



## Refugee Health Quarterly Report

**January 2012-September 2012**

### ARRIVAL DATA

Due to limitations in data capture techniques and lag times between screening and data entry, the following data does not capture refugees who are not listed on the WRAPS datasheet for each month but who have entered into the area as a secondary migrant or through another avenue. These clients are only captured once they have received a screening and their data has been entered into the database. Any clients that have been screened but not yet entered into the database will not be included in this data.

The following table shows a comparison of January through September 2012. The data is broken down into four different categories based on amount of time between date of arrival and date of health screening visit. For the month of January, 5.0% of patients were seen 90 days or more following date of arrival. For the months of February and March, most patients, 53.6 percent and 49 percent, respectively, were seen between 31 and 90 days after arrival.

	<b>0-30 days</b>	<b>31-90 days</b>	<b>&gt;90 days</b>	<b>Not Screened</b>	<b>Total</b>
<b>January</b>	32 (26.8%)	72 (60.5%)	9 (7.5%)	6 (5.0%)	119 (100%)
<b>February</b>	48 (39.3%)	66 (54.1%)	1 (0.8%)	7 (5.7%)	122 (100%)
<b>March</b>	39 (35.4%)	54 (49.0%)	3 (2.7%)	14 (3.6%)	110 (100%)
<b>April</b>	92 (51.6%)	80 (44.9%)	5 (2.8%)	1 (0.5%)	178 (100%)
<b>May</b>	88 (47.8%)	58 (31.5%)	8 (4.4%)	30 (16.3%)	184 (100%)
<b>June</b>	85 (61.1%)	53 (38.1%)	0 (0.0%)	1 (0.7%)	139 (100%)
<b>July</b>	83 (48.5%)	78 (45.6%)	0 (0.0%)	10 (5.8%)	171 (100%)
<b>August</b>	75 (49.3%)	28 (18.4%)	0 (0.0%)	49 (32.2%)	152 (100%)

## HEALTH DATA

The following report displays the health profile of refugees who received their health screenings from January 2012 through September 2012. Refugee health screenings include tuberculosis screening, intestinal parasite screening, laboratory tests, dental screening, vision screening, sexually transmitted infection testing and hepatitis screening. Tables for the figures throughout this report can be found in appendix I. A description of the health data and options on the screening evaluation forms can be found in appendix II.

### TOP HEALTH CONCERNS FOR ALL PATIENTS SEEN FROM JANUARY 2012 TO OCTOBER 2012

#### Top Referrals

1. Dental	14.9%
2. PCP	10.6%
3. Ophthalmology	6.3%
4. ENT	5.9%
5. Health department	4.9%

#### Top Illnesses

1. Hypertension	7.1%
2. Dental abnormalities/caries	4.8%
3. Parasites	4.6%
4. Tobacco abuse	4.2%
5. GERD	2.8%

#### Top Treatments

1. Parasites	10.6%
2. AR	6.2%
3. Hypertension	5.2%
4. GERD	4.9%
5. Albendazole	3.0%

## HEALTH PROFILE OF PATIENTS SEEN FROM JANUARY 2012 TO OCTOBER 2012

Total number of patients seen January 2012 to October 2012: 1371

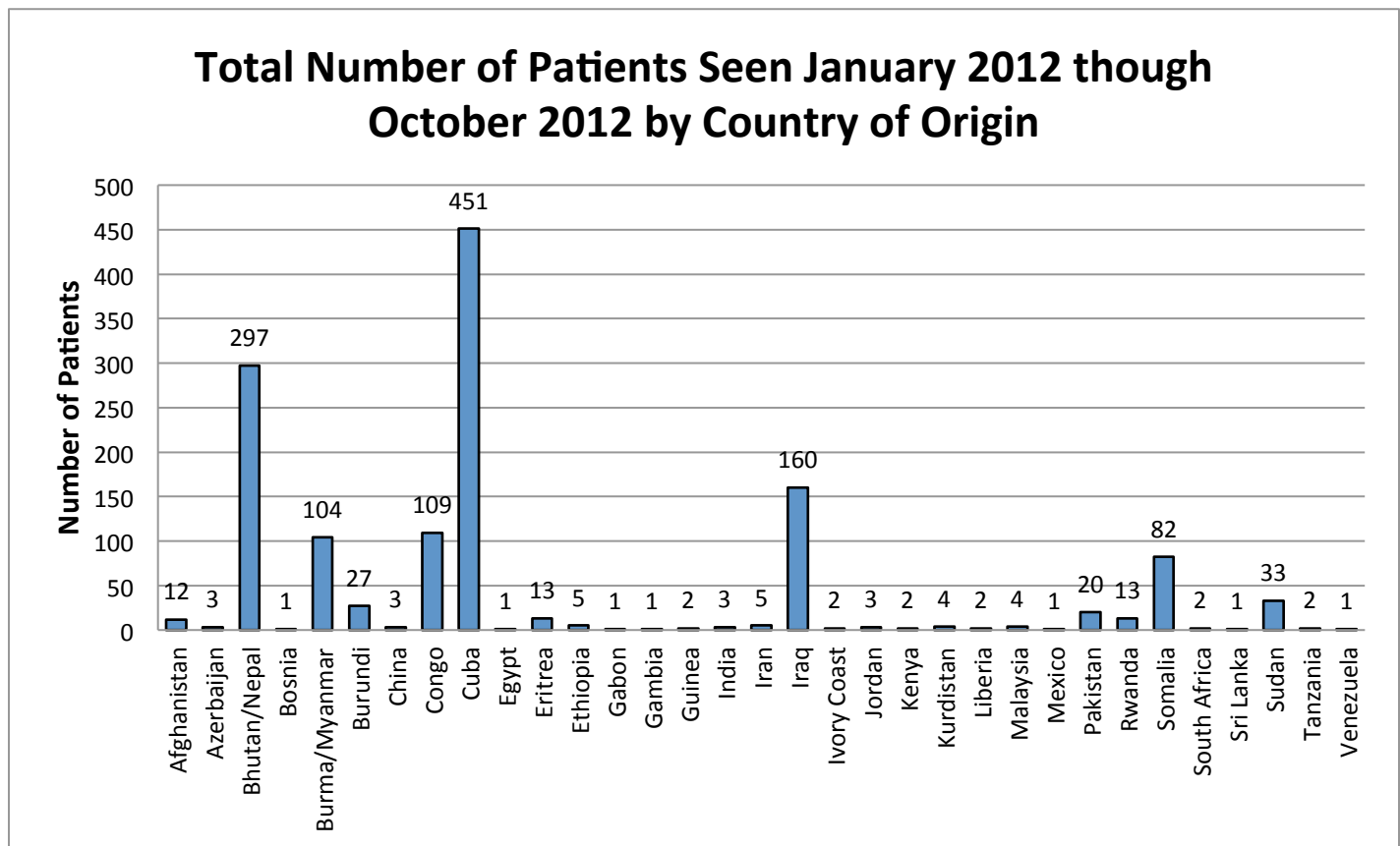


Figure 1.

1371 patients were seen at the clinics from January 2012 through September 2012. The figure above breaks the number of patients down by country of origin. 451 patients seen during this time period were from Cuba, 297 from Bhutan/Nepal, 82 from Somalia and so on. Countries with fewer than 10 patients seen from January to October were combined into an “other” category for analysis; Bhutan and Nepal as well as Burma and Myanmar were combined for accuracy.

## Overseas Medical Exam Review

Refugees undergo an overseas medical exam before coming to the United States. Class A conditions may keep refugees from entering into the United States, while Class B conditions require follow-up soon after arrival in the United States and often treatment before departure. None of the patients seen from January 2012 to October 2012 were diagnosed with a class A overseas medical condition. Figure 2 shows the top five class B conditions found in patients seen from January through September 2012. Over 2.5 percent of patients seen were diagnosed with Class B1 tuberculosis during their overseas medical exam. Figure 3 shows the percent of patients diagnosed with Class B by country of origin.

