

# Evaluation of Travel Health KAPs in Philadelphia International Airport

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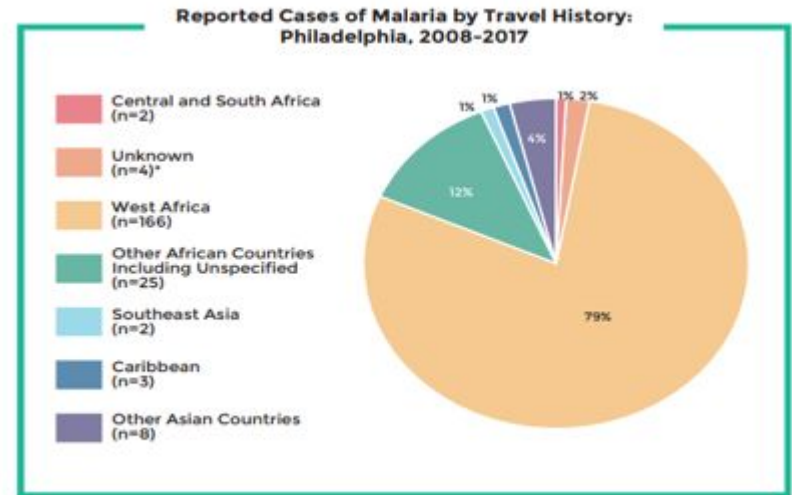


## Global Health in Philadelphia

- Diversity in our population
- International visitors
- Involvement in past outbreaks

# Global Health in Philadelphia

- Monitoring health in Philadelphia has included:
  - West Africa Ebola outbreak in 2014
  - Zika Virus
  - Patients from Puerto Rico and other hurricane affected areas
  - Malaria

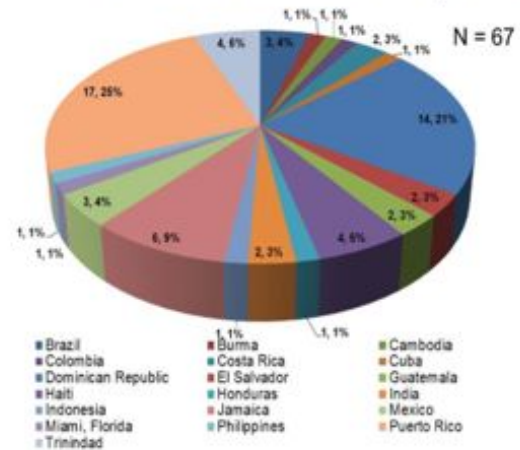


\*Includes one congenital case and one cryptic case with unknown source of infection

# Why We Worry About Travel

- Exposure to new pathogens
- International Travel is no longer the only concern

Travel Destinations: Arboviral Infections, Philadelphia, 2015 - 2019





## Significance

- In 2017 the rate of domestic travel increased 1.9% and international travel 7 % as reported by the U.S. Travel and Tourism Overview and the World Tourism Organization.
- With this increase in travel, it is suspected that more individuals will be exposed to diseases they previously had not encountered



## Study Aims

- This study seeks to do two things:
  - Understand and assess the knowledge, attitudes, and practices of current travelers and how they perceive their risk of contracting diseases, as well as where they go to seek health advice
  - Obtain feedback on the Philadelphia Department of Public Health (PDPH) educational materials that have been placed in the Philadelphia International Airport



# Hypotheses

- Those who travel often will seek the most medical advice
- Individuals traveling to places they have already visited will not seek travel advice before or after departure



# Study Design

- Educational materials were drafted by PDPH and approved by the Quarantine station
- These materials were displayed throughout the Philadelphia International Airport on screens
- Literature review
- Data collection
  - Survey instrument
- Data input
- Data Assessment





# Travel Health Education

- The travel health consultation should include:
  1. A technical component
  2. Individual component
  3. Travel health education
- Patients can only remember a max of 2-3 concepts after meeting with a travel health specialist
  - Other educational materials allow them to retain the most concepts and be able to refer back to them

