may be needed such as travel vaccination refrigerators and freezers. For some IHEs, services may be provided elsewhere on campus or may be available in the community. In these settings, it is helpful to have collaborative relationships in place for scheduling and record sharing.
- Travel health policies and procedures may include pre-travel education and training requirements, travel health forms, group travel appointments, individual travel appointment requirements, standing orders, immunization considerations, and post-travel protocols. Cross-campus collaboration is a critical component of a successful travel health program and is discussed in detail later in this guide.
- Appointment scheduling policies should include requirements for scheduling appointments with adequate time allowed for consults and vaccinations; completion of pre-travel questionnaires and vaccination records in advance of appointment; and information provided to patients in advance, including potential charges. Travel health appointments may be on certain days of the week or interspersed with other clinical visits. In some settings, post-travel visits are given priority in the acute care clinic. The demand for travel health services fluctuates greatly, with skyrocketing demand often occurring one to two months prior to term and summer breaks. Whenever possible, there should be adaptability in the schedule to accommodate these changes in demand. It is helpful to identify alternative options for those needing services when campus travel health services are unavailable (e.g., either closed or no capacity for additional travel appointments).
- Medical records (particularly electronic health records [EHRs]) can be adapted to include travel health questionnaires, discharge instructions, attendance at pre-travel educational sessions/ trainings, and post-travel checklists. Whenever possible, patients should fill out pre-visit questionnaires in advance, either electronically (e.g., through a patient portal) or on paper.
- **Foundational resources** for providing travel health services can be found on page 55.

Funding of Travel Health Services

Funding of IHE travel health services can vary widely. On some campuses, pre-travel visits are provided at no additional cost for students. At others, there are visit fees for all patients, including faculty and staff. Given the limited availability of these specialized services, no-show fees are commonly charged. On some campuses, parts of the pre-travel visit (e.g., visit fees, laboratory testing, medications, vaccinations) are covered by the student health insurance and benefits plan (SHIBP). IHEs must decide if travel health services and staff training are important enough to be provided with ongoing guaranteed funding across academic years, either as a budget line item or via a student health fee.

Promotion of IHE Travel Health Services

To successfully provide travel health services, marketing and communication with the campus community is essential. Options at each IHE will vary and may include:

- A robust, up-to-date website including:
 - Description of travel clinic services
 - Fee schedule
 - Importance of pre-travel care, including recommendations for seeking an appointment to review destination considerations and any health concerns
 - Recommended time frames to seek appointments prior to travel, emphasizing the importance of starting the process as early as possible after travel plans are known
 - Information about scheduling appointments, ideally via a secure patient portal (with contact information for questions)
 - Important current travel alerts or advisories (e.g., alerts in the earlier days of the COVID-19 pandemic)
 - Links to reliable travel information (e.g., Centers for Disease Control and Prevention [CDC], U.S. Department of State [USDOS])
 - Importance of seeking post-travel care promptly in the event of exposures or illness
 - Links to any additional relevant information available
- Marketing materials, ideally with a QR code that links to travel services webpage for easy accessibility.
- Visibility of services within the IHE clinic including:
 - Clear, bold signage ("Travel Health Clinic" or similar), both for logistics and to increase awareness of services
 - Attractive posters (perhaps as part of a graphic design contest or involving photographs from student travels)
 - Materials on travel health services in health center literature displays, with easily accessible information (e.g., cards/handouts with travel health service information) for clinic staff to provide to patients when they mention an upcoming trip
- College newspapers and radio stations can be excellent avenues to increase knowledge of travel clinic services. There may be options for free radio Public Service Announcements (PSAs). College media is often interested in little-known, undervalued services offered on campus.
- **IHE-associated social media** can be used to get the word out regarding travel health services. Short pieces by students who have used the services can make these posts attractive, frame services in a positive way and highlight the value of services provided.
- Partnering with others on campus can both help market travel health services and enhance campus collaboration. The study abroad/international programs office, counseling and psychological services, faculty and staff groups, student clubs, and organizers of information fair events can all be valuable partners.

Assessing the State of Travel Health Services on Your Campus

It will be a rare campus that does not have students/faculty/staff traveling internationally on educational, healthcare, public health, and/or research-related activities. It is certainly safe to say that every U.S. IHE, regardless of size and two-year or four-year status, has students/faculty/staff traveling for personal reasons, including business, leisure, family reasons, and visiting friends and relatives abroad (VFR). Therefore, it is prudent for every IHE to perform a "qap analysis" about its travelers and its travel health services. Please see Appendix A for an IHE Travel Health Gap Analysis form.

The answers to these gap analysis questions should help IHEs to appropriately scale their travel health services and support structure to meet the needs of the campus community, while operating within the available resources of the IHE and the college health and well-being program.

Small and/or Less-Resourced IHE Perspective: On-Campus vs Outsourced Travel Health **Services Considerations**

In general, the decision to offer travel health services is more complex for smaller and/or lessresourced IHEs than at larger, more resourced institutions:

- Smaller and less-resourced IHEs may not have enough travel patient volume to justify training dedicated staff, maintaining travel-related vaccines and other supplies, and paying fees for a subscription travel health clinical resource.
- Even with dedicated travel health staff, travel-related patient volume at these IHEs may be too low for the provider(s) to gain enough expertise without substantial effort.
- A low patient volume may mean minimal dedicated travel health staff. Questions arise regarding who should provide travel health services: a physician, NP/PA, and/or nurse. State, professional, and malpractice insurance standards may dictate what is possible. Furthermore, an individual or small group of travel health providers may feel isolated without other colleagues.
- Smaller or less-resourced colleges may not offer their own study abroad programs. Instead, students choose from a number of non-affiliated options. In this situation, travel health providers may lack familiarity with the specifics of the multitude of programs, and important collaboration with key IHE colleagues (e.g., study abroad/international programs office, faculty and staff, IHE general counsel and others) would be far less likely to happen.

Appendix M reviews the pros and cons of potential approaches to providing travel health services at small or less-resourced IHE's. Suggested solutions to address the unique challenges of these campuses can also be found throughout the Guide.

PRE-TRAVEL ASSESSMENT AND EDUCATION

Pre-travel health assessment and education are the cornerstones of any IHE travel health program. Too often travel health professionals are not consulted until the travel itinerary is finalized or when departure is imminent. An IHE travel health program can build an appreciation for pre-travel health services by reaching out to students and campus collaborators, including key faculty and administrators.

For IHE-sanctioned group educational travel, a relationship between the faculty trip leader and the college travel health program is essential. Group travel presentations for departments or programs with frequent international trips (e.g., study abroad services, public health and other health sciences, anthropology, political science, languages, and many others) provide an outstanding introduction to the importance of travel health education.



Pre-travel General and Institutional Considerations

Preparation

The importance of excellent, thorough pre-travel preparation for all students, faculty, and staff international travel cannot be overstated. An IHE should establish intentional and collaborative protocols which are well-known and easily accessible for all IHE international travelers. Preparation, planning, and support are necessary for successful IHE international travel. Large and well-resourced IHEs are uniquely positioned to offer a wide array of services across multiple campus entities to provide comprehensive travel preparation resources to IHE travelers. For smaller and less-resourced IHEs, creativity and off-campus collaboration are strongly encouraged. A key to successful, healthy, and safe international travel is initiating preparation as soon as travel details are planned (and in some cases even earlier, during initial exploration of travel options).

Broad cross-campus support and collaboration is essential in ensuring safe and healthy international travel for students, faculty, and staff. Collaboration both within the IHE and with external resources is particularly important at small and less-resourced IHEs. Every IHE should have travel policies and a travel registry in place, with policies and procedures well-known on campus.

Education and Training

Pre-travel education, training, protocols, and logistics are unique to each IHE situation. Elements to consider include:

- Developing and maintaining relevant, current pre-travel education and training
- Ensuring that pre-travel education and training are available to all travelers
- Determining if educational or training sessions are required for IHE-affiliated travel and how those requirements will be documented and enforced
- Determining who provides the education/training and in what format they are offered (in-person, online, etc.)
- Ensuring that adequate funding and staffing are available for ongoing services

Coordinated IHE Support Services

Coordinated campus services for IHE travelers should not be limited to student health services and study abroad/offices of international programs. Resources should be tailored to the individual traveler and may include counseling and psychological services (CAPS), accessibility services, diversity, equity, and inclusion (DEI) services, and others.

Education for Travelers

Pre-travel education is foundational to increasing the likelihood of safe and healthy travel. Some IHEs mandate specific pre-travel education or training for IHE-associated travel. For non-IHE affiliated travel, this education may only be recommended. Pre-travel education may include live pre-departure orientations (in-person or online); completion of online travel health and safety modules; group or individual travel consults; or education provided by non-IHE entities. Specifics of education and training options and content will vary based on needs and program design.

Content for pre-travel education should be tailored to the specific travel involved. However, essential information includes:

- Basic safety information including traffic and personal safety. College travel health professionals should stress motor vehicle accident (MVA) and pedestrian safety precautions at the pre-travel visit, particularly with students. See information on page 34.
- Emergency procedures including creating a Traveler Contact Card for every traveler (see Appendix C)
- Importance of registering with the U.S. Department of State Smart Traveler Enrollment Program (STEP) and maintaining awareness of current destination issues as they arise
- Communication options and logistics
- Mental health considerations
- Current public health concerns across all destinations (e.g., COVID pandemic)
- Overview of travel health and evacuation insurance
- Special considerations for travel to countries with less water and food sanitation resources (e.g., insect protection and food and water precautions)

Many IHE student travelers are embarking on the first international travel of their lives. These travelers may be accustomed to relying upon others (e.g., parents or quardians) to manage basic activities of daily living, logistics, personal health and safety concerns, and emergency responses. It is important for the IHE travel health program to thoroughly address these basics in pre-departure education.

Pre-Travel Education: Special Considerations for Healthcare Workers



U.S. IHE healthcare workers, including students, travel to international settings to work, volunteer, do research, and learn. In many of these settings, healthcare professionals and students may face a significantly increased risk of bloodborne pathogen exposure and respiratory infections spread by droplets. CDC notes that "Risks vary depending on the duties of the worker, the geographic location, and the practice setting," and may include risk of exposure to emerging and/or highly pathogenic diseases (e.g., extensively drug-resistant tuberculosis [XDR-TB], Middle East respiratory syndrome [MERS], Ebola virus disease, and SARS CoV-2 infection) (Wu et. al., 2020).

In pre-departure education and assessment sessions, college travel health providers should make healthcare travelers aware of:

risks associated with international healthcare travel, based upon a review of destination and practice risks, expectations of traveler in practice setting (e.g., clinical duties), and available resources and support.

- prevention and mitigation strategies (e.g., vaccination, medication prophylaxis, personal protective equipment, and safety-engineered devices)
- pre- and post-exposure prophylaxis regimens and the time-sensitivity of post-exposure intervention, and
- the availability of testing and counseling on-site, via telehealth, and upon return to the U.S.

Information regarding bloodborne pathogen exposure and post-exposure prophylaxis (PEP) in IHE healthcare travelers is on page 35.

Documentation of Pre-Travel Education

Providers should document pre-travel education provided to a traveler, for both clinical and risk management purposes, whether provided one-on-one or in a group setting. It is now possible in many electronic health records (EHR) systems to record attendance at a group session and give an overview of the content presented. IHE travel health providers are encouraged to explore this functionality in their own EHR systems.

Risk Management and IHE International Travel

The key to establishing effective risk management for IHE international travel is a committed and intentional approach with widespread compliance among travelers across the institution. While there is some degree of risk inherent in any domestic or international travel, there are a number of individual and institutional risk assessment and mitigation measures unique to IHE travel:

- The collaborative nature of IHE international travel calls for the involvement of multiple campus entities to assess and mitigate risks.
- As discussed later in this guide, the cornerstone of this process is the establishment of a Travel **Registry** with mandatory registration for any traveler on IHE-sponsored travel.
- Review of planned IHE-associated travel (with subsequent approval or denial) ideally involves the study abroad/international programs office and key campus partners on a travel safety review committee. The make-up of a campus travel safety review committee appears later in this guide.
- There are **risk matrices** which may be employed in evaluation of proposed travel (NAFSA: Association of International Educators' Roadmap for Risk Assessment in Education Abroad and Forum on Education Abroad). IHEs may also engage commercial risk-management companies specializing in international travel to assess their risk management needs.
- For **IHE group travel**, whether faculty-led, athletics, club or volunteer-based, the group itinerary should be required to undergo an institutional vetting process (A discussion regarding evaluation and risk assessment of an international itinerary may be found in Vaughn and Viera, 2021). For group trips and study abroad programs managed by a third-party entity, appropriate IHE risk management involves thoroughly vetting the third party's credentials and reviewing the travel itinerary and activities.
- For **individual IHE travelers**, all U.S. citizens should be required to register with U.S. STEP prior to travel.

- All travelers should have a "Traveler Contact Card" with specific, accessible information in written and digital form regarding personal, IHE, embassy, and insurance contacts for use in the event of urgent need or emergency. In addition, a second "Traveler Care Card/Document" would contain basic health information and be carried by the traveler at all times in the event of an emergency. Please see an example of information to be included on a "Traveler Contact Card" and a "Traveler Health Care Card/Document" in Appendix C.
- Personal physical and mental health preparation, and a discussion of itinerary-specific risks, is important for effective risk management for individual IHE travelers.

Travel Health Insurance

It is essential that the traveler understand differences in insurance types, in particular that travel insurance (which covers the cost of flights delays, other travel disruption, and damaged or lost baggage) is **not** travel health insurance (which covers the cost of care for medical conditions while abroad, access to referrals and consultation, and possibly medical evacuation including repatriation of deceased travelers).

Providers should be familiar with the basics of the travel health insurance plan that the university recommends or requires. CDC provides a useful overview of travel health insurance needs of U.S. travelers.