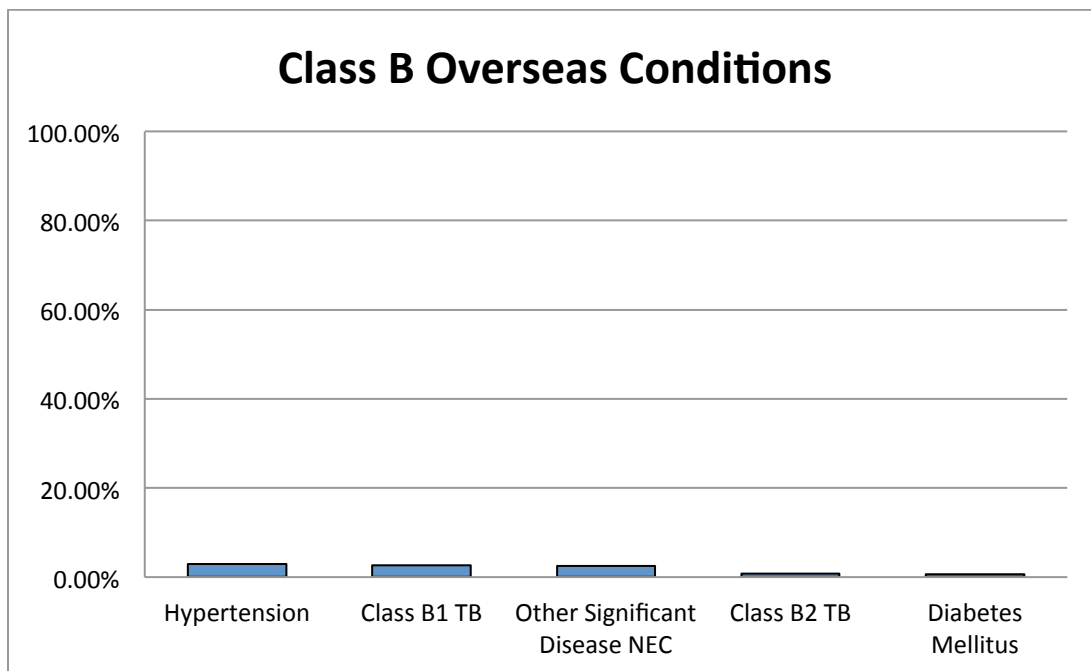


Figure 2. Percent of patients seen from January 2012 through September 2012 who were diagnosed with a Class B overseas medical condition.

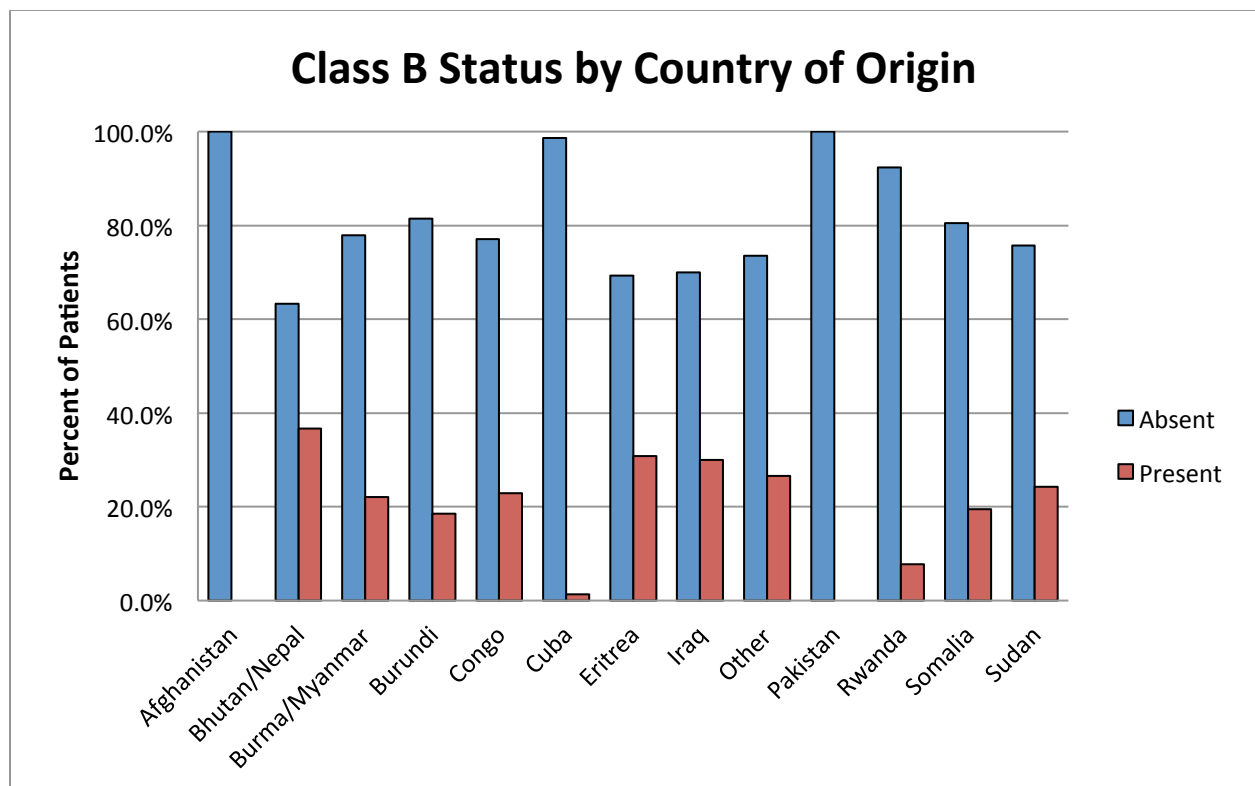


Figure 3.

## Dental, Vision and Nutrition Screening

The figures below show results from dental, vision and nutrition screenings conducted at the clinics. According to the data, 37.0 percent of patients had an abnormal result from the dental screening. 26.4 percent of patients had an abnormal result from the vision screening. Over half (54.1%) of patients fell within the healthy weight category for general nutrition; 22.8 percent were overweight; 14.7 percent obese. Figures 7, 8 and 9 show the dental, vision and nutrition screening results, broken down by country of origin. For example, over 50 percent of patients from Bhutan/Nepal, Burma/Myanmar and Sudan exhibited abnormal dental screening results. Over 40 percent of patients from Afghanistan, Democratic Republic of the Congo and Somalia exhibited abnormal dental screening results. Abnormal dental screening results ranged from 14.8 percent to 60.2 percent depending on the country of origin. Over 30.0 percent of patients from Bhutan/Nepal, Cuba, Pakistan, Eritrea and Rwanda had abnormal vision results. Over 30 percent of patients from Cuba were overweight and 27.7 were obese. The percent of patients who were overweight from each country of origin ranged from 3.7 percent for Burundi to over 30 percent for Cuba. 25.9 percent of patients from Burundi and 20.0 percent of patients from Pakistan were underweight