# Questionnaire

## Travel Health Knowledge, Attitude, and Practices (KAP) Survey

### TO BE FILLED OUT BY INTERVIEWERS:

Date:  
Interview Location:  
Interview #:  
Your name:  
Interview Language:

Interviewee is:  Departing (Go to Section I)  Returning (Go to Section II)

### I. Departing Travelers

1. Are you traveling:  
 Domestically  Internationally  
1a. Where are you heading? \_\_\_\_\_
2. Is this your first time traveling to this location?  
 Yes  No
3. How long are you staying at your destination(s) (Specify: days, months, years)? \_\_\_\_\_
4. What is the main purpose of your trip?  
 Business/Work  Tourism/Personal  Visiting friends or relatives  
 Educational  Religious  Other \_\_\_\_\_
5. Do you plan to visit rural areas/ countryside?  
 Yes  No
6. When did you begin planning this trip prior to your departure date?  
 Less than a month  1 to 3 months  3 to 6 months  
 6+ months
7. Where did you get general travel information about your destination? (Check all that apply).  
 Family or Friend  Internet  Travel agent  
 Travel books  Other: Specify \_\_\_\_\_

### II. Returning Travelers

1. Did you travel:  
 Domestically  Internationally  
1a. Where are you coming from? \_\_\_\_\_
2. Was this your first time traveling to this location?  
 Yes  No
3. How long did you stay at your destination(s) (Specify: days, months, years)? \_\_\_\_\_
4. What was the main purpose of your trip?  
 Business/Work  Tourism/Personal  Visiting friends or relatives  
 Educational  Religious  Other \_\_\_\_\_
5. Did you visit rural areas/ the countryside?  
 Yes  No
6. When did you begin planning this trip prior to your departure date?  
 Less than a month  1 to 3 months  3 to 6 months  
 6+ months
7. Where did you get general travel information about your destination? (Check all that apply)  
 Family or Friend  Internet  Travel agent  
 Travel books  Other: Specify \_\_\_\_\_
8. Did you seek travel health or medical advice prior to departure?  
 Yes  No (If no, skip to question 9)
- 8a. When did you get the pre-travel advice?  
 Within the week of travel  1 to 2 weeks prior  2 to 4 weeks prior  
 4 or more weeks prior to travel

### III. Educational Materials

14. The health department has developed some travel educational materials. Have you seen any of our materials? (Use the media handout to show examples):  
 Yes  No
15. For each of the following statements, circle the response that best characterizes how you feel about the materials: 1= Strongly Disagree, 2= Disagree, 3= Neither Agree nor Disagree, 4= Agree and 5= Strongly Agree
- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| The materials make sense.  | 1 | 2 | 3 | 4 | 5 |
| The materials make you stop and think?                                       | 1 | 2 | 3 | 4 | 5 |
| The materials make you feel concerned about staying healthy while traveling? | 1 | 2 | 3 | 4 | 5 |
16. After seeing the materials:
- 16a. What do you like?
- 16b. What don't you like?
- 16c. Did you learn anything new from the posters?
- 16d. Are there any other health topics you'd like more information on?
17. How can the health department improve its health education efforts in general? (Please fill in):
18. Please list any additional comments or questions. If you would like us to follow up with you or would like further information about this survey, please inform us and we will note this separate from your survey responses.



## Preliminary Findings- Study Population

Sample Size	International	Domestic
Departing	128 <b>17</b>	50 <b>12</b>
Returning	128 <b>18</b>	50 <b>14</b>

- 61 interviews completed this summer
- The majority of participants thus have been:
  - White/ Caucasian
  - Had a postgraduate education
  - Been between the ages of 46-60 years old