Travel health providers and travelers should know the following about travel health insurance:

- U.S. health insurance plans, including Medicaid, generally do not comprehensively cover care while abroad. Medicare does provide some coverage for emergencies while abroad. Medicare supplements may cover some aspects of hospitalization, but the coverage is not comprehensive. Travelers should contact their U.S. insurance providers if unsure about what, if any, coverage they have once they leave the U.S.
- Travel health insurance plans differ in levels of coverage and exclusions, including dollar-limits or exclusions on medical evacuation (which can cost hundreds of thousands of dollars, depending upon the complexity of illness and remoteness of location) and repatriation of remains. In a study of international travelers with travel health insurance claims, insurance companies fully paid only twothirds of claims (CDC Yellow Book 2020, 2019). Pre-existing illness and poor documentation were the main reasons for coverage refusal.
- Because college students are typically in an age group at higher risk for the emergence of mental health issues, insurance should cover mental health services. Travel health insurance plans that do not cover mental health care while abroad in an accessible language or that have limitations on crucial coverage (e.g., dollar caps or pre-existing condition exclusions) should be avoided.
- Other potential exclusions in travel health insurance plans include coverage for illness or injury during adventure activities (e.g., spelunking, bungee jumping, SCUBA diving, altitude travel, or travel in USDOS Level 4 countries) and pandemic coverage.
- Many policies have supplements or include services that help the traveler navigate to a network of providers and services in the host country.
- Travelers should understand that, even with insurance, they will likely need to pay for care upfront and submit a claim with documentation afterward. Services supplementing the travel health plan often can assist with moving money from home accounts. If possible, downloading and printing claim forms prior to travel can be helpful.

It is important for travelers to ensure that their insurance covers the duration of their travel, particularly if they are extending travel beyond their IHE-affiliated travel (and associated insurance) dates.

Clinical Considerations

Individual Pre-Departure Assessment and Counseling

Pre-travel assessment and counseling may be conducted under the auspices of the student health clinic, specialist clinics (e.g., infectious disease), community travel health providers, the local health department, or others with travel health expertise. Pre-travel consultations consider the anticipated risks of the destination(s) through the lens of the traveler's fitness for travel. The result is individualized counseling that seeks to provide practical advice and minimization of risks.

The Pre-Travel History and Detailed Itinerary

Whenever possible, travelers should complete a detailed pre-travel history and itinerary form prior to consulting with a clinician. These forms probe the details that help to delineate the traveler's and the destination's risks. When completed online, the information is more easily stored and accessible in the traveler's electronic medical files. Travelers' perception of risk and risk tolerance are not always congruous with the provider's assessment or CDC guidance.

The pre-departure form should include the following items related to the traveler:

- Age, natal sex, and gender identity
- ◆ Chronic medical conditions, including mental health concerns, even if they are not being actively treated with medication and/or are under control
- Allergies to medications, vaccines, foods, insects, and environmental/seasonal triggers, and the severity of response to each (e.g., anaphylactic reaction to penicillin, hives from eating strawberries, etc.)
- Prescription and over-the-counter medications, especially ones that are controlled or restricted in the U.S. and/or abroad
- Immunization history
- Prior travel experience (and plans for future travel, especially within the coming 1-2 years)
- Previous issues while traveling (e.g., altitude sickness)
- Other special conditions or circumstances such as immunocompromise, physical or sensory disability, use of durable medical equipment (DME), pregnancy, breastfeeding, young or advanced age, and last-minute travel

IHEs should regularly review their preferred travel health insurance product (or traveler's health coverage under their student health insurance plan) with their general counsel or risk management experts. If possible, selecting one common insurance product and requiring it for all travelers on university-sponsored trips can be extremely helpful for the protection of the IHE as well as the traveler, particularly in the event of an emergency or crisis.

The International Association for Medical Assistance to Travelers offers a very useful quide to travel health insurance. Other resources include the U.S. Travel Insurance Association and the American Association of Retired Persons.

The detailed travel itinerary should include:

- Destination country or countries, in order with specific locations within each country, including layovers
- Season and duration of trip
- Reason for travel
- Travel "style" (e.g., prearranged travel v. independent travel, type of accommodation, mode of transportation, rural v. urban, tourist sites v. off-the-beaten-path exploration)
- Planned activities, including those known to increase risks (e.g., high altitude, adventure sports, contact with animals)

Please see Appendix B for an all-inclusive example of a pre-travel patient history form that can be tailored for your use.



Travel Vaccinations and Medications

When considering travel vaccinations and medications, the provider must evaluate carefully both the CDC recommendations and WHO requirements for the specific areas of travel as well as the time until departure. Resources for this information include the CDC Yellow Book, CDC Pink Book, and travel subscriptionbased clinical decision support tools. Additional considerations include the traveler's underlying health conditions, previous immunization history, current medication list, medication and food allergies, ability to appropriately store and take medications, financial resources, and personal preferences. The provider needs to inform the traveler of potential side effects of medications and vaccinations and assist the traveler in selecting the most appropriate regimens. Cost of the medications and vaccines and insurance coverage must also be considered.



W Vaccinations

Providers should request a complete and accurate immunization history from the traveler. If the traveler does not provide immunization records, the provider may consult resources such as the state immunization registry, the record of immunizations submitted to the IHE upon matriculation, or records from a previous healthcare provider. While many student travelers have completed standard childhood vaccination series, in the absence of documentation of immunization, the provider should consider providing current ACIPrecommended routine vaccines that are most critical (e.g., hepatitis B vaccine for a traveler providing healthcare in the destination country). When appropriate and if time allows, titers may also be considered (e.g., hepatitis B, MMR, varicella).

When evaluating requirements for vaccines upon entry into an individual country or countries, the provider should consider:

- The specific itinerary, including the order of arrival and departure and the possibility of airport layovers, as this can dictate entry requirements
- The areas of travel within a particular country
- Anticipated length of stay
- Type of accommodations (e.g., air-conditioned hotels v. outdoor tents)
- Planned activities (e.g., volunteering with refugees or providing healthcare)

Student travelers commonly have some unpredictability and flexibility in their plans, and the provider should assist the traveler in preparing for various scenarios when considering the planned itinerary. Programs at small or less-resourced IHEs should explore community resources and collaborate with community providers to provide these important services. Students with fewer financial resources may be able to access these necessary immunizations at community resources for no or low cost.

Ideally, travelers will consult a travel provider at least 4 to 8 weeks before departure, allowing time for a series of vaccines, such as hepatitis B or varicella vaccine, to be completed. However, travelers may seek care just days before departure (often true with student travelers), and it is almost always still advantageous to vaccinate these last-minute travelers to the degree possible. Appointments for vaccines that require multiple doses should be scheduled at the time of the first dose, and appointment reminders should be sent to travelers. See Appendix D regarding last minute travelers.

Multiple vaccines may be recommended to a traveler. Those vaccines that are required for entry into a destination, such as yellow fever vaccine for entry into certain countries, should be prioritized. Vaccines for common illnesses both at home and at the destination, such as influenza and COVID, should also be strongly recommended. Other considerations when prioritizing vaccines may include the ability to take additional preventive measures to avoid the illness, the severity of the illness being prevented, available treatment options, the overall effectiveness of the vaccine, and cost of the vaccine. It is common that vaccines intended for prevention of travel-related illnesses such as yellow fever, Japanese encephalitis, and typhoid are excluded from insurance coverage policies. However, travelers should be encouraged to investigate the details of travel vaccine coverage in their health insurance plans before assuming noncoverage.

At the time of publication, common travel vaccines include: up-to-date routine vaccinations (e.g., hepatitis A and B, Tdap, MMR, polio, influenza); vaccines recommended for destination or activity-specific groups (e.g., meningitis ACWY); and destination-specific and/or required vaccinations (e.g., yellow fever, Japanese encephalitis, rabies, typhoid). Because a hallmark of travel medicine therapeutics and risks is that recommendations can literally change overnight, college travel health providers are best served by referring to up-to-date CDC travel vaccination recommendations and other trusted sources (CDC Advisory Committee on Immunization Practices (ACIP) and the Immunization Action Coalition (IAC).

Per CDC, a designated vaccine coordinator is the single most important element to preserve vaccine cold storage and supply chain (CDC Vaccine Storage and Handling Toolkit, Section 2, page 6). For most college health services, it is important to develop relationships with clinics and pharmacies within the local community that also stock less-frequently used and expensive travel vaccines (e.g., yellow fever, rabies, Japanese encephalitis), so that students may be referred to those providers as necessary. The CDC website offers a clinic locator for yellow fever vaccine (YFV). If an IHE clinic is interested in becoming a YFV provider, the process is outlined in the CDC Yellow Book and involves state and federal considerations.

Appropriate timing of administration of multiple vaccines is also important. Most vaccines, live and inactivated, can be given on the same day. Some vaccinations (e.g., yellow fever, typhoid) should be administered at least two weeks prior to travel to achieve adequate immunity and to satisfy country entry requirements. Otherwise, it is best to space injectable or intranasal live viral vaccines from other injectable live viral vaccines by at least four weeks. A discussion of interactions between travel medications and vaccines is found at Interactions between Travel Vaccines & Drugs - Chapter 2 - 2020 Yellow Book | Travelers' Health | CDC.

Medications

Medications most often considered for travelers include self-treatment for traveler's diarrhea, prophylaxis for malaria, HIV pre- and post-exposure prophylaxis, and medication specific to certain activities, such as medication to assist with acclimatization at high altitudes.

Other medications to be considered for travelers may be very specific to their planned activities. Clinicians should be up-to-date with indications, precautions, and contraindications for any travel medication they prescribe. Additional considerations for recommending medications include current medical conditions, concurrent medications, drug allergies, and past experiences during travel. Altitude illness and HIV preexposure prophylaxis (PrEP) are discussed on pages 39 and 26.

Highly resourced IHEs that have busy travel clinic services might benefit from stocking and administering travel medications and vaccines. Specific travel vaccines, such as Japanese encephalitis vaccine and yellow fever vaccine, may be difficult to locate in some communities, and having these available at the student health service helps to improve the accessibility to student travelers. Alternatively, it may be more prudent to order travel vaccines and medications via overnight mail, a service that is now more commonplace. Smaller and less-resourced IHEs should identify community resources for important medications and vaccines, particularly those that are expensive and expire quickly. Regardless of size and complexity of on-campus travel health services, providers should assist students in identifying sites where needed medications and vaccines are available. .



Managing the Last-Minute Traveler

It is never too late for a pre-travel consultation. Although IHE travelers should be encouraged to access pre-travel care four to eight weeks before departure, clinicians can anticipate requests for services within days or even hours of departure. Regardless of the reason or time constraints, college health clinicians are encouraged to offer all travelers support for their upcoming trips. Telehealth services and knowledge of off-campus services may be especially useful for these last-minute IHE travelers. Appendix D features detailed information on counseling, immunization and medication advice for lastminute travelers (LMTs). The appendix is a mixture of clinical and non-clinical material.

TRAVELERS WITH SPECIFIC MEDICAL NEEDS OR CIRCUMSTANCES

There are many outstanding texts and journal articles to guide the college travel health provider in the care of medical conditions before, during, and after travel. These key travel health references and additional travel health training opportunities are listed at the end of this quide. We will focus instead on issues and conditions of special relevance for IHE international travelers, including those with special needs, disabilities, and preexisting health conditions. We will also look at medications and medical devices of importance to travelers. More information on mental health considerations and emergencies can be found on pages 30-33.

A pre-travel health evaluation is strongly recommended for any travelers with known physical or mental health issues or concerns, regardless of destination or planned activities. However, any requests for pretravel evaluations should be honored. Pre-travel physical exams in the absence of presenting complaints or chronic conditions usually yield limited returns, but a thorough current and past health history (physical and mental health) is invaluable. Detailed destination and activity information must be researched and considered well in advance of travel and appropriate arrangements made

Creating a synopsis (a "traveler health care card/document") of health issues, medications, providers, and other information is extremely helpful. Travelers with known healthcare needs should have a viable plan for obtaining healthcare and support while traveling. Please see Appendix C for an example of a traveler health care card/document.

Collaboration with campus and community partners and travelers' own providers is crucial to help create a community of care for travelers' potential health and safety needs, including facilitating healthcare access for travelers to the degree possible. Active traveler engagement is also invaluable in the entire pre-travel process. Providers should encourage IHE travelers to be aware of their health needs and become knowledgeable about the resources available to them.

Pre- Travel Considerations for All Travelers

Jet Lag and Time Differences

Even without delays, mishandled baggage, and long lines for food, travel can be exhausting. Moving quickly across time zones by airplane can compound this. In preparation for this afront to one's circadian rhythm, a traveler may try to recalibrate their internal clock by slowly moving their bedtime earlier or later in the days leading up to the journey. Similarly, a common piece of advice for travelers is to try to follow the routine of the destination's time zone. For example, if one's eastbound flight lands in the early morning, try to avoid napping upon arrival and instead push through the day, sleeping when the locals make their way to bed.

The timing of routine medications is a challenge as well. Some individuals may be more tolerant of changes in dosing than others, based on the drug's half-life and other factors. In general, medication dosing is based on elapsed time, rather than the time of day. Experts recommend adjusting insulin doses in diabetic travelers based on the type of insulin, the direction of travel, and how many time zones are traversed. Certain antimalarials must be started 48 hours prior to arrival in the malaria zone, which may require special calculations in advance.

Environmental Exposures and Climate Change

Travelers should pack appropriate apparel and adventure gear based on where they will be, when they will be there, and what they will be doing. Some locations may feature quite different temperatures over the course of the day. Certain insects (and other creatures) are more active at certain times and/or are found in certain environments (e.g., Schistosoma in freshwater). Heat and cold can trigger certain chronic medical conditions (e.g., asthma, arthritis, multiple sclerosis). Wet and dry seasons, strong winds on a mountain, or a rip current in the ocean each present their own problems. In addition, significant environmental exposures such as air and water pollution should be discussed with travelers as appropriate. See Appendix F for information on altitude travel.

Travelers should be aware of the increasing incidence globally of severe and often unexpected weather events, including extreme temperatures (especially heat), increased flooding, more intense fire seasons, and more. Travelers should heed weather warnings issued locally and by the USDOS STEP Program. Health and safety accommodations for extreme weather events may be required, including last-minute itinerary and activity changes.

Food and Water Precautions

In travel to many parts of the world, there is often a higher risk of food- and water-borne illnesses. Risk mitigation involves both immunizations (e.g., hepatitis A, typhoid) recommended based on itinerary and activities as well as food and water quidelines. The CDC Yellow Book has detailed quidelines on food and water precautions.