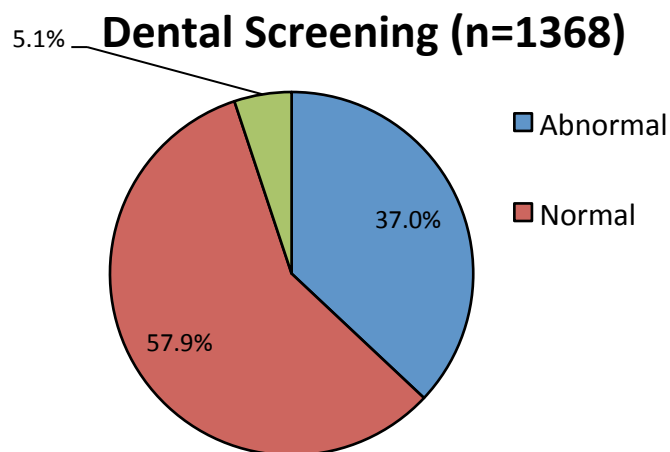


Figure 4

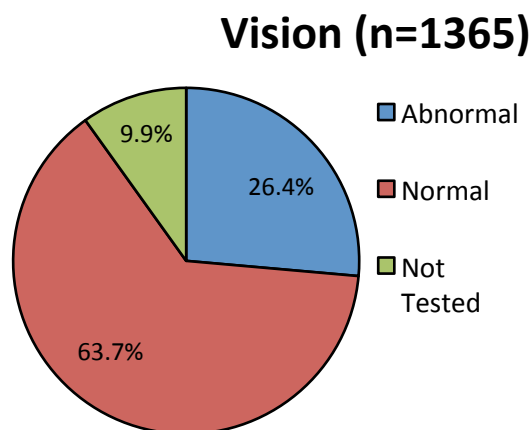


Figure 5

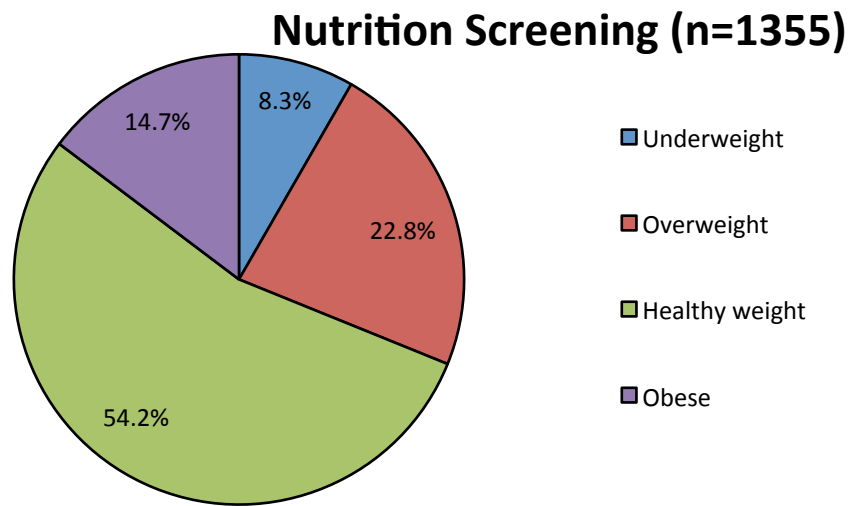


Figure 6

### Dental Screening for Patients Seen January 2012 through September 2012 by Country of Origin

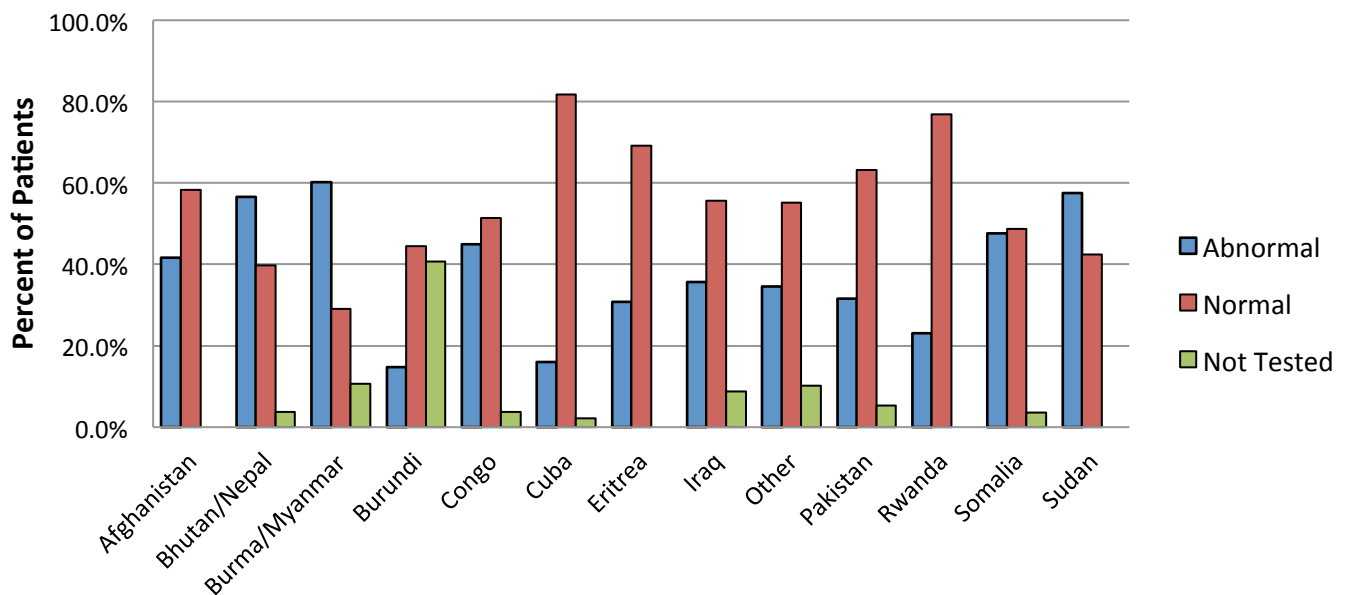


Figure 7.

## Vision Screening Results for Patients Seen from January 2012 through September 2012 by Country of Origin

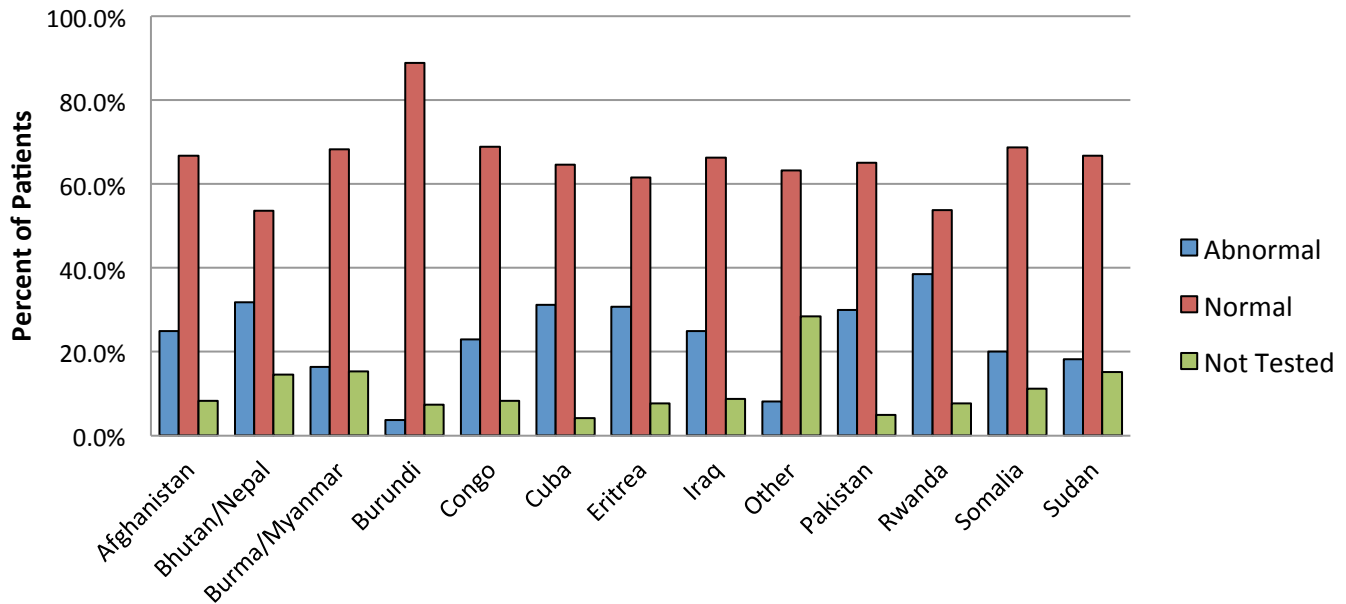


Figure 8.