## Aim 1- Preliminary Findings

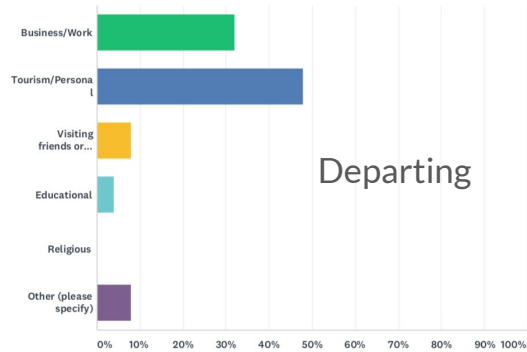
- The vast majority of participants sought no medical or travel health advice
- Participants mentioned being frequent travelers
- Many participants stated that they had no medical concerns when they traveled or already knew the necessary information

# Preliminary Results- Why do people travel?

Travel Health Knowledge, Attitude, and Practices (KAP) Survey

## Q11 4. What is the main purpose of your trip?

Answered: 25 Skipped: 36



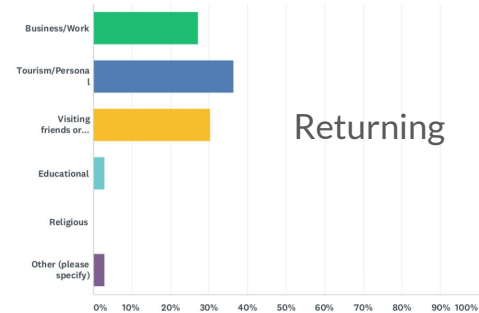
Departing

ANSWER CHOICES	RESPONSES	
Business/Work	32.00%	8
Tourism/Personal	48.00%	12
Visiting friends or relatives	8.00%	2
Educational	4.00%	1
Religious	0.00%	0
Other (please specify)	8.00%	2
TOTAL		25

Travel Health Knowledge, Attitude, and Practices (KAP) Survey

## Q28 4. What was the main purpose of your trip?

Answered: 33 Skipped: 28



Returning

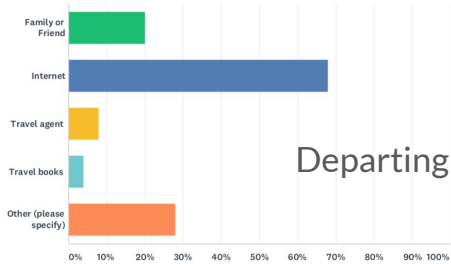
ANSWER CHOICES	RESPONSES	
Business/Work	27.27%	9
Tourism/Personal	36.36%	12
Visiting friends or relatives	30.30%	10
Educational	3.03%	1
Religious	0.00%	0
Other (please specify)	3.03%	1
TOTAL		33

# Preliminary Results- Where do people obtain travel information?

Travel Health Knowledge, Attitude, and Practices (KAP) Survey

Q14 7. Where did you get general travel information about your destination? (Check all that apply).

Answered: 25 Skipped: 36

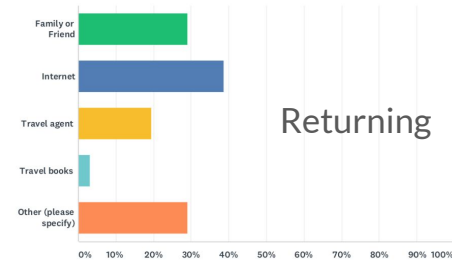


ANSWER CHOICES	RESPONSES
Family or Friend	20.00%
Internet	68.00%
Travel agent	8.00%
Travel books	4.00%
Other (please specify)	28.00%
Total Respondents: 25	

Travel Health Knowledge, Attitude, and Practices (KAP) Survey

Q31 7. Where did you get general travel information about your destination? (Check all that apply).