To decrease the overall risk of contracting a food- or water-borne illness in higher risk areas, frequent and thorough hand hygiene should be stressed. It is particularly important to clean hands with hand sanitizer or soap and water (plus drying) prior to eating and after using the bathroom.

Water and beverage precautions include:

- Avoid drinking tap water in higher risk settings, including for brushing teeth. Boiling water is always the first and best choice
- Avoid ice in drinks
- If a plastic drink bottle has a broken seal or loose-fitting cap, the drink should not be consumed
- Avoid beverages made in blenders
- Hot beverages made from boiled water (coffee and tea, but never add unpasteurized milk) and canned or bottled beverages are usually safe choices
- For information regarding other potential methods of water purification please refer to the CDC Yellow Book (https://www.cdc.gov/healthywater/drinking/travel/backcountry water treatment.html).

Food considerations include:

- Many experts note that the prime rule for eating internationally is "Fully cooked foods, served hot, are the safest choices"
- Avoid risky foods, such as "street meats" prepared on an outdoor (and often unwashed) grill, undercooked meats, raw fish and shellfish, and unpasteurized dairy products
- Be careful about all uncooked foods washed in unclean water
- Be aware that salads and fruits and vegetables difficult to peel (e.g., with small nooks and crannies) can resist thorough washing. With so many IHE travelers following vegetarian and vegan diets, recommendations about safe preparation and consumption of fruits and vegetables can be particularly important
- Buffets are often risky, even in upscale resorts, including food displayed on beds of ice

Physical Violence, Sexual Assault, and Human Trafficking

Foreign visitors are often targets of petty theft and other forms of crime. Standard precautions such as not drawing unnecessary attention to oneself (e.g., through flashy jewelry or expensive electronics), monitoring one's drinks for tampering, and not using unlicensed taxis are equally true at home and abroad. It can be helpful to travel with a friend or, in a crisis, identify a stranger likely to be sympathetic.

International travel presents a risk for sexual violence. Most of the documented violence is directed at women (Kennedy & Flaherty, 2015). IHE administrators and travel health providers should research current IHEs obligations to provide Title IX protections to students and staff studying abroad. In the U.S., a victim of suspected sexual assault may undergo a forensic exam to document and collect evidence. They are also likely to receive empiric treatment for STIs and emergency contraception, if appropriate.

Unfortunately, legal protections and reporting processes for victims of sexual assault (especially LGBTQ+ individuals) may be quite different and/or unsympathetic abroad. Hospitals may not have ready access to certain medications. It is important to know (in advance) the resources available abroad and have medical assistance insurance. The USDOS Country Information pages can be a valuable resource. Travelers are strongly advised to contact the nearest U.S. consulate or embassy as soon as possible after an assault.

While students studying abroad are at lower risk for human trafficking than migrants and refugees are, the risk rises with the confluence of travel and cyber targeting. Travel health practitioners should stay abreast of risks and mitigation strategies.

Accessibility and Accommodations

IHEs frequently must accommodate travelers with specific needs in study abroad situations. Accessibility support services (many IHEs refer to these as disability support services) and travel health providers should partner to solve the accommodation needs and provide relevant health education for those travelers. Often IHE travelers present special needs in advance, but needs may arise while away.

Per the Americans with Disabilities Act (ADA), "a person has a disability if [they have] a physical or mental impairment that substantially limits at least one major life activity." Unfortunately, even though one in seven people globally has a mobility disability (1 in 4 US adults live with a disability, 2018), many countries do not legally require accommodation. Accessibility may be further limited based on the perceived sense of need and available resources.

The need for accessibility is not limited to mobility. Differences in processing stimuli (e.g., vision or hearing impairment, autism spectrum disorders) and other medical and mental health conditions can dictate different needs.

Travelers with accessibility issues require consideration of the most likely hazards at the destination, how to avoid them, and what one's contingency plan will be. Common recommendations for travelers with accessibility issues include:

- Bring extra medication and/or supplies
- ◆ Wear a medical alert device and/or carry some form of medical information
- Have a plan for both minor and more serious issues

- Consider purchasing supplemental health insurance and/or medical evacuation insurance
- Consider renting durable medical equipment (DME) at the destination and/or pursuing a low-tech approach

Contacting the air carrier in advance to address specific accommodations (e.g., oxygen) is important. It is worth noting that travel by airplane can be particularly stressful, as the spaces are cramped, and interpretative and other services are quite limited. Preparing early and leaving extra time can be helpful. Though rules regarding service animals may differ outside of the U.S., emotional support animals (ESAs) are no longer permitted on most U.S.-based air carriers.

Gender, Sexuality, and Identity Based Risk

There may be some travel sites where travelers who occupy a specific demographic can reasonably anticipate special circumstances to arise in response to gender, sex identity, race, or religion. These differences are exactly the ones that make IHE international travel a rich and formative experience, so it is important to keep those educational goals in mind if issues arise during travel.

There are many places in the world where women will be visibly treated as a separate and lesser class than men. Such cultures are likely to be experienced by IHE travelers as discriminatory. Preparing the traveler or group to understand and consider how to interact with such cultures is important in the advance planning phase. Access to women's health services (including reproductive health services and emergency contraception) may be restricted in some sites. Travelers who could become pregnant should be counseled about health concerns (e.g., Zika virus) and provided resources for emergency and long-acting reversible contraception (LARC).

Discrimination due to sexual orientation and/or gender identity is the leading concern for most LGBTQ+ travelers. It has been estimated that one in three LGBTQ+ travelers felt they were treated differently because of their gender or sexual identity (World Tourism Organization, 2017). As such, pre-departure planning should include not only the cultural, legal, and security issues at the destination, but also one's willingness to accept or avoid risks. Equaldex, International LGBTQ+ Travel Association (IGLTA), the U.S. Department of State, and the CIA World Factbook are just a few resources that LGBTO+ travelers can reference when drafting an international itinerary.

Safety is a top priority for all travelers. Please see Traveler Handout 5 for additional safety tips specific to LGBTO+ Travelers.

Travelers with Insufficient Funds

Unless an IHE has built coverage for pre-travel care into its SHIBP, student travelers will often report inadequate funds to pay for a comprehensive pre-travel visit plus indicated immunizations and travel medications. This situation may also apply to faculty and staff travelers. When faced with this situation, the clinician will want to appreciate the impact inadequate funds can have on a trip, know of alternative resources on and off campus for reducing costs, and adjust the pre-travel encounter accordingly. See Appendix L for information regarding student travelers with insufficient funds and a case study.



Travelers with Specific Medical Needs or Circumstances

Pre-Existing Health Conditions

Some pre-existing medical and mental health conditions (e.g., ADD/ADHD) are significantly more common (or more commonly diagnosed) in college students than in other adult demographic groups. In the presence of pre-existing conditions, the IHE travel health professional should focus on approaches and accommodations to allow the traveler to participate safely and in maximal health, rather than why the traveler should **not** participate.

Many countries require documentation regarding legally restricted medications (e.g., prescribed stimulant medications or other controlled substances) and essential medical equipment (e.g., needles and syringes). IHE travelers to less-resourced locations will need to give careful attention to local conditions, including medication availability, refrigeration, infusion centers, safe medication storage, and availability of emergency medical and mental health care.

Even if they are "well controlled," chronic medical and mental health problems can flare abroad. Air pollution or being at high altitude, for example, can trigger asthma. Loneliness or victimization by street crime could cause a depressive episode. Episodic problems such as migraine headaches or genital herpes outbreaks can derail a trip if the traveler did not prepare adequately. Travelers should consider this when planning their trip, researching local healthcare facilities, and obtaining appropriate insurance coverage beforehand.

Immunocompromise

There are several reasons why a traveler may have an impaired immune system, with varying levels of accompanying risk. The degree of immunocompromise can affect the efficacy of travel vaccines. Travelassociated infections (and their treatment) can exacerbate underlying disease. Since guidance on vaccination of immunocompromised travelers is typically based on consensus opinion, inclusion of other members of the traveler's healthcare team is advisable.

Acute Illness and Injuries Precluding Travel

Some travel insurance plans cover unexpected, last-minute travel cancellations in the face of acute illness or injury. There can be carve-outs, though, for certain conditions like COVID-19 infection. The traveler—and any involved healthcare team members—should use their best judgment in adjusting travel plans, including both transportation and activities. Any unstable medical or psychiatric condition or active communicable disease likely represents a contraindication to airplane travel. Though there is some debate about the exact number of hours, days, or weeks after which a traveler is no longer at high risk, several recent events or procedures may temporarily preclude travel by air, including myocardial infarction, thoracic or abdominal surgery, neurosurgical intervention, laparoscopy, or colonoscopy. Additionally, travelers who have been SCUBA diving within the past 24 hours or who are in the latter half of their third trimester of pregnancy are advised not to travel by air.

Allergies and Anaphylaxis

Though environmental allergies can prove to be a nuisance while traveling, severe allergic reactions can be deadly. The risk of severe allergic reactions while traveling can be increased by language barriers, unfamiliar foods and menus, remote destinations, lack of emergency services, and certain individual characteristics (e.g., younger age, solo travel, asthma comorbidity). Please see Appendix E for detailed information on severe allergic reactions and anaphylaxis.



Infectious Diseases

Travelers should be counseled that no medication, vaccine, or other intervention is 100% effective. Therefore, providers should stress the importance of personal protective measures (PPM). For example, since the type of mosquito that spreads the malaria parasite is most active dusk to dawn, protection against infection includes bed nets and DEET or picaridin-containing insect repellent. The mosquitoes that spread Dengue and Zika are active during the day, with insect repellent (applied over sunscreen) being the primary defense, as there are no equivalent oral medications to protect travelers against these viral diseases. Permethrin, an insect repellent applied to clothing (e.g., shirt, pants, bandana) prior to travel is extremely effective in decreasing mosquito, tick, and other exposures and lasts through many washings.

Additionally, travelers should be encouraged to disregard information from non-medical resources or the local population that malaria and other vector-borne disease protection is not necessary. See Chapter 3 of the CDC Yellow Book for detailed prevention recommendations.



Malaria and Other Vector-Borne Diseases

Several medication options are available for prevention of malaria. Considerations include: degree of malaria risk at destinations (recent data, species, drug resistance, etc.); the patient's previous experience with malaria prevention medications; patient preference, side effects; medical history and current medical conditions; drug interactions with current medications; time before departure; ability of the patient to adhere to the regimen; availability of medications; and cost including insurance coverage. The CDC webpage Choosing a Drug to Prevent Malaria provides an excellent summary of the medications available for malaria prevention and includes dosing regimens, side effects, contraindications, and specific indications. Anti-malarial medications need to be started prior to arriving in the malaria-endemic region, taken on a regular schedule (depending on the medication), and continued for days or weeks after exiting malaria zones. Anti-malaria medication "tail coverage" is extremely important and should be emphasized in patient counseling. It is important for travelers to obtain recommended malaria prescription medications prior to departure to ensure adequate quantity, quality, and efficacy. There is a great deal of counterfeit antimalarial medication circulating in many countries. There is currently no vaccine against malaria.

Other vector-borne diseases must be considered depending upon itinerary, including dengue fever, Zika, arboviral encephalitis, chikungunya, and other high-risk illnesses. See the CDC Yellow Book, Chapter 4, for the approach to these and other travel-related infectious diseases.

Travelers' Diarrhea and Gastrointestinal Issues

CDC Yellow Book, Chapter 2, estimates that 30-70% of international travelers develop diarrhea (Connor, 2020). Gastrointestinal (GI) issues are often mild and transient. Simply experiencing a change in bowel movements does not indicate the presence of an illness. While diarrhea is more common, constipation may also be an issue for travelers, particularly older travelers. Adequate fluid intake, mindfulness of electrolyte replenishment, and overall good hydration status are always important.

Travelers' diarrhea (TD) is a term applied to diarrheal illnesses with an infectious etiology in a traveler. Causative agents include viruses, bacteria, and protozoa, with bacteria being the most common pathogen.

The pre-travel discussion should be tailored for the traveler's risk tolerance, particular itinerary, season of travel, individual activities, and accommodations. Particular attention should be given to underlying medical conditions which could be adversely affected by significant GI issues. It is important that patients are provided with information on frequent and thorough handwashing, safe food and water choices, distinguishing the severity of diarrhea, oral rehydration, and proper use of over the counter (OTC) and/or prescribed medications for self-treatment. Care should be taken not to overprescribe or over-recommend the use of antibiotics for short term diarrheal illnesses. Special emphasis should be placed on education about recognizing signs and symptoms of dehydration and other red flags to prompt seeking care in the presence of GI illness. If diarrheal symptoms begin, the traveler should be advised to drink clean, safe water and/or an electrolyte solution (pre-prepared, reconstituted from a powder, or mixed with a recipe). In a pinch, certain non-alcoholic, carbonated beverages can be used.

College travel health clinicians should familiarize themselves with the ISTM Guidelines for Treatment of Traveler's Diarrhea. These quidelines include a "Traveler's Diarrhea Management Algorithm." Because traveler's diarrhea epidemiology and quidelines change frequently, providers should regularly confirm their standard recommendations with the CDC Yellow Book guidelines.

Should traveler-initiated treatments fail, or the diarrhea be severe (e.g., bloody, accompanied by abdominal pain, dehydration, or intractable vomiting), formal medical attention must be sought. Any traveler with ongoing post-travel GI concerns after returning home should also seek evaluation.



Sexual Health and HIV PrEP and PEP

Being away from one's own environment and social circle, especially in combination with ready access to alcohol or other substances, can lead to greater acceptance or less consideration of risks. Because finding appropriate diagnosis and treatment of sexually transmitted infections (STIs) abroad can often be challenging, many clinicians strongly recommend that travelers avoid casual sex when traveling. If an individual does engage in casual sex while traveling, consistent and correct use of undamaged condoms or other appropriate barrier protection methods (e.g., dental dams) will help reduce risks. Travelers taking HIV pre-exposure prophylaxis (PrEP) and/or hormonal contraceptives should bring enough medication with them for the duration of their time abroad, or at least have a plan for how to obtain more, without gaps in dosing. Travelers should be warned that counterfeit (or substandard) medications are a problem in some locations.