## Nutrition Screening Results for Patients Seen in January 2012 Through September 2012 by Country of Origin

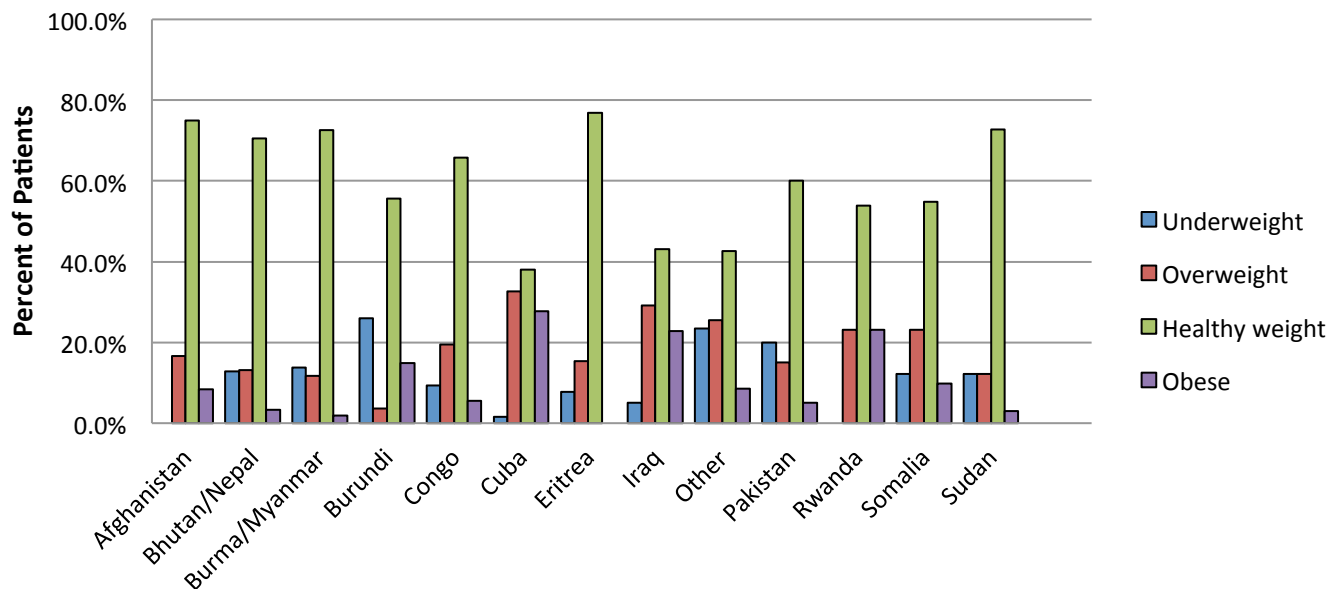


Figure 9.



## Tuberculosis Screening

All patients should be screened for tuberculosis. The two ways the clinics test for tuberculosis are the TSPOT and TST tests. The following figures show the results from those tests. Figure 10 shows that 15.6 percent of refugees tested positive with the tuberculosis screening. Figure 11 shows the percent of patients who tested positive by country of origin. Patients with a positive tuberculosis screening test are referred to the health department for a chest x-ray and further evaluation. Over 30 percent of patients from Eritrea and Somalia had a positive TSPOT result.

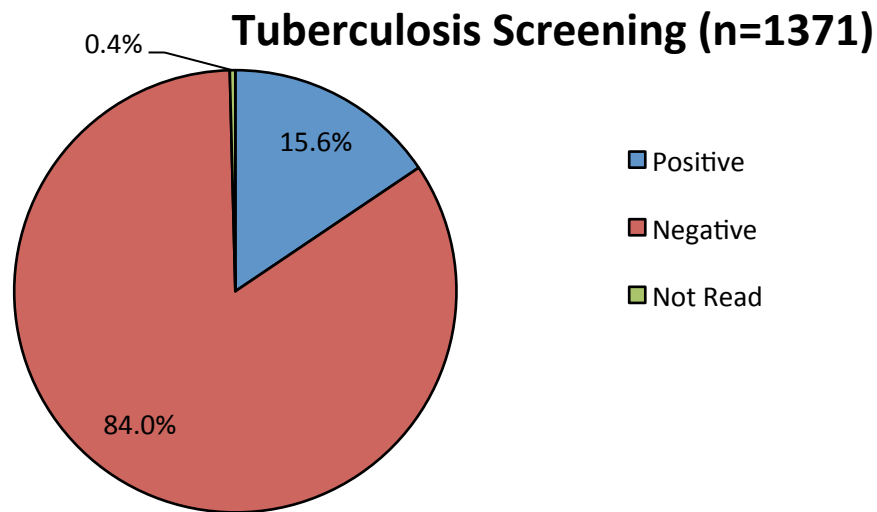


Figure 10. Tuberculosis screening results for patients seen from January 2012 through September 2012.

## Percent of Patients with Positive Tuberculosis Results by Country of Origin

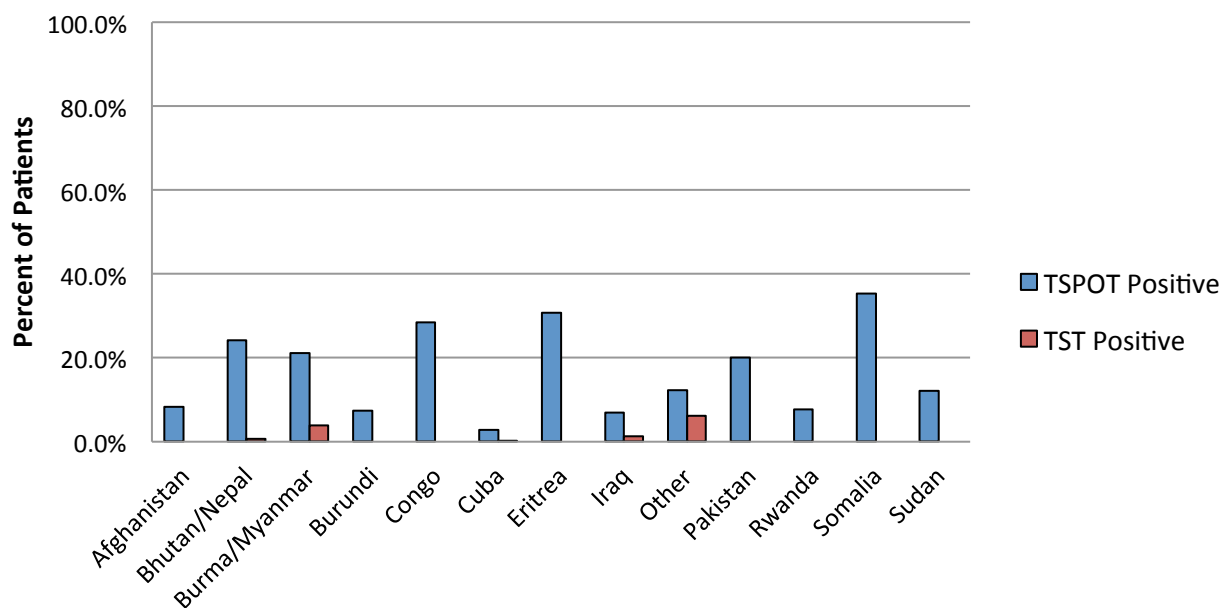


Figure 11.

## Laboratory Testing

A urinalysis is run during the health screening evaluation. 11.0 percent of patients showed abnormal results; 85.3 percent presented with normal results. Blood lead level tests are also used to determine if children 16 years of age or younger have elevated blood lead levels. 324 patients seen from January to October were tested for blood lead levels. Figure 13 shows that 4.0 percent of patients this age exhibited elevated blood lead levels. The fecal occult blood test (FOBT) is given to patients who are 50 years of age or older. 139 patients were age 50 years or older; four had a positive result. Figures 16 and 17 show the percent of patients with abnormal urinalysis results and elevated eosinophil levels by country of origin. The highest percent of patients with abnormal urinalysis results were from Bhutan/Nepal, Burundi, Congo and Cuba, and the highest with elevated eosinophil levels were from Pakistan. Figure 18 shows elevated blood lead levels by country of origin. Only patients 16 years of age and younger from Bhutan/Nepal, Burma/Myanmar, Congo, Cuba, Iraq and Somalia exhibited elevated blood lead levels.

