



Department of Medicine  
Research Day 2020

# Travel Destination, Demographics, and Underlying Medical Conditions Among Travelers Seeking Yellow Fever Vaccination at a Large Academic Medical Center in the U.S.



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## INTRODUCTION

Yellow Fever vaccine (YF-VAX) is licensed as a pivotal preventative intervention in routine immunization programs in endemic areas, and for those traveling to YF endemic areas. YF-VAX has the potential for the development of viscerotropic and neurotropic disease. Screening of travelers during the pre-travel encounter is a necessary intervention to identify risk factors to prevent life-threatening complications associated with YF-VAX.

## METHODS

We performed a retrospective analysis of 964 patients receiving YF-VAX from 31 Oct 2016 to 7 Jul 2019 at the University of Colorado Hospital, Aurora, CO, U.S. Percentages, means, and standard deviations were calculated for categorical and continuous variables, respectively.

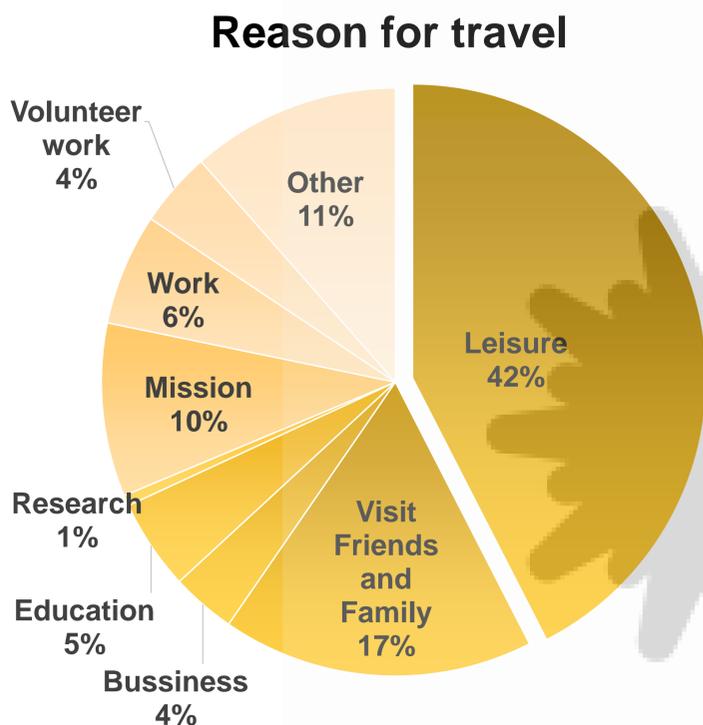


Figure 1.

**During the pretravel medical encounter, individualizing YF-VAX recommendations by carefully identifying the type of travel, itinerary, and underlying medical conditions, allows providers to administer YF-VAX to travelers safely, including those over 60 years of age or those with immunologic comorbidities.**

## RESULTS

The average age of patients receiving the vaccine was  $39 \pm 18$  years with a range from 6 months to 83 years. Patients who were 60 years of age and older represented 17% of the total study population. There were more females (52.1%), and most of the patients were identified as Caucasians (63.7%). Most travelers were from Colorado (96%). The average duration between vaccine administration and travel was 43 days. The most common reasons for travel included leisure (42%), followed by visiting family and friends (17%), and mission trips (10%) (figure 1). Patients reported that they would be travelling to Africa (58.4%) or South America (41%). The primary destination for patients overall was Kenya (21%), Uganda (12%), and Tanzania (12%) in Africa; and Peru (15%) and Brazil (14%) in South America (figure 2). Uncommon comorbidities included a history of hematologic disorders (3.7%), HIV infection (2.3%), and Diabetes Mellitus (2.8%). No evidence of mild or life-threatening reactions to YF-VAX occurred in this large cohort.

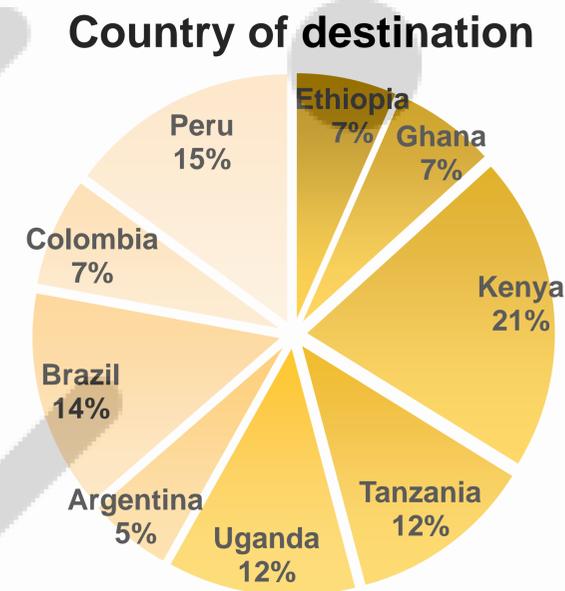


Figure 2.