Currently, there are two options for HIV PrEP: an oral pill (emtricitabine + tenofovir disoproxil fumarate, [F/TDF], or emtricitabine + tenofovir alafenamide, [F/TAF]), or an injected medication (cabotegravir extended-release injectable suspension, [CAB]). Prescribing providers should be familiar with current CDC PrEP recommendations. Though the latest CDC quidelines recommend discussing HIV PrEP with all interested patients (and, of course, those who are at increased risk of HIV seroconversion), FDA approval draws certain eligibility lines by sex and gender (CDC PrEP, 2022). Similarly, the oral pill is to be taken daily under U.S. prescribing standards, whereas in Europe, an "on-demand" (aka, "2-1-1") schedule can be followed prior to anticipated sexual contact. F/TAF is absorbed more quickly than F/TDF and therefore requires a lower dose for efficacy, but there has been recent concern that it is associated with increased cholesterol and weight

gain. The newly approved injection is given every two months, after a four-week loading dose (i.e., a shot is given at time 0 and then months 1, 2, 4, 6, etc.). Recipients should be reminded that these medications only protect against HIV and not other STIs. Assuming there are no contraindications to their use, appropriate management of these medications requires regular blood work:

- HIV antibody screen (and HIV RNA or HIV p24 antigen if there is concern for acute HIV infection), creatinine, and hepatitis B surface antigen are drawn prior to starting the medication
- Baseline LFTs, STI screening, and urine pregnancy test may also be considered, based on risk factors
- HIV testing is done every three months for F/TDF or F/TAF, and every two months for CAB (along with HIV RNA) since the long-acting nature of that drug can delay detection of HIV by antigen/ antibody tests
- STI screening and creatinine are also repeated every six months (or more often if appropriate)

If there is substantive concern for exposure to HIV, either through consensual sex or sexual assault, postexposure prophylaxis (PEP) must be initiated within 72 hours, typically with F/TDF plus either raltegravir or dolutegravir.s See additional CDC HIV PEP guidelines for clinicians.

Pregnant and Breastfeeding Travelers

As with other special populations, pre-departure planning and trip execution for pregnant travelers include the same basic considerations as other travelers, but the CDC Yellow Book notes several areas of heightened concern. Please see Appendix G for a list of pre-travel considerations for pregnant IHE travelers.

Preparation is also important for IHE travelers who are breastfeeding. The CDC Yellow Book encourages research on destination-specific resources, which may be found via the International Lactation Consultant Association (www.ilca.org) or La Leche League International (www.llli.org). Please see Appendix H for detailed pre-travel considerations for breastfeeding IHE travelers.

Trans Travelers

There is a notable dearth of information for transgender travelers, with most information being shared through social media (rather than peer-reviewed journals or other formal publications) and focusing on acceptability of legal documents. Indeed, many of the practical suggestions aren't medical, and the medical recommendations aren't necessarily specific to trans travelers. Nonetheless, trans travelers do have an increased risk of victimization (i.e., sexual and physical assault) both domestically and abroad. The typical advice to avoid unwanted attention still holds true, but trans travelers may also want to have a contingency plan, including identifying emergency medical and mental health contacts abroad and at home.

The trans traveler has unique health-related needs, in both physical and mental health realms. Therefore, early preparation for international travel is crucial. In addition, there are multiple cultural considerations to consider when travel is planned. There is a curated selection of references later in this guide. Important elements for travel health providers to consider include:

- Discuss the destination's cultural views regarding trans individuals prior to the traveler determining and confirming travel plans.
- Collaborate with the individual's primary providers (medical and counseling).

- For transitioning individuals, determine if appropriate medical care is available at destinations.
- For individuals who are using any medications, determine if any are controlled substances in the U.S. or destination countries (e.g., testosterone gel), requiring special letters for customs or which are prohibited in some countries.
- Facilitate personal (and if appropriate, professional) assessment of mental health and readiness to be physically removed from supportive home communities. Trans populations have higher rates of significant mental health issues overall than cis-gender populations.
- Discuss with the traveler whether there are considerations regarding lodging at destinations. This may include roommates for group travel, residence halls, homestays, etc.
- Discuss safety and security while abroad. Provide resources including USDOS and other emergency communication resources. Maintaining support with home community resources is also invaluable.

Traveling with Medications and Medical Devices

Travelers generally need to continue their regular medications while traveling. Medications should be transported in carry-on baggage in their originally labeled prescription bottle, and in sufficient supply for the duration of the journey plus a little extra, if possible, in the event of delays. The travel health provider should obtain an accurate list from the traveler of all current medications, including overthe-counter medications and dietary and herbal supplements, in part so that travel medication and vaccine interactions are avoided. Similarly, the experienced travel clinician will consider possible drug-drug interactions (especially with new travelrelated medications) as well as how the traveler's medical conditions and expected foodstuffs at the destination may interact. Medications (including injectable and refrigerated medications) should not be stored in cars or other areas where temperatures may exceed product stability requirements.

The travel provider should assist with obtaining adequate supplies of daily medications, typically from a regular healthcare provider, and advise that

Older Travelers

Increasingly, colleges are enrolling "nontraditional" students of every age for both undergraduate and graduate programs. College health services are adapting to this change. As we age, the differential for any health complaint becomes more complex. Older travelers may have a greater need for referrals to specialists on or off campus for travel-related illnesses and injuries. The age of the traveler needs to be factored into the overall risk profile for a trip. Whatever their age, all students, faculty, and staff travelers should receive the standard pre-travel assessment and management plan. For older travelers, additional considerations should be included in the consultation, including the benefit or need for a "fitness-to-travel" evaluation. Please see Appendix K for pretravel assessment of older travelers.

extended supplies of medications will often require additional time for prior authorizations from insurance companies and for the filling process. It is recommended to provide additional days' supply of medications beyond the planned itinerary in case of unexpected delays such as canceled flights or illness. Longterm travelers who take daily hormonal contraception may consider switching to long-acting reversible contraception (LARC), such as an intrauterine device, to avoid having to obtain and travel with extensive supplies of hormonal contraception. It is helpful for travel providers to consult with the patient's regular healthcare providers to ensure provision of adequate quantities of daily medications including emergency medications such as epinephrine auto-injectors.

When possible, travelers should avoid reliance on obtaining medications, including over-the-counter medications, at the destination country, as medication sourcing and quality controls may be unreliable. Medications in the destination country, while sometimes less costly, may have different names or ingredients than in the home country. There is also a risk in some countries of counterfeit, unregulated, and adulterated medications. It is helpful for travelers to have a comprehensive medication list with both brand and generic names of their medications. IAMAT (International Association for Medical Assistance to Travelers) has published a helpful guide to traveling with medications.

Some countries restrict or even prohibit certain prescription and over-the-counter medications, and the provider has an opportunity to help the traveler navigate these restrictions. These restrictions may include medications commonly used in the student population, such as stimulants used to treat attention deficit hyperactivity disorder (ADHD). Certain countries may require an application and approval process for bringing medications across their borders. Depending upon the restriction, the student may need a reduced supply of the medication, an alternative therapy to use during travel, or a letter from the prescribing provider explaining the medical need for the oral or injectable medication (including epinephrine autoinjectors).

Medications for Travelers with Chronic Medical Conditions

Travelers with chronic medical conditions often require consideration regarding needed medications, devices, and managing an acute episode of their condition. If the traveler has medications that are injectable, it may be helpful to have a letter from the medical provider explaining the need for the medication. Those with electronic devices such as CPAPs, pacemakers, implanted defibrillators, and insulin pumps may have concerns going through airport security screening processes. A letter from the provider involved with the device is helpful. User manuals, manufacturer contact information, and extra batteries/ power supplies usable at the destination are beneficial. The manufacturer of the traveler's medical device could be contacted regarding prohibitions on the device going through security machinery (e.g., metal detectors). Travelers with medical conditions and accessibility issues can learn about TSA screening processes and request assistance or special accommodations.

The travel health provider should confirm that the traveler with a chronic medical condition has a plan for acute exacerbations of the illness during travel. This may include identifying sources of healthcare in the destination country, obtaining travel insurance inclusive of medical evacuation, making contingency plans for traveling to an area where proper medical care is available, ensuring supplies of emergency medications, and having contact information for the home medical provider who cares for the patient. Those with devices such as insulin pumps and continuous glucose monitors should contact the device manufacturer, as some will provide backup devices to be used in the case of device failure. (Pavela et al., 2018).

CDC provides travel information for those with certain medical conditions, such as the 21 Tips for Traveling With Diabetes. Medical associations such as the American Diabetes Association and the American Heart Association are excellent resources for travelers with associated chronic medical conditions.

MENTAL HEALTH CONSIDERATIONS FOR STUDENT TRAVELERS AND MENTAL HEALTH EMERGENCIES WHILE ABROAD

Equity requires that IHEs commit to supporting study abroad for all students, including students who are managing mental health concerns. Just as cultures differ, so does the degree of access to counseling, mental health services, and medications in many countries a student might consider for their study abroad experience. Addressing these challenges can help students with mental health conditions, especially those in crisis or having problems while abroad, to have a successful experience. Pre-departure planning, comprehensive insurance coverage, and site readiness enable travelers with mental health concerns to travel confidently. While this section deals with mental health considerations for student travelers, it is important to note that faculty and staff travelers can also face mental health challenges while abroad. Many of the recommendations made here would be beneficial to all IHE travelers.

Not every study abroad experience is a good fit for every student. In the pre-departure planning stage, the IHE and the student should partner in managing risks to maximize the rich educational opportunities of study abroad experiences. This aspect of pre-departure planning is highly individualized, aimed at reducing the surprises that may negatively impact the study abroad student experience. Healthcare providers, study abroad advisors, accessibility support services, trip leaders, and site faculty can work together to build such a process. Pre-departure exploration should include input from those who are familiar with the needs of the traveler as well as the resources available at the destination site. Selection of the best site for each student is an important element of a sustainable program.

Pre-Departure Planning

There are several steps an IHE can take to make sure the student experience is as successful as possible:

- Set expectations with study abroad advisors (SAAs)/trip leaders:
 - Familiarity with the site should include an up-to-date understanding of how mental health challenges are handled in the host country/community and knowledge of resources. Site reviews should be undertaken on a regular basis to update changing situations.
 - Bias or stigma among SAAs/trip leaders or the study group about inclusion of students with mental health conditions should be identified and addressed with well understood policies and training before travel.
 - Student disclosure to SAAs/trip leaders about their mental health condition should be encouraged but not required. SAA/trip leaders must be prepared to respond supportively and with accurate site-based guidance. Every disclosure should be a positive and collaborative experience.
- Whenever possible, student travelers should meet with a travel health provider well in advance of program selection to consider host site variations and to begin pre-departure planning to meet their health and wellness requirements.
 - In the pre-selection phase, establish a process to include the travel healthcare team to participate and advise. Providers can work directly with students to support their healthcare needs while abroad.
 - Effective pre-selection conversations require advance consideration and publication of the site requirements.

Study abroad programs and travel health providers should normalize mental health challenges by offering a mental health checklist to all outbound students (and families). See Traveler Handout 1 for a mental health checklist for students (and their families) considering travel abroad and Traveler Handout 4 for a pre-travel mental health provider appointment checklist.

It can be very helpful to discuss the students' motivation for travel. Students managing multiple stressors may view the study abroad alternative as a relief from their current situation. As a result, the temptation to then experiment with changes in medication, drinking, and risky behaviors may be high. Preventive education should include non-judgmental information about the consequences of suspending medications or other risky choices.

When Students Disclose Mental Health History

IHEs face many complex issues regarding student disclosure of mental health issues before or during international travel. Such disclosures, or failures to disclose, present both liability implications and the need to be fair to students with challenges. Institutions are encouraged to create policies that focus on "minimal necessary information" and "the need to know" while also preparing trip leaders to provide appropriate accommodations for student travelers and groups.

IHE travel health providers should encourage (but not demand) that students disclose their mental health history to the SAA, if they feel comfortable doing so. There are many benefits to disclosing to an SAA. The SAA can help find a program where students will be able to succeed academically and personally (due to academics, environment, housing, on-site support, etc.). It can be helpful to provide students with a guide for this conversation. Please see Traveler Handout 2 for a student handout about maintaining privacy during a discussion between students and the SAA or trip leader.

SAAs should plan pre-departure and post-travel conversations with students. The period after return is an important time of readjustment and re-connection. These check-ins can help identify difficulties and the need for support.

Mental Health Considerations for All Student Travelers

Many mental health conditions have their onset during young adulthood (Pedrelli et. al, 2015), which is a critical time for brain development. For college students, the additional demands, and stressors of initiation into a new identity and social group, the assumption of additional financial obligations and responsibilities, and the stress of academic demands converge to create escalating pressure. As a result, the college age population carries a high risk for mental illness and suicide during this critical developmental time.

Students who present for pre-departure care with a pre-existing mental health diagnosis often know their needs and can work with the travel health provider to identify resources and develop a plan of care. However, students who present with a mental concern for the first time during international travel have not made such preparations. Therefore, pre-travel education for all students should include information about managing mental health concerns such as homesickness and culture shock. See Traveler Handout 3 for a student handout on dealing with culture shock and homesickness.

The dynamic of belongingness within the travel group can be a great ally (e.g., supportive friends and trip leaders) or a great obstacle (e.g., group encouragement of risk-taking). Strong IHE study abroad programs

know how to take advantage of the group to build connection and belongingness, which then reduces culture shock and mental health and travel risks. It is important to remember that other members of a group may be significantly affected by mental health issues experienced by a fellow traveler and may need support themselves.

Serious Student Mental Health Issues and Emergencies While Abroad

Serious mental health concerns such as psychosis, bipolar disease, and major depression can present while a student is traveling abroad. IHEs should have policies in place for care of a student with an emerging mental health concern or emergency during a study abroad experience.

Mental health emergencies are among the most common emergencies that IHE travel health and study abroad professionals must manage. In both short- and long-term placements, travel, language barriers, separation from support networks, and re-acculturation may take a heavy toll on participants and can destabilize even the most healthy and robust student, faculty, or staff traveler. College student years (ages 18 to 25) are when the brain fully matures, and serious student mental health problems appear. Therefore, it is important to have requisite supports in place, including access to good travel health insurance with medical evacuation coverage, a travelers' plan for accessing healthcare, a network of known onsite mental health resources, and collaboration at the host institution. These elements should provide interlocking support. Having a timely and effective response to travel mental health emergencies requires a predetermined team approach.