**Urinalysis Results (n=1371)**

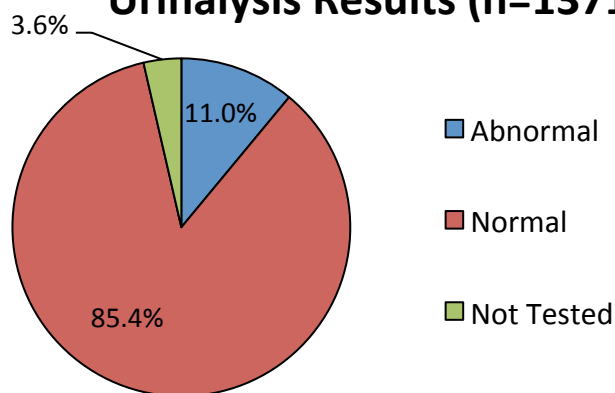


Figure 12

**Blood Lead Level (n=324)**

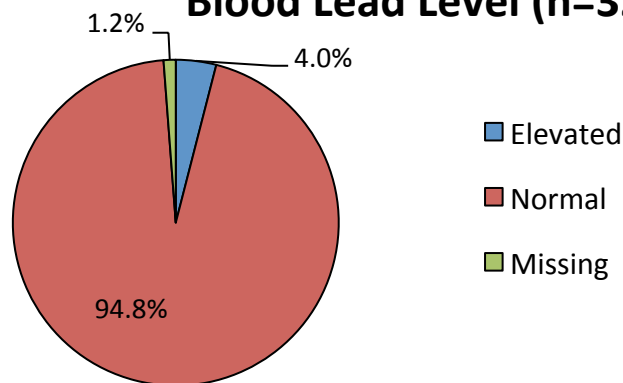


Figure 13

## FOBT (n=139)

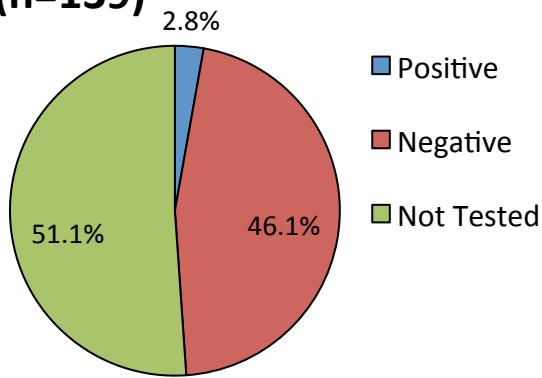


Figure 14

## Eosinophils (n=1371)

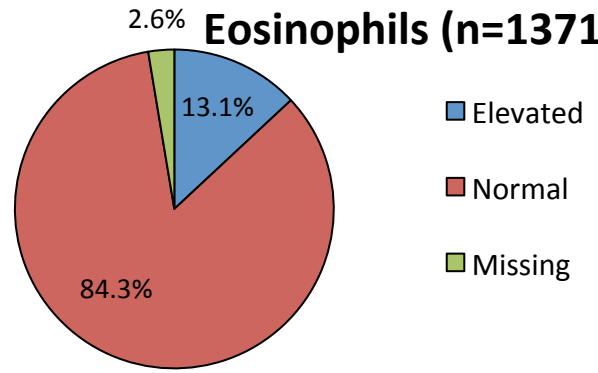


Figure 15

## Urinalysis Results of Patients Seen from January 2012 through September 2012 by Country of Origin

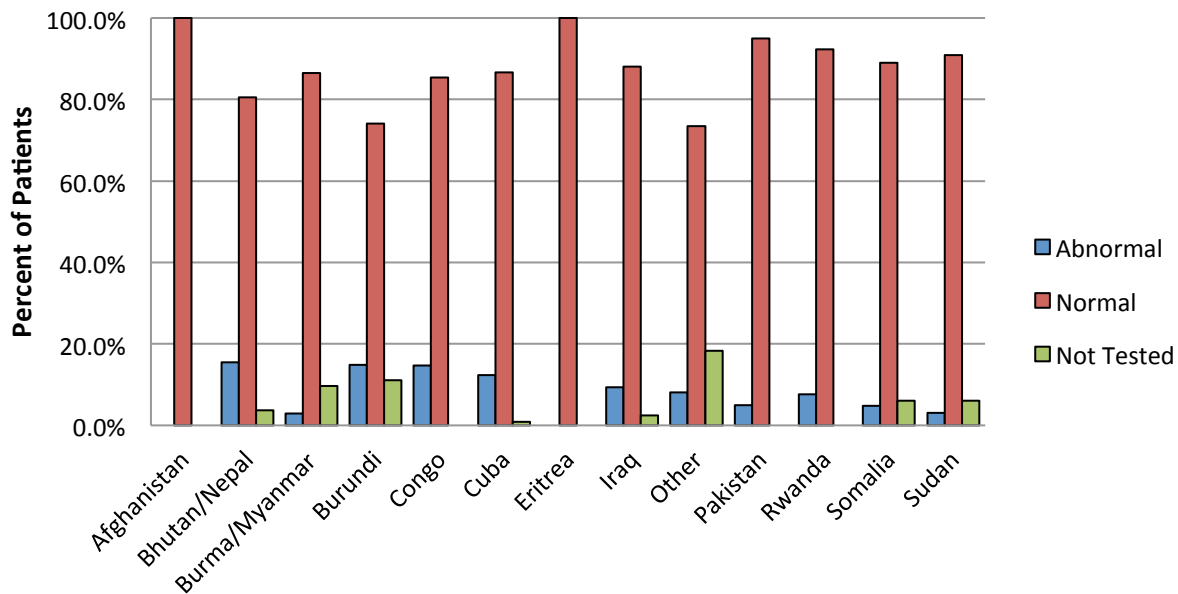


Figure 16.

### Percent of Patients with Normal and Elevated Eosinophils Levels by Country of Origin

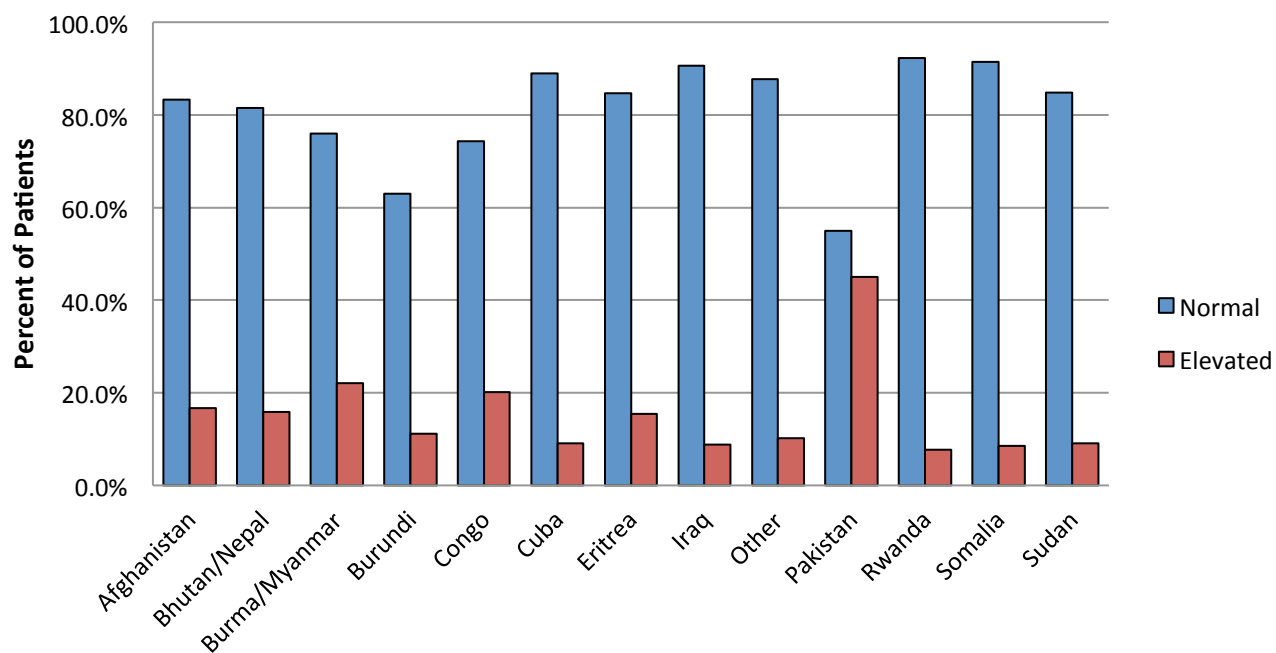


Figure 17.