Answered: 31 Skipped: 30



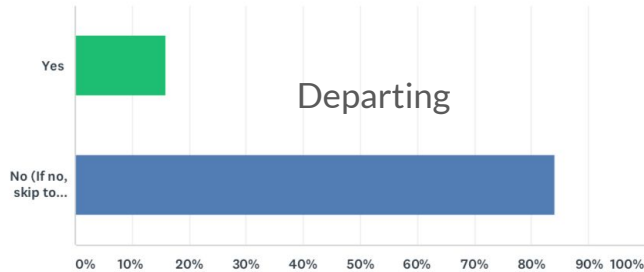
ANSWER CHOICES	RESPONSES
Family or Friend	29.03%
Internet	38.71%
Travel agent	19.35%
Travel books	3.23%
Other (please specify)	29.03%
Total Respondents: 31	

# Preliminary Results- Do people obtain travel health advice?

Travel Health Knowledge, Attitude, and Practices (KAP) Survey

Q15 8. Did you seek travel health or medical advice prior to your trip?

Answered: 25 Skipped: 36

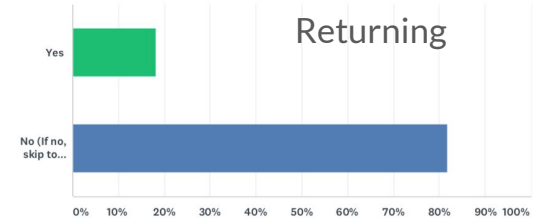


ANSWER CHOICES	RESPONSES
Yes	16.00% 4
No (If no, skip to question 9)	84.00% 21
TOTAL	25

Travel Health Knowledge, Attitude, and Practices (KAP) Survey

Q32 8. Did you seek travel health or medical advice prior to departure?

Answered: 33 Skipped: 28

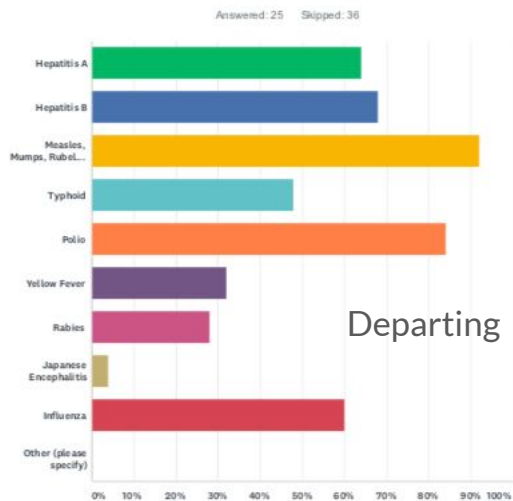


ANSWER CHOICES	RESPONSES
Yes	18.18% 6
No (If no, skip to question 9)	81.82% 27
TOTAL	33

# Preliminary Results- What vaccines do travelers receive?

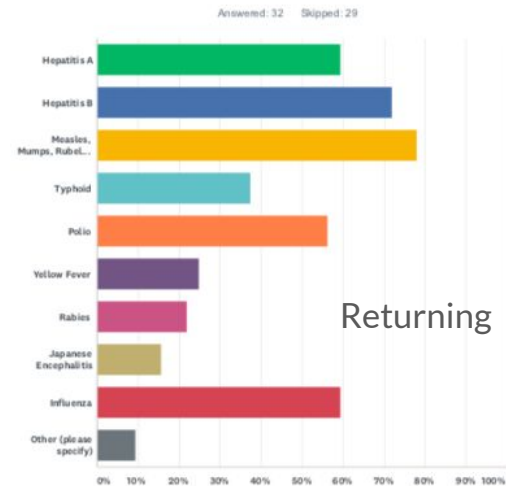
Travel Health Knowledge, Attitude, and Practices (KAP) Survey

Q19 10. To your knowledge, have you been vaccinated for any of these diseases? (Check all that apply).



Travel Health Knowledge, Attitude, and Practices (KAP) Survey

Q36 10. To your knowledge, have you been vaccinated for any of these diseases? (Check all that apply).





# READY FOR YOUR TRIP?



Stay healthy wherever you go.



Safe and healthy travels!

## Educational Materials

# READY FOR YOUR TRIP?



Stay healthy wherever you go.



Safe and healthy travels!

What did you  
bring back  
 from your trip?




Traveling can leave you with more than souvenirs.