Coordinated Mental Health Crisis Response: The travel health provider may be called upon to gather resources in a study abroad crisis, so it is valuable to have good working relationships with the IHE individuals and team responsible for campus crisis response. Additional staff/faculty who may be important participants in a travel mental health crisis response for a student could include:

- Mental health director/on call staff
- Student's identified mental health or primary care provider at home
- IHE dean of students
- IHE accessibility support liaison
- Liaison for travel health insurance plans (health and evacuation if they are separate coverages)
- Travel academic directors including those traveling with the student/group
- Student's designated emergency contact(s) and/or family.

For staff or faculty mental health emergencies abroad, other emergency response team members may be more appropriate. It is highly likely that the travel health professional and campus counseling colleagues will be responsible for appropriately monitoring and maintaining patient privacy (FERPA and HIPAA) in such a setting.

Remotely Stabilizing a Mental Health Emergency: In a mental health emergency, IHE travelers can often be stabilized from anxiety, depression, or exacerbation of an existing mental health condition with accommodations and access to mental health clinical support on site or remotely delivered. Persistent anxiety attacks can be experienced as emergencies but often respond well to such interventions. Depressive symptoms may not be as responsive, but accommodations can be a significant relief while the team works with the student to determine if they are able to remain on site. Prescribing medication

will often require a qualified and licensed healthcare professional on site. Some states require specific licenses to counsel students remotely while they are abroad. Campuses should understand their state requirements. IHEs could explore contracting remote mental health services to organizations with the licensure to perform remote and/or international care.

IHE travelers who are experiencing life threatening depression and/or who articulating active suicidal ideation or intent to harm peers or staff should be stabilized immediately in a secure environment such as a local psychiatric treatment facility or hospital or otherwise be safely escorted home. Some travel health insurers provide coverage for a friend/family member to travel to the student to assist in stabilization for a medical evacuation. A suicidal patient should not be allowed to travel home without appropriate accompaniment, ideally a mental health or medical professional. With support, travelers who are suffering a mental health crisis should be able to accomplish a safe and successful journey home.

Responding to Emerging Psychosis in a Traveler: Ages 18-25 years represent a common developmental threshold when psychotic mental illness may emerge. The lifetime impact of such illness is heavily mitigated by access to effective treatment and medication as soon as possible. Whether the traveler is treated quickly on site or returns home depends on the team's familiarity with onsite and home resources. However, an actively psychotic patient should not travel unless accompanied by qualified mental health professionals.

Preventive Education and Mental Health Emergencies

Planning and preventive education cannot eliminate traveler mental health emergencies. However, wellness-oriented planning establishes a learning environment that prioritizes mental health, assists IHE travelers in their adjustments, and develops a mutually supportive learning community among participants. Teaching mindfulness relaxation is an example of an effective prevention strategy.

Post-Travel Mental Health Care and Debriefing

Mental health issues may often be present and pressing upon travelers' return. Providers should encourage a low threshold for travelers to seek support and/or mental health consultation if they are experiencing any concerns.

IHEs should utilize post-travel debriefings to update their travel mental health guidance. Often those debriefings will yield important points of information from students and travel groups for improvements and adjustments.

TRAVELER EMERGENCIES

The Duke University Office of Global Administrative and Traveler Support defines a "travel emergency" as "any circumstance that poses a genuine risk to, or that has already disturbed, the safety and welfare of a ... traveler while ... abroad" (Emergency Response, 2022). Travel emergencies may range from injuries and medical emergencies to potentially complex issues like mental health crises (see pages 32-33), physical and sexual assault and harassment, weather-related events, local political crises, warfare, terrorist attack or threat, and unfortunately, death. Because emergencies are often uncontrollable or unpredictable, the importance of robust and anticipatory pre-travel preparation and education for all travelers and trip sponsors cannot be overstated.

Traveler emergencies can affect individuals, groups, or even countries, regions, or the world. Emergencies involving individuals can profoundly impact other travelers in a group, necessitating a supportive approach for them as well. Individual travelers often have their own perceptions of what constitutes an "emergency," as do fellow travelers, colleagues, family, and friends. The IHE response must be timely, coordinated, clinically sound, and appropriate to the situation. Circumstances may evolve rapidly and require a coordinated response across campus and internationally. Stakeholders may include faculty trip leaders, contacts "on the ground" abroad, IHE study abroad programs, IHE administrators, students, and families/ significant others. These situations are challenging and consume significant time and resources.



Traveler Emergencies Requiring Medical Care



Significant Accident/Injury Including Motor Vehicle Accidents

According to the CDC Yellow Book 2020, motor vehicle accidents (MVAs) were the leading cause of nonnatural deaths among U.S. citizens living, working, or traveling abroad in the years 2015 - 2016. (Parker et. al, 2019).) CDC further states "[n]early half of people who die on the world's roads each year are pedestrians, cyclists, and motorcyclists, also called 'vulnerable road users." (Sauber-Schatz et al., 2019) College travel health professionals should stress MVA and pedestrian safety precautions at the pre-travel visit, particularly with students. The CDC Yellow Book has an excellent list of CDC strategies for vehicular and pedestrian safety while traveling abroad.

When IHE travelers participate in activities that can lead to injuries (e.g., boating, SCUBA diving, and adventure travel such as mountain climbing and skydiving), it is important for them to realize that many countries, particularly remote areas, may lack the level of emergency and trauma care facilities frequently found in the U.S. IHE travelers should be made aware of the increased risks of certain injuries in these settings and urged to take precautions to mitigate those risks including the purchase of evacuation insurance (Parker et al., 2019).

Severe Allergic Reactions and Anaphylaxis

The IHE traveler with allergies should be evaluated to determine if they are at risk for severe allergic reactions with the potential to significantly interrupt or alter planned activities or require emergency medical care during travel. The traveler with a history of anaphylaxis warrants special attention. Travelers with a new severe allergy, recent or recurrent severe allergic reactions, or history of idiopathic anaphylaxis warrant a specialist referral. The provider should anticipate that this consultation may generate additional recommendations that require trip delay or rerouting. See Appendix E for detailed information on the pretravel and self-care management of IHE travelers at risk for severe allergic reactions.

Severe Physical Illness

Severe physical illness while abroad may be anticipated (e.g., immunocompromised travelers and those with pre-existing illnesses) or unanticipated (e.g., emerging infectious diseases, toxic chemical exposures, and animal bites and stings). Remote management of a severe physical illness in a traveler of any type can be difficult and present legal and risk management issues.

Even if the IHE travel health professional cannot directly manage complex patient care abroad, they may provide important assistance by offering sources for clinical and logistical advice when unavailable in remote or less-resourced areas. The International Society of Travel Medicine (ISTM) maintains a searchable database for members that lists travel health clinics in 80 countries around the world. The local U.S. embassy or consulate (https://www.usembassy.gov/ or 888-407-4747) may be able to help travelers locate medical services in-country, and travel health insurance companies often have lists of accessible medical services.

IHE travel health providers can help obtain home medical records and serve as a "clinical interpreter" to the patient as well as (within the confines of FERPA and HIPAA) the patient's family/emergency contacts and IHE officials. Finally, college health professionals can help coordinate the clinical response upon return of the traveler to the U.S.

Rabies Exposure

Rabies is a fatal viral disease transmitted by mammals. The rabies risk to IHE travelers is a complex interplay of destination, activity, and personal prevention measures taken by each traveler, compounded by available options for pre- and post-exposure immunizations and wound treatment. Please see Appendix I for a detailed review of pre-travel rabies education, risk assessment, consideration; pre-exposure rabies prophylaxis, and potential rabies exposure during travel. Excellent comprehensive resources are available in the CDC Yellow Book Chapter 4.

Bloodborne Pathogen Exposure and PEP

Bloodborne pathogen (BBP) exposures often present an emergent need for intervention and post-exposure prophylaxis (PEP). For IHE travelers providing healthcare in less resourced or remote settings, pre-travel education and preparation are essential. The most common bloodborne pathogen exposures in healthcare settings are hepatitis B (HBV), human immunodeficiency virus (HIV), and hepatitis C (HCV) (Centers for Disease Control and Prevention [CDC], 2021; 2022; 2020). Of these, hepatitis B is vaccine preventable. IHEs should strongly consider requiring HBV vaccination for all international travelers participating in an IHEsanctioned healthcare setting.

When possible, IHE travelers to less resourced and remote healthcare settings should ascertain in advance the destination availability of BBP exposure assessment, hepatitis B immune globulin (HBIG), and HIV postexposure prophylaxis (PEP). To be maximally effective, HIV PEP must be started within 72 hours of exposure (Post-exposure prophylaxis (PEP), 2021). If HIV PEP medications are not reliably available onsite, providers should strongly consider providing IHE travelers (as per state prescribing regulations) with a supply of PEP medications of a duration (generally three days or more) to allow the healthcare traveler to reliably access the remainder of the 28-day treatment course elsewhere (PEP, 2021). When available, a telehealth visit with a BBP-exposed IHE traveler can establish a time-sensitive treatment plan and needed follow-up.



Other Traveler Emergencies

Disasters Abroad

As the number of international travelers grows, so do the chances of travelers encountering both natural and human-caused disasters. While rare, these events do occur, and the IHE traveler should take steps preemptively to mitigate the risks. Ideally, these risky situations/destinations should be avoided, but that is not always possible. IHEs should work with travelers who are intentionally entering disaster situations to offer assistance as special preparation is required.

Before departing the U.S., travelers should enroll in the U.S. Department of State's Smart Traveler Enrollment Program (STEP). STEP can provide relevant security updates for the destination before and during travel. The traveler will also receive a contact number to call in the event of an emergency. Should a disaster occur, the U.S. embassy in the country will know the STEP traveler's destination and, if necessary, they will be able to better target the stranded traveler for evacuation or rescue.

For IHE-sponsored travel, pre-trip planning should involve a solid communication plan for all travelers to activate in the case of an emergency. IHE travelers should have a reliable designated 24/7 telephone contact in the U.S. Once the IHE receives notification of an emergency/disaster abroad, a plan can be developed to support the individuals and groups impacted, which may include dispatching a campus official and possibly a mental health provider to help support the travelers on-site, via telehealth or upon returning home. Debriefing and ongoing support following travel is also important.

Potential Social Media Impacts in an Emergency

Social media can play both a helpful and a harmful role in the response to an IHE traveler emergency. It can be used to quickly alert IHE travelers when significant risk to travelers exists (e.g., terrorism, severe weather and other natural disasters, potential infectious disease exposure). Even if well-intended, however, social media can facilitate the rapid, widespread, and uncontrolled release of incorrect and/or highly personal information.

POST-TRAVEL CARE

While most travelers experience no health problems related to travel, the returning traveler may experience a wide variety of challenges as they navigate re-entry to their home country. This is especially true for longstay travelers, as it can be overwhelming emotionally to reintegrate to one's community, country, and even family; mental health concerns may arise upon returning home. There may be physical health issues upon return as well (e.g., infectious disease issues including vector-borne illnesses, GI infections, and STIs).

There are numerous resources regarding the evaluation of post-travel medical issues with which IHE providers

During an emergency, IHEs and college travel health professionals have a legal (FERPA and HIPAA) and ethical obligation to safeguard Protected Health Information (PHI) and Personally Identifiable Information (PII) of traveling students, faculty, and staff. However, the spread of information on social media cannot always be prevented or controlled. The involved IHE, IHE-sponsored safety apps and the U.S. Department of State Smart Traveler Enrollment Program (STEP) can serve as confidential options to share vitally important safety and health information rapidly and accurately, while protecting affected parties.

should be familiar (see Vaughn and Viera's [2021] section on this topic which includes a Post-Travel Checklist). Key principles of post-travel care include:

Acutely Ill Returning Traveler:

- When ill international travelers present for care, it is crucial to ask for a recent travel history, particularly for travelers with fever, rashes, or severe illness. Asking about recent travel (within the past three months) early in the scheduling process or clinical visit (e.g., at check-in) can have a significant impact on patient outcome and can avoid the potential spread of infectious diseases to others. Important considerations for the travel health service include:
 - At what point in patient scheduling or check-in should this information be requested?
 - Who should review the information and when should it be reviewed?
 - What information should be requested (e.q., "Have you traveled internationally in the past three months? If so, where?")?
 - Is isolation needed while the patient is waiting to be seen? What parameters should be considered when making this decision?
 - How often should we check to ensure this screening process is occurring?
- In potentially severe diseases such as *Falciparum* malaria, a patient may progress to life-threatening illness if prompt diagnosis and care are not received. Fevers and rashes in a returned traveler should warrant immediate evaluation.
- In evaluating an ill returned traveler, the provider should always remember to include non-travel related etiologies in their differential. Close follow-up of ill post-travel patients is always warranted.
- ◆ Travel health providers should know and use key resources and consultants (e.g., local infectious disease experts; travel medicine experts locally, nationally, and at destinations visited; the CDC Malaria hotline; state health departments).
- Providers should encourage post-travel STI testing as appropriate.
- When providing pre-travel education, remind travelers that post-travel care is very important to seek as needed and to have a low threshold for doing so. Providers should emphasize the importance of disclosing any international travel during the prior three months when seeking care following travel.

Routine Post-Travel Follow-Up and Other Concerns:

- Consider attractive travel-themed graphics around the clinic (waiting areas, exam rooms, entryways, counseling center, etc.) and on your website conveying the importance of patients letting their providers know if they have traveled in the past three months. Offer to share your graphics to others around campus for display (e.g., study abroad/international programs office, residence life, etc.) to increase awareness.
- Consider facilitating or encouraging informal groups of returned travelers to meet on a regular basis for activities (lunch, walks, coffee, etc.). This can be a great way to ease re-entry and develop new relationships with common ground upon return.
- Collaborate with other campus entities (study abroad/international programs office, residence life, others) when providing post-travel care. Create a broader awareness of the importance of seeking timely evaluation for post-travel symptoms or concerns.