### Blood Lead Levels for Patients Seen between January 2012 through September 2012 by Country of Origin

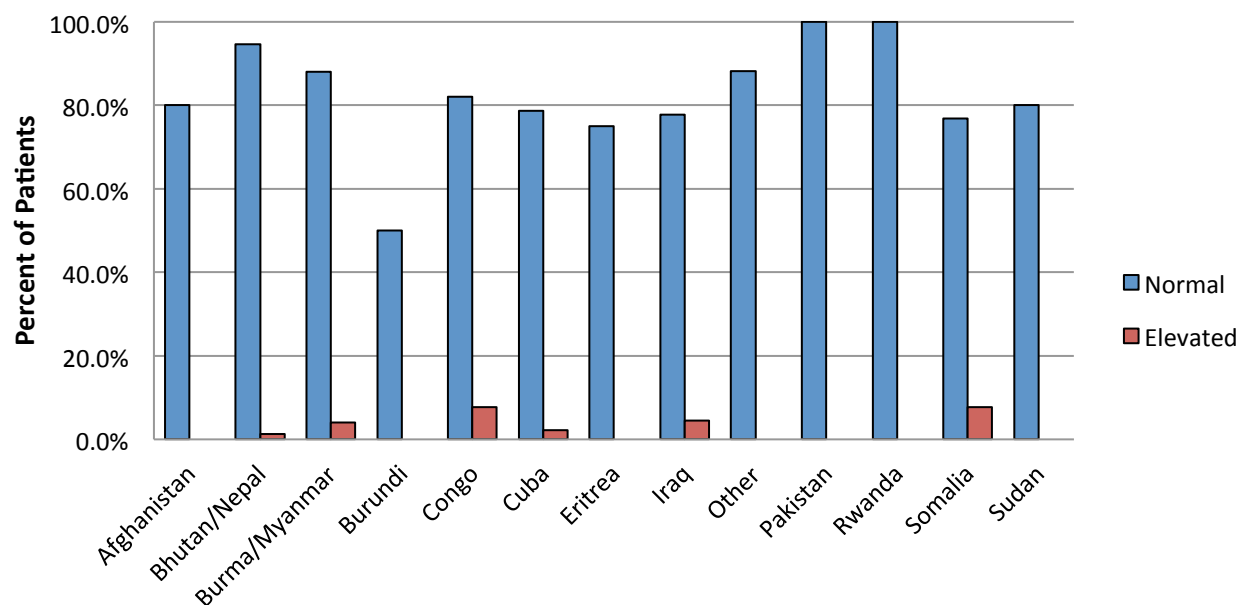


Figure 18.

## STI Testing

Another part of the health screening is testing for sexually transmitted infections (STIs). STI testing includes tests for HIV, syphilis, gonorrhea and chlamydia. Figure 19 shows that 0.4 percent of patients seen from January to October tested positive for syphilis. 153 patients were tested for gonorrhea and chlamydia from January to October. For those tested, all patients tested negative for gonorrhea and five patient tested positive for chlamydia. Figure 20 shows that 0.7 percent of patients tested positive for HIV.

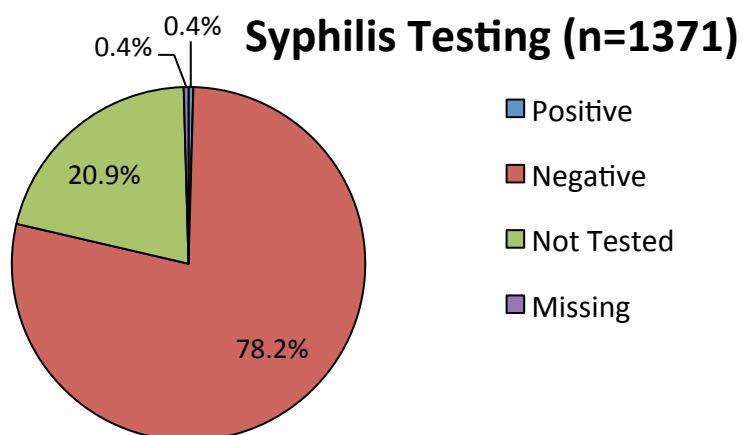


Figure 19

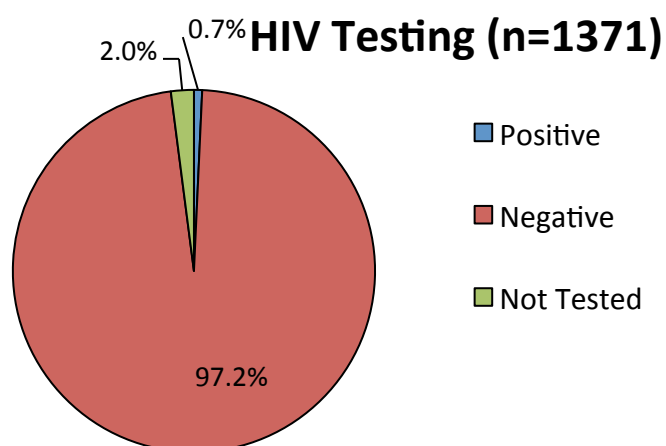


Figure 20

Intestinal Parasite Screening

Refugees undergo an intestinal parasite screening during the health screening. If a stool sample is provided to the clinic, they will screen for parasites. Figure 21 shows that parasites were found in 29 percent of patients. The top five parasites found are shown in figure 23, and figure 24 shows the percent of patients with parasites by country of origin. Diarrhea/GI symptoms were present for 1.5 percent of patients seen from January to October. Those patients were from Afghanistan, Bhutan/Nepal, Burma/Myanmar, Burundi, Congo, Cuba, and Somalia (Figure 25).

