
Planning for Travel With Children in the Modern World

Martin G. Ottolini, MD,^{a,b} Michael Rajnik, MD,^b and Patrick W. Hickey, MD^c

Introduction

You are part of a busy group, primary care, practice in a mid-sized “college town” that serves an economically and culturally diverse patient population. Your first patients of the day are two siblings, a 3-year-old girl and a 9-month-old boy who present with upper respiratory tract symptoms and concern about possible otitis media. The parents, both of whom emigrated approximately 4 years ago to the United States, mention that the family is “traveling home to Cameroon” next week to spend 2 weeks visiting the children’s grandparents. Standing in the doorway on the way, the mother asks you if the children “need any shots?” A week later, a family of four comes in to discuss that they are moving to Thailand for an estimated 3 years to follow the parents’ newest positions in a large non-governmental organization (NGO). They include a 47-year-old father with no health problems, a 49-year-old mother who is on chronic therapy for rheumatoid arthritis, and three healthy children with the ages of 9, 14, and 16. They will reside in Bangkok, but will be working on a rural development project in the north near the city of Chiang Mai, will likely visit displaced persons camps near the Thailand-Cambodia border, and plan to travel extensively as a family in the region. Later that day, one of your “routine physical exam” appointments is a healthy 17-year-old female high-school student, who is

going to work for 8 weeks at a rural church mission site in the Amazon basin of Peru. She will help staff a program that provides early childhood education in a community of subsistence farming families. She anticipates traveling with another friend, planning to use any free time to extensively explore the region through hiking and kayaking.

Each patient or family is asking the same questions, in general. “What can we do to reduce our risk of becoming ill or injured during our stay in these foreign sites? What should we do to prepare for our trips? Do you have any advice we should follow during travel?” The family from Cameroon is not too concerned—after all, they are revisiting a country where they spent most of their lives, and have relatives who know their way around. They have however, not been back home in several years, and the health infrastructure of their country is limited. You are concerned about their “lack of concern” and casual attitude towards advanced preparation. The family moving with the NGO has already had a series of briefings and studied both written and web-based preparation materials. They are also receiving advice from a sponsoring family residing in their future county, arranged by their agency, to help orient them to the culture, challenges, and opportunities of living overseas. They will be residing in a large, rapidly developing country, with access to a modern health care system in most of the major population areas. They do plan to visit several remote sites, and are very proactive about their “planning.” The young missionary is highly enthused and very motivated, but is working with a small group of volunteers working under a newer agency, and does not seem to have as much institutional support for travel preparation.

While all three sets of travelers are focuses their concerns on preventing infectious diseases, you note that their planned activities will include several other potential travel risks; including motor vehicle and water-sport hazards, extreme environmental conditions, crime, potential government stability issues, and the simple challenges of the travel infrastructure.

From the ^aOffice of Curriculum, F. Edward Hébert School of Medicine, Uniformed Services University of the Health Sciences, Bethesda, MD 20814; ^bDepartment of Pediatrics, F. Edward Hébert School of Medicine, Uniformed Services University of the Health Sciences, Bethesda, MD 20814; and ^cDepartment of Preventive Medicine and Biostatistics, F. Edward Hébert School of Medicine, Uniformed Services University of the Health Sciences, Bethesda, MD 20814.

The views expressed herein are those of the authors and are not necessarily representative of those of the Uniformed Services University or the Department of Defense.

Curr Probl Pediatr Adolesc Health Care 2015;45:209-214

1538-5442/\$ - see front matter

© 2015 Published by Mosby, Inc.

<http://dx.doi.org/10.1016/j.cppeds.2015.06.002>

Overall they wish to anticipate and reduce their “risks” of travel-related illnesses and injuries, and to be ready to take more control of their health and potential therapies in regions where they would need to rely less on ready access to the substantial safety net of a modern health care system.

Extent of Travel in the US Population

In 2013, more than 61.8 million U.S. Residents traveled internationally.¹ If one excludes travel to the well developed nations of Canada and Europe, 39.8 million U.S. residents traveled to areas of the world that would justify a pre-travel health assessment, risk-based counseling, and preventive medical services (Including 20.9 million travel visits to Mexico). The Figure demonstrates the trends over the last decade in travel to locations outside of North America.² Overall, 8% of outbound travel parties include children, accounting for approximately 1.2 million child international travelers annually.³ Among all international travelers, the average duration of travel is 16.6 days (median 10 days) showing that both the magnitude and duration of overseas travel as a health-related exposure are quite significant.¹ Further, the incubation periods for many travel-associated diseases are such that the illness is most likely to occur after return home.⁴ Despite a substantial mean lead time from “decision to time of travel” of 106 days, pre-travel health visits are sought out in only 11% of international travelers overall, and in only 36–46% of those traveling to low and low-middle income countries.^{2,5,6}

Health Risks in International Travel

The majority of travel medicine advice focuses on the prevention, diagnosis, and treatment of infectious diseases, as will the majority of this supplement. Compared to adults, pediatric travelers may be more likely to develop diarrheal, dermatologic, and respiratory illnesses as well as suffer animal bites.⁷ While the incidence rate of traveler’s diarrhea during a 2-week trip is approximately 30%, and that of influenza approximately 1%, the risk of other vaccine preventable diseases are lower, ranging from 1:3,000 for typhoid fever; to $\leq 1:100,000,000$ for Japanese encephalitis and meningococcal meningitis.⁸ These statistics highlight the importance not only of

risk-benefit and cost-benefit considerations but also consideration and discussion of risk-tolerance and avoidance behaviors on the part of parents, stressing that travel planning options involve a shared decision-making process between families and providers. Furthermore, despite the typical focus on infectious health risks, it is important to remind families that serious injuries occur at higher rates when traveling. The major source of pediatric traveler mortality is actually due to both motor vehicle accidents and drowning, both of which are disproportionately high when compared to adults.⁹

Some parents may have concerns whether it is safe to fly with young infants. A recent review of serious in-flight emergencies resulting in consults to a ground based medical support center found that passengers under 18 years of age account for 9.3% of the total in-flight emergencies with a rate of 2.24 events per 1 million passengers.¹⁰ Deaths were rare (10 total, 0.13% of all pediatric emergencies). While exact cause of death could not be abstracted from the available data, four of the ten had known pre-travel health conditions, with additional associated factors of young age (median 3.5 months), and being a “lap infant” (9 of 10), bringing up the possibility of sudden unexplained infant death (SUID) during trips with sleeping infants.¹⁰ More common concerns whether over-the-counter medications can be utilized as either a sedative or prophylactic against barotrauma-related otalgia merit direct discussion with parents as both antihistamines and decongestants pose serious risks to children under the age of two and have shown no benefit in reducing symptoms of air-travel-related otalgia.^{11,12} Rather, there should be emphasis on enhancing safe, comfortable seating for children, age-appropriate activities, and use of sucking and swallowing techniques to reduce barotrauma with changes in cabin-pressure.^{13,14}

Adolescent (up to age 21) travelers also have unique age-specific considerations when traveling. They are likely to be adventurous and engage in riskier activities, like the missionary in our introduction, both increasing the chances of injury and also creating new infectious disease exposures from fresh-water or soil/mud contact. Blood borne pathogens (tattoos and piercings) and sexually transmitted infections become significant concerns that should be discussed, as well as broader issues of reproductive health such as contraceptives and sexual violence.

Additionally, chronic diseases should be addressed, in terms of direct risk of an exacerbation during travel,

Download English Version:

<https://daneshyari.com/en/article/4152611>

Download Persian Version:

<https://daneshyari.com/article/4152611>

[Daneshyari.com](https://daneshyari.com)