Consider messages that are scheduled through the electronic health record to be sent to travelers near their date of return, advising travelers to continue taking their malaria medication if indicated, and to come in at appropriate time intervals for screenings that are indicated (e.g., tuberculosis screening, STI tests, and schistosomiasis tests). This is also an excellent opportunity to encourage travelers to address any post-travel physical or mental concerns.

SPECIAL TYPES OF TRAVEL

There are many travel activities and situations that are either unique to or very common among IHE travelers. Pre-travel education involving a collaborative approach with campus and international partners is essential, with careful consideration given to climate and extremes of weather, altitude, terrain, disease burden, transmission rates, and planned activities.

Event-Based Travel

IHE travelers may participate in group and individual event-based travel. It can be a one-time or infrequent event (e.g., an isolated IHE sports competition, the Olympics, and Kumbh Mela) or an annual event (e.g., Hajj, Carnival, and Fashion Week.) CDC Yellow Book 2020 notes that mass gatherings "are associated with environmental hazards, increased infectious disease transmission due to the influx of attendees, crowding, poor hygiene from temporary food and sanitation facilities, and challenging security situations." (Gaines & Brunette, 2019).

These events can exacerbate individual medical conditions and cause injury or death due to surging crowd behavior or other catastrophes. Most organized mass gatherings, even those in remote locations, have emergency medical services and evacuation planning, but these services can be overwhelmed by a catastrophe. The traveler must be educated about the risks of event-based travel and given risk mitigation resources. A detailed travel itinerary is essential, and travelers should be encouraged to get assistance when needed.

Adventure Travel

Adventure travel (bungee jumping, climbing, cave diving, paragliding, and many others) is not the exclusive domain of students and other IHE travelers. However, college students are often risk-takers, both by age and inclination. It is important to provide appropriate education and counseling regarding the role of risktaking and accidents as an integral part of pre-travel preparation, with focus on the following:

- A comprehensive travel itinerary, including the specifics of adventure travel activities
- A frank discussion about the importance of travel health, evacuation, and repatriation insurance
- Issues to consider when traveling to remote locations or planning high risk activities, including limited medical and emergency services, less reliable communications, and extremes of weather
- ◆ A strong recommendation for enrollment in the U.S. Department of State Smart Traveler Enrollment Program (STEP)

A review of CDC adventure travel recommendations can be found at https://wwwnc.cdc.gov/travel/page/ travel-to-the-extreme. The Wilderness Medicine Society (https://wms.org/) and the Divers Alert Network (https://dan.org/) also provide adventure travel resources.

Visiting Friends and Relatives Abroad (VFRs)

VFR travel (visiting friends and relatives) is by no means unique to IHEs, but it is underappreciated and can pose significant health-related concerns to our IHE populations. Many students, faculty, and staff undertake international travel with the express purpose of visiting family and friends, often returning to their home countries. When visiting friends or relatives or returning home, perhaps after many years away, the perception of health and safety risk is potentially underestimated and pre-travel care is often not sought. Being aware of this group of travelers and making travel health services known to the IHE community can be helpful in bringing attention to this matter. Discussions and recommendations regarding travel health for VFRs can be found in the CDC Yellow Book.

High-Altitude Travel

Traveling to altitude presents wellknown and widely recognized risks to travelers. While in no way unique to IHE-associated travel, there are elements of student travel to altitude which can pose especially challenging risks. The CDC Yellow Book chapter on high-altitude travel is a foundational resource. Please see Appendix F for detailed information, including the Wilderness Medical Society quidelines on altitude travel.

Travel Related to Humanitarianism and Volunteerism

Many students, faculty, and staff participate in domestic and international travel for humanitarian and volunteer purposes. If the trip is IHE-sponsored, please refer to information provided in Handout 8 that addresses group travel led by faculty and lists responsibilities and procedures for the tour leader, trip participants, chaperones, and other university stakeholders.

IHE travelers, particularly students, may also seek preparation for non-university affiliated "voluntourism" experiences. These trips may be short (one to four weeks) or longer term (up to two or more years). Some trips have a religious affiliation. Since such trips may be an add-on to a semester abroad, a conference abroad, or a visit home to see family, clinicians should always inquire about volunteer activity in conjunction with an international trip.

Unfortunately, voluntourism organizations often provide little or no pre-travel health and safety guidance. Rather, the organization's website and literature focus on the mission, the spiritual and cultural aspects of the journey, acquiring language skills, and/or packing and pre-trip reading lists.

It is not uncommon for IHE travelers (particularly students) to have vaque or unrealistic expectations about a voluntourism trip. They may come to the pre-travel encounter without even the most basic trip information or express a lack of concern about anything except the trip goals (e.g., "working in an orphanage," "building a village well," etc.) Travelers often know very little about itinerary, activities, health and safety risks, and sometimes the information they have received is outdated or simply wrong. In pretravel preparation, it should be stressed that the traveler should fully vet voluntourism and related activity.

Special steps should be taken in preparation for travelers on non-IHE-affiliated volunteer/humanitarian trips, including work in healthcare settings. Travelers (and their families/significant others) need to know that the IHE may provide pre-travel services in preparation for these non-university sponsored trips but may accept no other responsibility (travelers should confirm this IHE general counsel or the IHE travel abroad program). See Appendix J for more detailed information.

Travelers responding to humanitarian crises may be aware of health and safety concerns at their destination but may be less aware of the risk for PTSD (post-traumatic stress disorder) and the potential impact of that on their future work or academic plans. Witnessing or directly experiencing trauma is a considerable mental health challenge. People embarking on humanitarian or crisis response travel should have a personal knowledge of and experience using emotional self-management tools and be aware of support services available during and following their humanitarian service. These should be utilized without hesitation as any need arises.

IHE travelers should know that if their experience volunteering in less-resourced communities or with at-risk populations generates sad or uncomfortable feelings or thoughts, there are resources at the IHE or in the community to help them process the experience after their return. A useful resource on this topic to share with the traveler is The Ultimate Guide on How to Plan a Volunteer Trip Abroad by Go Overseas.

Travel Related to Athletics

The relationship between an IHE's athletic department and its health and counseling services varies widely across campuses. At some IHEs, typically smaller NCAA Division II and III schools, the campus health and counseling services provide all or nearly all care to student athletes. At larger Division I programs, an entirely separate healthcare system may exist for student athletes. Others have a combination of campus health services and athlete-specific healthcare systems. However, it would be rare for an intercollegiate athletic program to have its own travel health program for student athletes, coaches, administrators, and staff. This presents a potential liability for the IHE but also an opportunity for college travel health providers to connect with athletics and promote their services.

Where no or a minimal relationship exists between athletics and the college travel health program, travel health providers should consider the following:

- Meet with team physicians, athletic trainers, and coaches. Introduce yourself, your travel health program, and its potential importance to student athletes and staff traveling internationally. Inquire about any upcoming trips.
- Offer group educational sessions for teams traveling internationally. Allow enough time between the session and departure for individual travel health assessments, either on-campus or with an offcampus partner.
- To avoid exceeding your on-campus capabilities, establish off-campus partnerships in advance if necessary.

Travel Related to Faculty-Led Academic Programs

Health and safety preparation for faculty-led programs is an important part of international travel risk mitigation. IHEs may approach this differently, but the goal is the same: to familiarize faculty and students about the health and safety challenges they may face during their international experience, resulting in safe and healthy travel and the best traveler experience possible.

IHEs typically have administrators who must remain current on Clery Act and Title IX policies, including management during international travel. Institutions that fail to enforce these policies face sanctions from the Federal government, including significant fines and/or withholding of federal funds. Some institutions that do not have Clery Act or Title IX administrators have hired consultants to help manage this important area.

Faculty/staff international trip leaders face the challenge of stepping into a non-traditional role. While on campus, students with health issues go to student health, those with mental health issues go to counseling

services, and those with conduct issues are sent to the student conduct office. However, when faculty are leading an educational expedition abroad, they become representatives of all these university offices. Therefore, an effective pre-departure orientation for faculty/staff trip leaders empowers them to manage health and safety situations in a way that does not overwhelm them and/or put them directly into healthcare provider roles. Please see Traveler Handout 8 for a detailed trip leader checklist.

Faculty program leader pre-departure orientation is generally managed by the study abroad/international programs office. Training could include a health and safety workshop that familiarizes program leaders with IHE policies and best practices for handling emergency situations while abroad. Important presenters at the workshop should include student health/mental health/travel health providers(s) and campus experts on Title IX, Clery Act, student conduct, accessibility, security, and safety. Such a workshop should prepare attendees to initially respond to emergencies while awaiting additional IHE help. The preparation could involve role playing by program leaders, which allows them to discuss challenging health and safety scenarios. Orientation leaders should encourage questions and allow adequate time for discussion.

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COLLABORATION AND PRIVACY

One of the most significant aspects of IHE international travel is the central role of collaboration: across campus, within the community, and with destination institutions. To have a successful IHE travel health and safety program, the collaboration must be intentional, active, and effective, with the traveler as the central focus of the process. In addition, an IHE must navigate the complex world of information access and privacy, including HIPAA, FERPA, group travel issues, and emergencies.

Identifying Key Stakeholders

On every campus, the most important stakeholders to consider are the travelers themselves. Other key stakeholders who actively collaborate in IHE international travel will vary for each IHE, depending upon institutional resources and priorities, but may include:

- Student health (travel clinic, medical services, counseling services, pharmacy, medical records, other)
- Study abroad/international programs office
- Dean of students/student affairs office
- Faculty and staff
- Athletics
- Student clubs
- Safety and risk management

- Accessibility services
- Insurance office
- ◆ IHE legal counsel
- ◆ Upper administration (e.g., president and provost offices)
- Campus law enforcement (especially in cases of emergencies abroad)
- Community resources including the local health department, travel health providers, infectious disease specialists, yellow fever vaccine providers, etc.
- Travelers' own healthcare providers (not at IHE)
- Multiple destination stakeholders (colleges/universities, healthcare institutions, local travel health experts, law enforcement, local and national government officials)

Creating Intentional Structure, Protocols, and Support

The creation of an IHE international travel safety review committee is highly advised. This may involve core members who meet regularly and others who join on an as-needed basis. Intentionality and well-defined goals are very important, as is clear delineation of decision-making authority. Requirements for IHEaffiliated travel (individual and group) must be widely known, accessible, and enforceable.

The travel safety review committee should create:

- Required traveler enrollment in an international travel registry for IHE-affiliated trip:
 - This may range from an informal spreadsheet for less-resourced travel health programs to higher-cost, more comprehensive commercial platforms which may involve annual subscriptions. All individuals should also register with the U.S. Department of State Smart Traveler Enrollment Program (STEP).
 - It is crucial to know where your IHE-affiliated international travelers are, how to reach them, who their emergency contacts are, and when they have safely returned to the U.S.
- Protocols for reviewing and approving IHE-associated travel plans.
- Protocols for individual and group traveler emergencies.
- Requirements for collaborative pre-travel education and training for all travelers on IHE-affiliated travel.
- Requirements for training of IHE faculty and staff group trip leaders including applicable federal rules and regulations during international travel (Title IX, Clery Act, etc.).
- Information about local, state, tribal, and federal health resources (e.g., city and county health departments, tribal health entities, state health departments, CDC). Local travel health and infectious disease specialists may also serve as valuable resources during IHE-sponsored travel.
- Information about how to work with important destination resources to provide support and respond to emergencies (e.g., arranging destination medical and mental health care and pharmaceutical resources in advance of travel).

Traveler Privacy Considerations

IHEs must address the questions and issues related to the privacy of travelers, both pre-travel and while abroad. This includes, but is not limited to, managing travelers' personal health information.

HIPAA and **FERPA**

There are some pre-existing health conditions that warrant special attention prior to and during student, faculty, and staff international travel. Institutions are bound by both the Health Insurance Portability and Accountability Act (HIPAA) and the Family Educational Rights and Privacy Act (FERPA) in the management of IHE traveler information.

Working in travel medicine involves daily handling of Protected Health Information (PHI) and Personally Identifiable Information (PII). Although it can be complex and cumbersome, IHEs have an ethical and legal obligation to protect the privacy of students, faculty, and staff travelers, including their healthcare records. There is an extra layer of complexity in IHE travel health because student health records (somewhat dependent upon the setting) are primarily governed by FERPA and employee health records are primarily governed by HIPAA. In general, with healthcare "treatment records," HIPAA and FERPA regulations are very similar, but they are not identical. In both situations, it is important to release/share the "minimum necessary" information. The strictest privacy rules are in mental health. Therefore, all IHE travel health providers and campus collaborators should be trained in applicable privacy rules and regulations.

As with all legal situations, it is important to consult with your IHE's general counsel/attorney regarding your individual campus' approach to FERPA, HIPAA, and student/faculty/staff privacy. Their instructions should supersede any information provided in this guide.

Protocols should be established that are well understood by all parties involved. Some questions that can arise regarding the collection of protected information include:

- What is the best way to collect this information pre-travel?
 - Is it collected through on-campus health services?
 - If so, how is it then shared with departments and other services to establish the best protections?
 - If the information is collected by the study abroad office, how is it utilized? How is it shared?
- What happens if the student, faculty, or staff traveler refuses to release the information?
 - In this scenario, this means that some are made aware of the conditions (perhaps those in clinical services) but are unable to share.
 - In such cases, it is very important to determine potential liabilities for the IHE and the provider. Travel health providers should involve IHE general counsel/attorney in such a discussion if clear protocols do not exist.

Close and Emergency Contact Identification

It is essential for all IHE travelers to identify close and emergency contacts prior to traveling. Both the trip leader and the programs at the home institution must ensure this information is up-to-date and accessible. Adult travelers must identify their own close and emergency contacts. No assumptions should be made

that this necessarily involves the traveler's immediate family. If the incorrect close or emergency contact is notified, it could represent a breach in traveler/patient privacy. At least two emergency contacts who are not routinely together should be required for each traveler (e.g., parents currently living together count as one contact).

It is also good practice to remind travelers to let their close and emergency contacts know they have been identified as such prior to departure. This will help to ensure that the contacts answer unknown calls for the duration should an emergency contact attempt be made. It is also helpful to provide the close and emergency contacts with a number they can call should they need to reach the traveler, or a person involved with assisting the traveler. If an email is used, it is important to give clear instructions to close and emergency contacts regarding what information should and should not be included in an email.