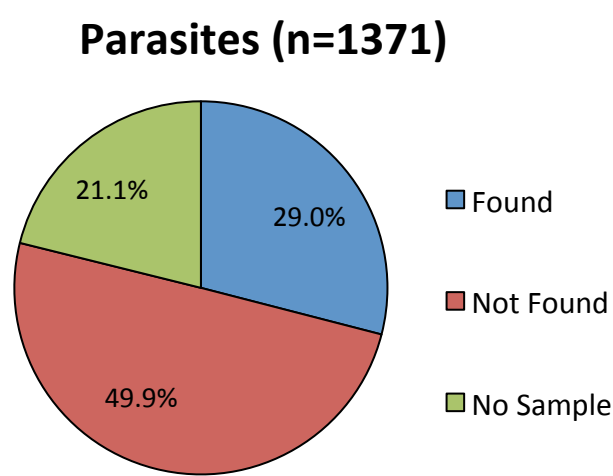


Figure 21

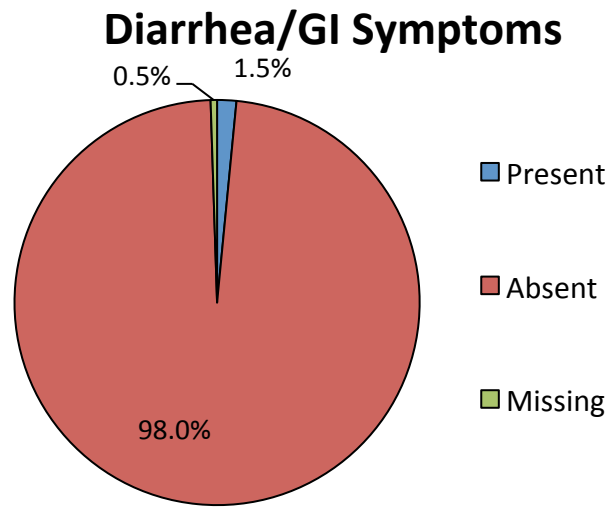


Figure 22

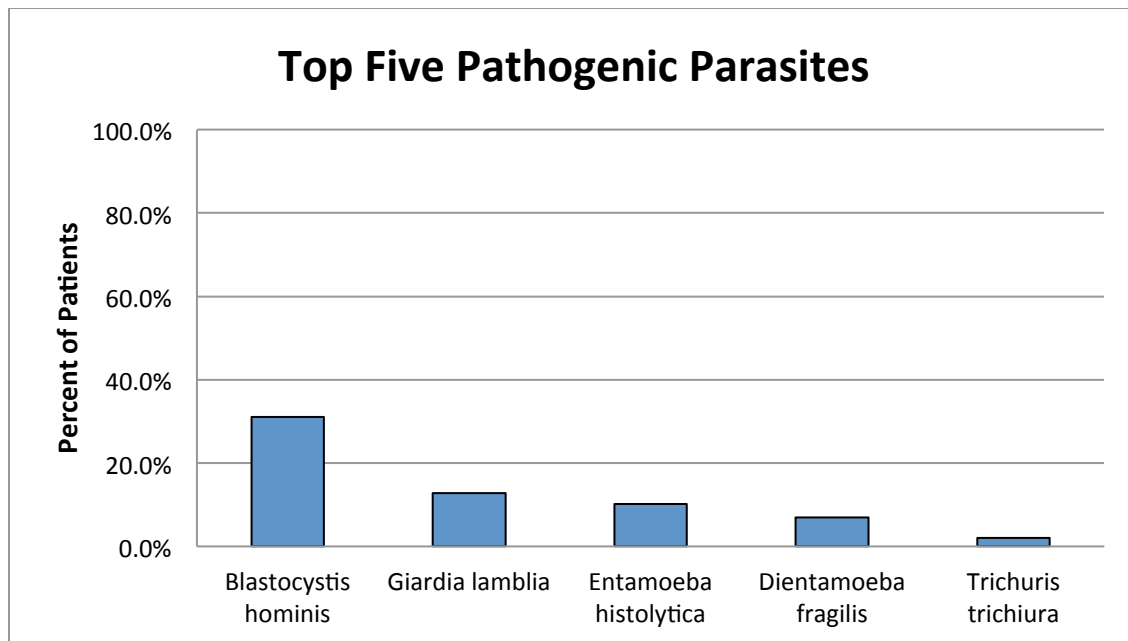


Figure 23. Percent of patients seen from January 2012 to October 2012 who were diagnosed with the above pathogenic parasites.

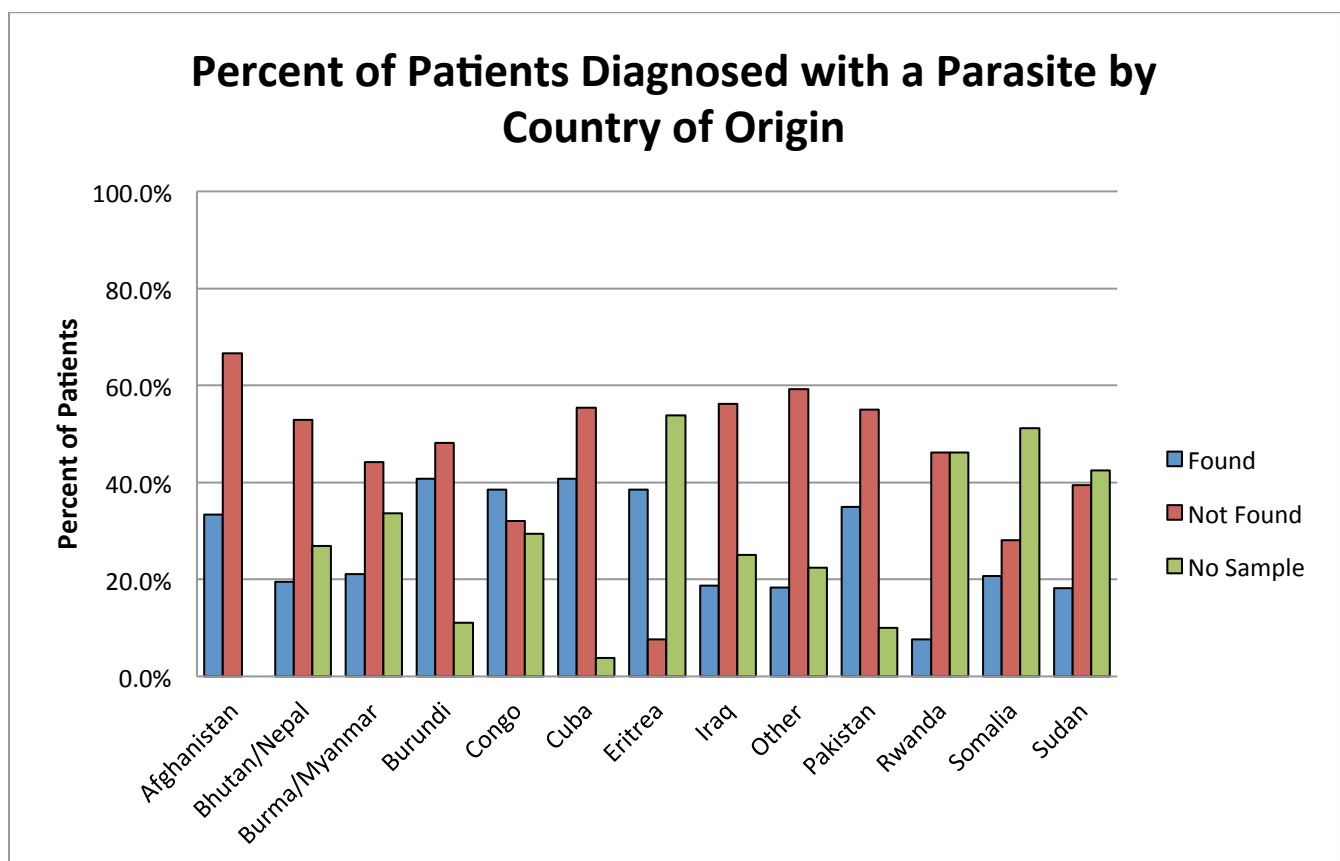


Figure 24.