Sick after your trip?

If you experience:

-  Fever
-  Diarrhea
-  Rash
-  Cough or trouble breathing



See your healthcare provider.  
 Tell them you traveled.



Don't give the gift of germs. 

## Educational Materials

What did you  
bring back  
 from your trip?



Traveling can leave you with more than souvenirs.

If you experience:

-  Fever
-  Diarrhea
-  Rash
-  Cough/  
Trouble breathing

→ See your healthcare provider.  
 Tell them you traveled. 

Don't give the gift of germs.



## Educational Materials

**STOP** *the* **COUGH**

*Need to* **COUGH** *or* **SNEEZE?**

USE A

- TISSUE**
- MASK**
- SLEEVE**

*and then* **WASH YOUR HANDS WITH SOAP AND WATER**

**LET'S STAY GERM FREE**

Department of Public Health  
CITY OF PHILADELPHIA  
PHILADELPHIA, PA

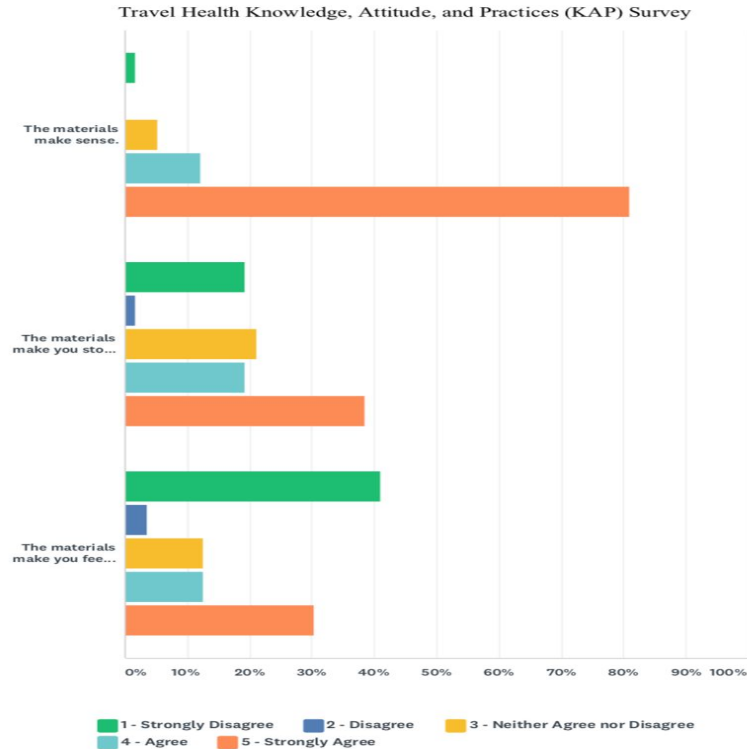
The poster features a stylized illustration of a person's face with a coughing expression in the top right corner. Below the title, three circular icons illustrate the use of a tissue, a mask, and a sleeve. At the bottom, an illustration shows hands being washed under a faucet with soap suds. The background is a mix of dark green and light green with a dotted pattern.



## Aim 2- Preliminary Findings

- Very colorful and vibrant, grabs attention
- Simple and easy to read
- Great reminder
- Pre travel and stop the cough are favorites
- Too much information on the post travel poster
- Need to be presented prior to airport arrival

# Preliminary Results- Feedback on the Educational Materials





## Next Steps

- We will be continuing surveys primarily in the international terminal
- Assessment of the data
  - Pull out the main points that are consistent



## Lessons Learned

- Articulating questions in a way that everybody can understand
- Remain unbiased and neutral while conducting a survey
- Stay on topic
  - Always reevaluate why you're doing what you're doing



## Future Considerations

- What do travel health practices look like for individuals traveling to their countries of origin?
- How would the survey answers differ if performed outside of the Philadelphia airport (ex: travel health clinics)?





# Thank you!

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SUMR 2019 Cohort  
Leonard Davis Institute  
University of Pennsylvania