Medical Information Considerations

Medical and mental health disclosures are important to ensure the safest travel experience for the group and the individual traveler. To avoid preventable urgent and emergent health situations, a standard process should be established for information-sharing pre-travel. As with any protected health information, the "minimum necessary" information should be shared on a "need to know" basis.

If the IHEs requires a traveler medical history form as part of the pre-travel approval process for IHEsponsored travel, the form should be reviewed by a healthcare professional bound by ethical and legal privacy quidelines. Such an IHE process could require one of the following approaches:

- A provider's signature confirming that the traveler has no medical or mental health issues that should be disclosed to the international travel program and travel group leadership. If the provider indicates there is medical and/or mental health information that should be shared, the provider should summarize the issues on the form with the traveler's permission; or
- All traveler medical history forms would be reviewed by an IHE student health or employee health provider who, in consultation with the traveler, would determine the level of information-sharing necessary to protect the health and safety of the traveler and the group. The forms themselves would be stored at the student health center or employee health clinic as protected health records. Admittedly, for many IHEs, the volume of traveler health forms would make this approach very difficult to accomplish, and the liability issues could be unacceptable to the institution.

Collaboration and Privacy at Small/Less-Resourced IHEs

At a small or less-resourced institution that has international travelers studying, teaching, or volunteering via third-party travel abroad programs, a number of additional collaboration and privacy issues may need to be considered.

- Work with the third-party providers to collect information for your campus travel registry. Campuses, regardless of size, must know where their students are located and how to reach them and their emergency contacts during the academic term. Registries can be as simple as an Excel spreadsheet or done through a subscription commercial platform.
- Establish who has access to the travel registry, especially if PHI is included.
- Establish in-house emergency protocols that are adaptable to travelers on both IHE-sponsored and non-sponsored travel.

- Develop relationships with third-party program contacts, especially those with programs used most often at your campus, to streamline communication in the event of a crisis.
- Consider providing on-campus pre-travel training for all travelers, including information on travel health, safety, evacuation insurance, and mental health issues while abroad.

WHEALTH INEQUITIES AND MARGINALIZED GROUPS

Every person's unique background contributes to how they experience travel. Optimal travel healthcare includes an appreciation of health inequities and experiences of marginalized groups as well as the consideration of the intricacies of a patient's identity and any related social determinants of health. The material in this section can also be found in Provider and Traveler Handout 6, to be used as a handout for travel health providers, colleagues, and travelers.

Health Inequities and Disparities Defined

The World Health Organization (WHO) states that health is physical, mental, and social well-being, not just the absence of disease or infirmity (World Health Organization, 1948). It has become increasingly clear that where one resides can positively or negatively affect health. In 2019, approximately 628 million people approximately 8% of the world's population—lived in abject poverty (defined by the World Bank as having an income of less than \$2.15/day) (Fact sheet: An adjustment to global poverty lines, 2022), with impaired access to basic human needs like clean drinking water, sanitation facilities, shelter, and educational opportunities. Millions of vulnerable people die each year for reasons that are either preventable or easily treated in places with more robust resources.

Public health professionals now increasingly focus on the social determinants of health, the not-directlymedical circumstances that affect health outcomes. Examples of positive social determinants include access to:

- ◆ High-quality, culturally appropriate, and respectful health care
- Healthy food options
- Appropriate educational resources for all life stages (e.g., public schools and libraries, vocational training programs)
- Stable and safe employment
- Safe and affordable housing, transportation, and shared common spaces (e.g., parks, playgrounds)
- Strong and supportive social networks

People who are free from violence, discrimination, and day-to-day uncertainty generally have fewer functional limitations, less stress, lower health care expenditures, and higher health status.

Health inequities are differences in the distribution of resources between two or more populations. This imbalance, by definition, puts one group at a disadvantage, simultaneously imposing barriers and stripping it of the tools to overcome them. Barriers that stand in the way of seeking health care include:

- Opportunity cost (e.g., lost income by missing work)
- Geographic and/or financial concerns (e.g., the clinic is too far away)
- Low health literacy (i.e., not being able to make an informed health care decision)

- Inadequate health insurance (i.e., being un- or under-insured)
- Stigma in seeking care (e.g., mental health care)
- Discrimination in treatment settings
- Limited healthcare staffing and facility resources (often requiring family members to provide hospital care, removing them from their own income-generating work)
- Simply being unaware of available resources

Travel Preparation through an Equity Lens

Understanding Self and Others

In preparing for travel, it is important to remember that we are individuals with backgrounds and experiences who are going to a destination where people have different backgrounds and experiences. Understanding who we are and the context and history of our place of residence helps us to better understand our own feelings, emotions, and interpretations. This context often determines how we interpret the words and actions of others and how we interact.

When traveling, our destination also has a context. The people have a culture and experiences which will shape how they respond to and treat "visitors" to their place of residence. As travelers, understanding ourselves, the cultures we visit, and the context of our travel allows us to better respond to and interact while in new environments.

Understanding Travel Dynamics

Transportation: Destination modes of transportation will vary, from cars, taxis, and planes to walking, wagons, and animals. Understanding the common travel modes of the destination will help with mental and, if needed, physical preparation.

Customs and Practices: Local people may have customs and practices that may be different or unfamiliar to a traveler. These can include:

- Honorifics (e.g., terms, gestures, greetings)
- Physical touch (e.g., bows, handshakes, hugs, kisses)
- Gifts (e.g., offering, accepting, expectations)
- Punctuality

Even if the traveler chooses to not engage in every cultural practice, understanding them will help to ensure a level of comfort and find ways to avoid what could be perceived as offensive behaviors.

As implied by the WHO's definition of health, healthcare is not just medical care. Whereas medical intervention aims to treat injury and illness, and prevent further sequelae, healthcare includes health promotion and education. Working towards health equity means providing adequate resources where and when they are needed. Inequities are deeply entrenched in so many aspects of daily life, some groups may have forgotten the privilege they were once afforded, perpetuating inequities. By reminding travelers of health inequities, both here in the U.S. and abroad, the travel health professional may help the traveler to self-examine and make more informed choices (culturally, environmentally, and economically) during travel.

Religion: Many groups are rooted in religious beliefs and practices. There are hundreds of religions around the world, as well as many groups who practice the same religion with varied beliefs and approaches. Learning more about religion and practices of traveler destinations can help travelers interact and engage more appropriately with people of that destination, helping them to avoid unintentional choices that could be perceived as disrespectful.

Health Care Systems: Countries abroad have varied healthcare systems. Some are fully funded by the government via taxation while others have limited care and supplies. It is important for travelers to anticipate what kind of healthcare system and access to care will be available and plan accordingly.

Food and Cuisines: Food options vary around the world. Different regions house different plants, spices, and animals. Cuisines will vary with perhaps unknown ingredients. Because the human body adapts to its primary environment, the digestive tract might not process foods as easily in other locations. Understanding the food options ahead of time can help plan for contingencies should there be limited options or any negative encounters with food.

Cultural Restrictions and Obligations

One of the main goals of IHE-sponsored international travel is to broaden the global perspectives of students, faculty, and staff travelers, thereby enhancing their ability to work with people from different cultural backgrounds (also known as cultural agility). Learning how to respect cultural norms at the travel destination, especially those related to health and safety, can contribute to the success of a trip.

Cultural agility is important at various stages of travel. Remaining sensitive to the cultural restrictions or obligations of the host destination can be complicated and lead to hard choices with potential adverse outcomes. The medications travelers are prescribed may be banned or regulated at the destination. A western traveler in need of medical attention at a remote location with no immediate access to western medicine may be faced with the difficult choice of accepting or rejecting treatments widely embraced in the local community. It can be valuable to thoughtfully consider these potential situations prior to travel.

In many parts of the world, the shortage of physicians and health infrastructure has resulted in a different cultural approach to medicine. It is very common for people in some areas of Sub-Saharan Africa to self-diagnose for malaria, based on their previous encounters with the illness and familiarity with the symptoms, and then self-treat with available pharmaceuticals. Similarly, a local medication regimen may be based on how much money a patient can spend on medication. For IHE travelers, thoughtful pre-trip planning could help to identify physicians in nearby regions (sometimes for a modest fee) who would serve on standby for the traveler or group of travelers over the duration of their stay.

In some rural lesser-developed communities, American healthcare students (RN, MD, NP, PA, etc.) wearing a medical coat and volunteering with a healthcare organization may be viewed by the locals as medical doctors and expected to offer the services of a licensed physician. Sometimes when the students insist that they are unqualified, locals may incorrectly conclude the students do not really care about their wellbeing. Students who yield to the pressure and cross an ethical line to act like licensed physicians may face penalties upon their return to their U.S. institutions.

Understanding Group Dynamics: Marginalization, Equity, and Inclusivity

When traveling in a group, each traveler should be mindful that others in their group will have different perspectives, values, and experiences. A culture of respect should be fostered to enhance the experience of all travelers.

Travelers are people of two worlds, calibrated to the culture of their home environment but also navigating the culture of their current host. In many cases, there is enough overlap that a traveler can overcome culture shock and learn any differing expectations through observation and experience in situ. However, some places, both international and domestic, can be unwelcoming or even unsafe for certain travelers. For instance, LGBTO+ travelers may find themselves lacking legal protections or even be targeted by discriminatory laws in many countries. Travelers who use wheelchairs may become frustrated that certain buildings or other public places are inaccessible, even when they had been previously advertised as accommodating. The expectation that travelers will "respect the local culture" can become very difficult to fulfill when it runs counter to one's own identity.

Individuals from marginalized groups may view traveling and preparing for travel in a different context than their mainstream counterparts. Experiences of systemic racism as well as supremacist and discriminatory behaviors in the U.S. may have resulted in a loss of a sense of belonging and fear of travel. Differences can also stem from having had fewer opportunities to travel previously.

It is important that IHEs consider resource preparation and support systems for any travelers needing assistance. Travelers might require help both processing what resources they might need and finding these resources to support their travels. Support for marginalized groups could include adequate research about the destination, availability of financial assistance, recommendations for what to pack as well as a discussion about what the experience might be like and listening to any concerns a traveler might have prior to travel. By providing this help, IHEs can continue to move towards the goal of equitable access to travel for all members of the campus community.

RESPONSIBLE TRAVEL AND ETHICS IN TRAVEL HEALTH

Ethics are moral principles that govern how a person behaves and interacts with others. As a responsible and ethical IHE traveler, it is essential to consider the impact of one's actions on the destination's people, animals, and environment. Furthermore, actions can impact how willing others are to engage and interact with IHE travelers and participate in shared activities.

IHE travelers should be encouraged to adhere to best practices for being a responsible traveler. The International Society of Travel Medicine (ISTM) provides a summary of some best practices through a variety of their resources. These best practices include but are not limited to the following:

- Be informed and willing to experience the culture
- Be open-minded and patient
- Leave a good impression to pave the way for future travelers

Do No Harm

Travel health providers are encouraged to remind students, staff, and faculty to minimize harm when traveling. Harm can be intentional or unintentional, so awareness of the following is essential:

- Culture
- Environment
- Rules
- Social norms
- Religious practices

Travelers should also be reminded to consider the purpose of their travel and give careful thought to the effect of their choices on the destination's people and culture. For example, receiving appropriate pre-travel medical screening and vaccinations can reduce the potential for introducing external pathogens to the destination's people and animals.

Be Respectful

Every culture and location are unique. Travelers should respect local people and their culture. This can include but is not limited to the following:

- Religion (i.e., prayer times, dietary habits, gestures, attire, etc.)
- Environment (i.e., sacred grounds, agrarian cultures, fragile ecosystems, etc.)
- Human interactions (i.e., greeting customs, communication customs, gift customs, etc.)

Many people around the world are eager to welcome travelers. Avoiding exploitation of a destination's people should be a priority. Direct forms of exploitation may include verbal abuse, sexual abuse, demanding behavior, and poor compensation for services rendered. Indirect exploitation might include gaining from the local economy but not supporting it.

Additional considerations should be given to the use of technology. Travelers should be educated on appropriate use of computers, the internet, cell phones, photography, and recording devices. Travelers should not take images of people who do not want to be photographed or recorded. Rules related to the internet and social media also vary abroad. Travelers should seek an understanding of expectations at their destination(s) and conduct themselves accordingly.

Volunteer Ethically

For many years, international volunteerism has continued to grow, and many Americans have been privileged to experience other cultures through such opportunities. Often, such experiences result in eye-opening encounters that enable volunteers to see the world as it is rather than through an exclusively American lens. This is beneficial as the privilege of the United States and American culture is not a universal experience.

Understand "Culture Shock" (Anxiety, Alienation, and Confusion)

Travelers should be reminded to review and understand the differences between their culture and the destination's culture. Such differences could have a negative impact on the traveler if they are not appropriately prepared. They could experience homesickness, loneliness, social isolation, and panic attacks. The change in food and water can also contribute to some physical discomforts. Functioning as an ethical traveler can be impacted if the traveler is not feeling physically and mentally well. Travelers should take extra steps to maintain a respectful disposition and also seek care, if possible, should they experience any of these outcomes.

Handout 7 reviews important considerations in being a responsible and ethical college/university traveler. The travel health provider could consider sharing this handout with study abroad colleagues and faculty trip leaders, as well as travelers during pre-travel education sessions and clinical visits.

TRAVEL HEALTH LESSONS LEARNED FROM THE COVID-19 PANDEMIC

The COVID-19 pandemic had a significant impact on student travel and the provision of travel health services. In the flood of information and often misinformation that accompanies a future emerging and rapidly changing situation, it may be difficult for students to identify reputable sources. Student health centers have an opportunity to help students navigate the complexity of requirements and provide comprehensive travel care.

Testing Protocols in Future Pandemics/Health Crises

In the event of future pandemics or health crises, travelers may need to meet specific laboratory testing and documentation requirements as prescribed by the country of destination or may need reentry testing upon return to the U.S. Ideally, rapid testing would be available that meets narrow time frames, with documentation that fulfills the specific requirements of the destinations.

Travelers may need to show health clearance from a medical provider. Depending upon resources, student health centers may have the opportunity to provide this testing and documentation or assist students with identifying testing centers in the community that meet the requirements.

Even on smaller and less-resourced campuses, student health centers would be well-positioned to educate students about reliable sources for the latest entry and reentry requirements of countries in a future pandemic. The U.S. Department of State Bureau of Consular Affairs website, the CDC website, and travel subscription websites provide up-to-date information around entry and departure regulations. The International Society of Travel Medicine offers a travel clinic directory for members with a filter for on-site diagnostic testing. Travel health insurance providers may have a network of clinicians at the destination.

As was often true with COVID-19, laboratory tests to meet regulatory requirements can be an additional financial burden for the traveler. Insurance plans may not cover tests for individuals who are not symptomatic. Costs for testing should ideally be included in planning financial resources for the trip, as well as expenses related to lodging and travel if a positive test necessitates an alteration in the itinerary.

IHEs should be prepared to either provide lab testing and documentation requirements for those traveling abroad or help travelers identify off-campus resources that can support this need. Conversations about

potential added expenses related to isolation lodging and testing should be incorporated into the pretravel consultation.

Vaccination

The COVID-19 pandemic reminded us of the important place vaccines hold in the public health landscape. This is true not only for COVID-19, but for all communicable viruses and diseases that are vaccinepreventable. Encouraging vaccinations and remaining as current as possible on immunizations is essential to individual health and population health. IHEs should remain a resource for students, staff, and faculty regarding all vaccines that CDC recommends for adults, which includes providing accurate information regarding the safety and effectiveness of vaccines.

As was true during COVID-19, some campuses may be able to implement immunization requirements as a public health protocol. This option was not available in every state and in the future could also vary based on academic programs offered within a college or university. When considering IHE-associated travel, it might be beneficial for colleges and universities to consider which vaccines/immunizations will reduce health risks for travelers and determine what level of vaccine uptake encouragement might be needed to promote the safest travel.

In future pandemics, destinations might also have documentation and/or vaccination requirements for inbound travelers which should also be reviewed. If vaccines are required to enter a country, travelers must ensure they schedule appointments to receive the needed vaccines in advance of travel, allowing time for any follow up appointments or any issues that should arise. Scheduling appointments four to eight weeks before departure is advisable (World Health Organization, retrieved 7/6/22).

Small and Less-Resourced IHEs

The COVID-19 pandemic has been an extraordinarily difficult time for college health professionals at small and less-resourced IHEs. Student health staff were often expected to run every aspect of the campus COVID public health response, including patient care, immunization and testing programs, source and contact tracing, isolation, quarantine, and perhaps addressing the mental health needs of students, faculty, and staff. Frankly, it was an impossible task for most. While COVID led many administrators and campus leaders to better appreciate the quality and expertise of the on-campus staff and services, the toll on the staff was physically and emotionally profound. Therefore, while this would seem like an inopportune time to add or expand travel health services at a small or less-resourced IHE, the opposite may in fact be true.

Lessons learned at small and less-resourced IHE college health services include:

- Use increased visibility and appreciation of campus health services to advocate for needed financial resources, equipment, increased staffing and salaries, and space for other needed services (including travel health services)
- For travel health vaccinations and required laboratory testing of large traveling groups of students, faculty, and staff, use expertise gained during COVID to schedule mass vaccination and testing clinics at alternate locations outside the health center (on or off campus)
- Continue and deepen relationships and partnerships with local and state health departments, hospitals/health systems, and specialty providers to strengthen availability of comprehensive travel health services for your campus community

- Continue to provide targeted travel health clinical services via telehealth and tele-mental health
- Provide travel education via group sessions or online

Health Disparities and Inequities

The COVID-19 pandemic highlighted and further exacerbated existing health inequities across many populations. It served as a reminder that considerations and intentional actions are necessary to reduce negative outcomes related to these disparities. See previous discussions in this guide.

Policies and Preparation

The COVID pandemic has brought into sharp focus the importance of adaptability and flexibility in all aspects of our lives, and IHE international travel has certainly been no exception. As lessons learned from the pandemic evolve, those involved in IHE international travel may wish to consider the following regarding policies and preparation:

- Determine insurance requirements for all travelers on IHE-associated travel including current and future pandemic-related exclusions:
 - Requirements should be well-known to all travelers
 - Familiarity with CFAR (Cancel for Any Reason) options should be encouraged
 - Encouraging insurance coverage to extend throughout travels (i.e., not just the IHE-related portions)
- Because travel may be postponed or canceled on very short notice, prepare travelers for unexpected extended stays at any point in travel. Preparation could include extra funds, extra medications, potential lodging options, new transportation plans, etc.
- Explore excellent resources for travel health providers and travelers, which include CDC, ACHA guidelines, and other references in the appendices of this guide.
- Create opportunities to address travelers' concerns and questions before, during, and after travels.

Educate campus and community collaborators that excellent communication is essential and is a cornerstone to safe, healthy, and successful IHE international travel.

Education of Travelers about Personal Risks and Choices

During the COVID-19 pandemic, IHE student, faculty, and staff travelers often faced changing, and even bewildering, recommendations regarding personal travel-related risks and appropriate preventive steps. As a result, even recommendations that were evidence-based and/or based upon consensus expert opinion, including CDC recommendations, were met with skepticism among many individuals and groups. The situation was exacerbated by rapidly evolving recommendations and widespread misinformation and disinformation, both on social and mainstream media. IHE travel health professionals and their campus and community collaborators struggled to keep their travelers and their campus communities healthy and safe, even in a world with greatly restricted travel opportunities.

There were a number of important lessons learned about educating patients about personal risks and choices during international travel:

- Travelers should always take precautions against airborne and fomite-borne illness transmission during travel, including frequent hand hygiene, decontamination of surfaces, and respiratory protections. Travelers should not be surprised to see mask use long after the pandemic subsides and should consider personal masking in confined, poorly ventilated, and densely populated settings.
- When choosing between modes of transportation, ventilation and air exchange should be an important part of the decision tree, along with safety, cost, speed/duration of travel, and traveler density.
- Mass gatherings often present significant risks during travel, including injury, crowd behavior, crime, inadequate emergency response, heat-related illness, food and water safety, and many others (World Health Organization, Managing health risks during mass gatherings). Added to that list must be respiratory-borne illness, particularly in situations of high communicability.
- IHE travelers should expect the unexpected during international travel. Local and international illness patterns have proven that plans must always be flexible and may include cancellations or delays of departure from or return to the U.S. and campus community. The COVID-19 pandemic has once again proven that travel disruptions like unexpected border closures and restrictions on international travel, including those related to infectious disease testing, isolation, and guarantine, can have a myriad of consequences for the traveler. The impacts can be individual (economic, quality of life, and mental health) as well as societal (economic, environmental, equity, and the healthcare system) (Klinger et al., 2021).
- Communication with national and IHE officials, including campus travel health providers, is essential. Planning for emergencies and taking steps to mitigate the potential impact (including travel and travel health insurance) should be stressed to all IHE travelers.

Mental Health

A public health emergency such as a pandemic has the potential to significantly impact mental health. Travelers may be dealing with fears regarding their own health or the health of family members or grieving for family members or friends who died. The rapidly changing landscape of regulations, the complexity of travel requirements, and the possibility of significant disruptions to itineraries, including isolation or quarantine far from home, introduce additional sources of stress and anxiety for travelers. Travel health professionals should prepare travelers for mental health concerns by identifying resources they may find helpful in facing mental health challenges.

Evaluation of Returning Travelers

As with previous international public health crises (e.g., Ebola, SARS, avian influenza, and others), COVID-19 increased the careful clinical scrutiny of returning international travelers. Thorough evaluations must always take a broad view of the ill returning traveler and rule out plausible alternatives and co-infections. Focusing only on a current epidemic or pandemic illness and thereby delaying the diagnosis of malaria, acute HIV, Zika, dengue, tuberculosis, arboviral encephalitis, chikungunya, or other high-risk illnesses may have significant consequences for both the individual patient and their community. Evaluation of the ill returning traveler should be based upon the individual's medical history, a detailed travel itinerary, vaccines received, and prophylaxis used, timing of the illness relative to travel, and a careful review of potential pathogens. Consultation should be sought when appropriate (see CDC Yellow Book Chapter 11).

APPENDICES

Appendix A: IHE Travel Health Gap Analysis Form

Appendix B: Pre-Travel Health Questionnaire Example

Appendix C: Traveler Contact Card and Traveler Health Care Card/Document

Appendix D: Travel Health Services for Last Minute IHE Travelers: Counseling, Immunizations, and Medications

Appendix E: Management Plan for IHE Travelers at Risk for Severe Allergic Reactions

Appendix F: Travel to High Altitude: Considerations for IHEs

Appendix G: Pre-Travel Considerations for Pregnant Travelers

Appendix H: Pre-Travel Considerations for Breastfeeding Travelers

Appendix I: Rabies Exposure During Travel

Appendix J: Information Needed for a Pre-Travel Assessment of Students on Non-IHE Affiliated Volunteer/ **Humanitarian Trips**

Appendix K: Important Notes on the Pre-Travel Assessment of Older Travelers

Appendix L: The Student Traveler with Insufficient Funds

Appendix M: Offering Travel Health Services at Small or Less-Resourced IHEs: Pros and Cons

TRAVELER HANDOUTS

Traveler Handout 1: Mental Health Checklist for Students and Their Families/Significant Others

Traveler Handout 2: Discussing Private Healthcare or Accessibility Needs with a Study Abroad Advisor or Trip Leader

Traveler Handout 3: Dealing with "Culture Shock" and Homesickness During Travel

Traveler Handout 4: Checklist for Pre-Travel Appointment with Your Mental Health Provider

Traveler Handout 5: Safety Tips for LGBTQ+ Travelers

Traveler Handout 6: Health Inequities and Marginalized Groups: A Review for Travelers and Travel Health **Providers**

Traveler Handout 7: Responsible Travel and Ethical Considerations for Travelers

Traveler Handout 8: Trip Leader Checklist: Responsibilities, Training, and Preparation for IHE-Sponsored **Group Travel**

RESOURCES AND TRAINING IN TRAVEL HEALTH

Travel health resources and training are essential in the provision of sound travel health care to our IHE populations. The following lists, while not exhaustive, provide foundational travel health resources, clinician training opportunities, and certifications available in travel health.

Foundational Travel Health Resources

- CDC, The Epidemiology and Prevention of Vaccine-Preventable Diseases, aka the "Pink Book," https:// www.cdc.gov/vaccines/pubs/pinkbook/index.html
- CDC, CDC Yellow Book 2020: Health Information for International Travel https://wwwnc.cdc.gov/ travel/page/yellowbook-home
- American Nurses Association (ANA), Travel Health Nursing: Scope and Standards of Practice, 1st Ed.
- NAFSA and Forum on Education Abroad: Responsible Education Abroad: Best Practices for Health, Safety and Security (2021). https://www.nafsa.org/sites/default/files/media/document/responsibleeducation-abroad-2021.pdf (CE)
- ◆ US Department of State International Travel website: travel.state.gov
- Vaughn, J. A., & Viera, A. J. (2021). Principles and Practice of College Health. Springer International Publishina.

Additional Travel Health Resources

Resources for Medication Restrictions

- U.S. Department of State website: International Travel
- ISTM Pharmacists' Professional Group Database 2nd Edition Carrying Medicines Database.pdf
- International Narcotics Control Board Guidance for Travelers provides information for traveling internationally with medications containing controlled substances as well as regulations by country.
- International Association for Medical Assistance to Travellers (IAMAT) Traveling with Medications Guide

Resources for the Older Traveler

The Older Traveller: A Guide for the Health Professional – Bauer et al, 2016; IAMAT, South African Society of Travel Medicine, South African Geriatrics Society; ISBN 978-0-620-72125-7

Healthy Travel: A Pocket Guide for Seniors – Westmacott, 2012; IAMAT and South African Society of Travel Medicine: ISBN 978-0-6399051-0-5

Resources for Ethical and Responsible Travel

- ◆ ISTM: Health Volunteerism (https://www.istm.org/Files/Documents/Groups/ HealthVoluntourismHandout.pdf)
- ◆ ISTM: Tourism (https://www.istm.org/files/Documents/Groups/Nature%20Based%20Tourism.pdf)
- ◆ ISTM: Volunteerism (https://www.istm.org/Files/Documents/Groups/ voluntourismINFOhandout 5-13-19.pdf)
- Countries and their Cultures (https://www.everyculture.com/)
- AMA Ethical Guidance for Medical Tourism (https://www.ama-assn.org/delivering-care/ethics/ medical-tourism)
- American Travel Health Nurses Association and American Nurses Association, "Code of Ethics in Travel Health Nursing," Travel Health Nursing: Scope and Standards of Practice, 1st edition.
- Culture Shock (https://www.fitfortravel.nhs.uk/advice/general-travel-health-advice/culture-shock)

Travel Health Organizations

- International Society of Travel Medicine: istm.org
- International Association for Medical Assistance to Travelers: iamat.org
- ATHNA American Travel Health Nurses Association: athna.org
- ◆ ASTMH American Society of Tropical Medicine and Hygiene: astmh.org
- ◆ USDOS Travel (home): travel.state.gov/content/travel.html
- Wilderness Medical Society: wms.org

Training Opportunities and Certificates in Travel Health

- ◆ APhA, Pharmacy-based Travel Health Services: interactive certificate-based advanced competency training (ACT) program that explores the pharmacist's role in providing travel health services to patients. This application-based activity is the first step for pharmacists interested in learning the essential skills necessary to successfully provide travel health services: https://www.pharmacist. com/Education/Certificate-Training-Programs/Travel-Health.
- ◆ ASTMH, Certificate of Knowledge in Clinical Tropical Medicine and Travelers' Health (CTropMed® Examination) (CE)
- ATHNA, Model Core Curriculum Guide: https://www.athna.org/about/EducationalPreparationforTHN.
- CDC, Yellow Fever Vaccine Course: https://wwwnc.cdc.gov/travel/page/yellow-fever-vaccine-course.
- ISTM, Travel Medicine Teaching Slides: https://learning.istm.org/resource-library.
- ISTM, Certificate of Knowledge Program: https://www.istm.org/certificateofknowledge. Widely recognized travel health/travel medicine certification program.
- Learning @ ISTM, Virtual Annual Travel Medicine Review and Update Course: https://learning.istm.org/.

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