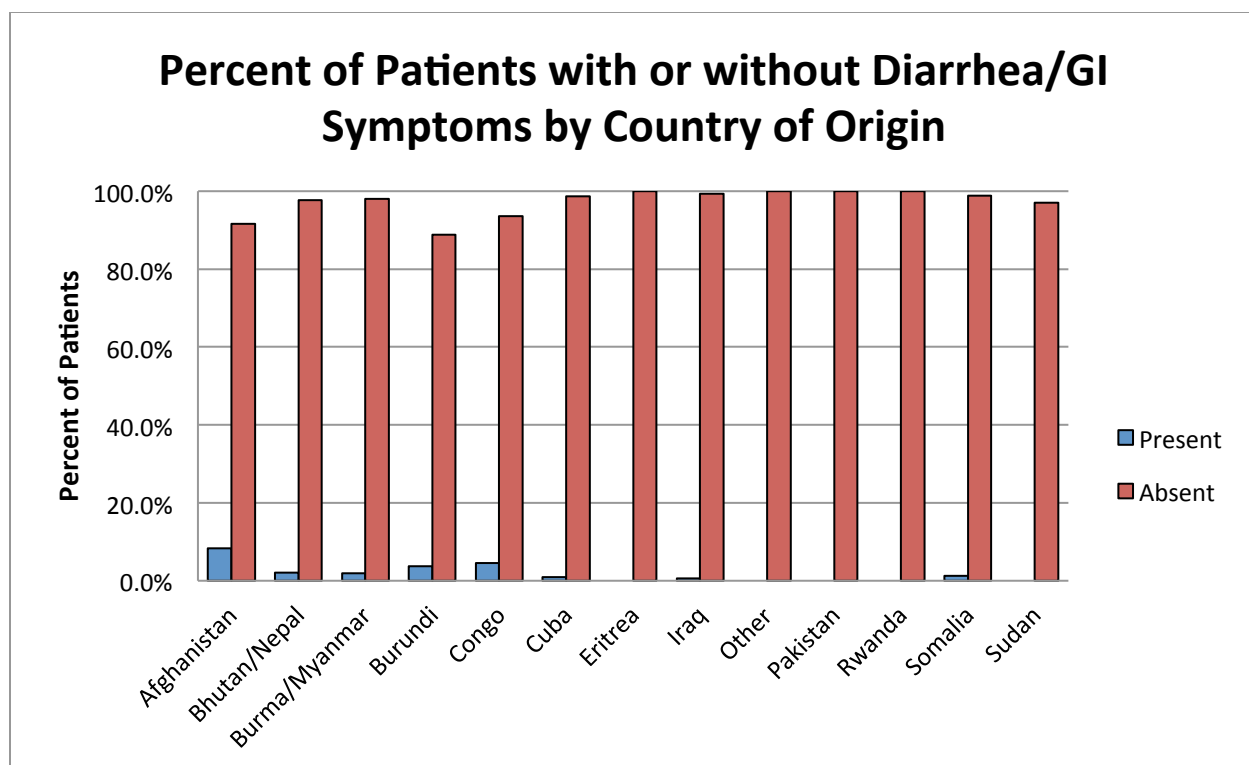


Figure 25.

## Hepatitis B Screening

The hepatitis B screening portion of the refugee health screening consists of a number of tests used to determine the hepatitis B status of patients. Patients can be categorized as susceptible to hepatitis B, immune to hepatitis B due to natural infection, immune from hepatitis B due to the hepatitis B vaccination, or diagnosed with acute or chronic infection. The following guidelines from the CDC were used in analyzing the results.

HBsAg-HEPBSAG Anti-HBc-HEPCAB HBsAb-HEPSAB	Negative Positive Positive	Immune due to natural infection
HBsAg-HEPBSAG Anti-HBc-HEPCAB HBsAb-HEPSAB	Negative Negative Positive	Immune due to hepatitis B vaccination
HBsAg-HEPBSAG Anti-HBc-HEPCAB IgM anti-HBc-ANTIHBICGM HBsAb-HEPSAB	Positive Positive Positive Negative	Acutely infected
HBsAg-HEPBSAG Anti-HBc-HEPCAB IgM anti-HBc- ANTIHBICGM HBsAb-HEPSAB	Positive Positive Negative Negative	Chronically infected

From [www.cdc.gov/hepatitis](http://www.cdc.gov/hepatitis)

Using the table above, the following results show the number of patients with acute infection, chronic infection, and those immune to hepatitis B. The table is also broken down by country of origin. From January to October, 2 patients presented with acute hepatitis B infection, 14 with chronic infection, 129 were immune due to natural infection and 313 were immune due to hepatitis B vaccination. Those with chronic infection were from Afghanistan, Bhutan/Nepal, Burma/Myanmar, Burundi, Congo, Somalia, Sudan and the “other” countries. Patients who were immune due to natural infection and the hepatitis B vaccination were from a number of countries, as shown below. Those that do not fall within one of the categories below are still susceptible to hepatitis B.

	<b>Chronic Infection</b>	<b>Immune due to natural infection</b>	<b>Immune due to hepatitis B vaccination</b>
Afghanistan	2	2	3
Bhutan/Nepal	3	20	43
Burma/Myanmar	3	28	26
Burundi	2	4	8
Congo	1	18	22
Cuba	0	23	146
Eritrea	0	0	2
Iraq	0	7	29
Other	1	2	17
Pakistan	0	1	4
Rwanda	0	2	1
Somalia	1	15	6
Sudan	1	7	6
<b>Total</b>	<b>14</b>	<b>129</b>	<b>313</b>

## Appendix I

### Overseas Medical Exam Review

		Count	Percentage
<b>Class B Conditions</b>	Hypertension	42	3.0%
	Class B1 TB	37	2.6%
	Other significant disease NEC	35	2.5%
	Class B2 TB	11	0.8%
	Diabetes Mellitus	10	0.7%
	<b>Total</b>	<b>1371</b>	<b>100.0%</b>

### Dental, Vision and Nutrition Screening

		Count	Percentage
<b>Dental</b>	Abnormal	506	36.9
	Normal	792	57.8
	Not Tested	70	5.1
	Missing	3	0.2
	<b>Total</b>	<b>1371</b>	<b>100.0%</b>
<b>Vision</b>	Abnormal	361	26.3
	Normal	869	63.4
	Not Tested	135	9.8
	Missing	6	0.4
	<b>Total</b>	<b>1371</b>	<b>100.0%</b>
<b>General Nutrition</b>	Underweight	114	8.3
	Overweight	309	22.5
	Healthy weight	733	53.5
	Obese	199	14.5
	Missing	16	1.2
	<b>Total</b>	<b>1371</b>	<b>100.0%</b>

### Tuberculosis Screening

		Count	Percentage
<b>TB Test Results</b>	Positive	212	15.5
	Negative	1147	83.7
	Borderline	0	0.0
	Not Read	6	0.4
	Missing	6	0.4
	<b>Total</b>	<b>1371</b>	<b>100.0%</b>

## Laboratory Testing

		Count	Percentage
<b>Urinalysis</b>	Abnormal	151	11.0
	Normal	1169	85.3
	Not Tested	49	3.6
	Missing	2	0.1
	<b>Total</b>	<b>1371</b>	<b>100.0%</b>
<b>Eosinophil levels</b>	Normal	1156	84.3
	Abnormal	179	13.1
	Missing	36	2.6
	<b>Total</b>	<b>1371</b>	<b>100.0%</b>
<b>Blood Lead levels</b>	Elevated	13	4.0
	Normal	307	94.7
	Missing	4	1.2
	<b>Total</b>	<b>324</b>	<b>100.0%</b>
<b>FOBT</b>	Positive	4	2.8
	Negative	64	46.0
	Not Tested	71	51.0
	Missing	0	0.0
	<b>Total</b>	<b>139</b>	<b>100.0%</b>

## STI Testing

		Count	Percentage
<b>HIV</b>	Negative	1332	97.2
	Not Tested	29	2.1
	Positive	10	0.7
	<b>Total</b>	<b>1371</b>	<b>100.0%</b>
<b>Syphilis</b>	Negative	1072	78.2
	Not Tested	287	20.9
	Positive	6	0.4
	Missing	6	0.4
	<b>Total</b>	<b>1371</b>	<b>100.0%</b>
<b>GC/Chlamydia</b>	GC Positive	0	0.0
	Chlamydia Positive	5	0.3
	Both Negative	148	10.7
	Not Tested	1202	87.6
	Missing	16	1.1
	<b>Total</b>	<b>797</b>	<b>100.0%</b>

## Intestinal Parasite Screening

		Count	Percentage
<b>Diarrhea symptoms</b>	Absent	1342	97.9
	No Sample	1	0.1
	Present	21	1.5
	Missing	7	0.5
	<b>Total</b>		<b>100.0%</b>
<b>Parasite</b>	Found	397	29.0
	No Sample	289	21.1
	Not Found	682	49.7
	Missing	3	0.2
	<b>Total</b>	<b>1371</b>	<b>100.0%</b>
<b>Parasites Found</b>	Blastocystis hominis	102	31.1
	Giardia lamblia	42	12.8
	Dientamoeba fragilis	23	10.1
	Entamoeba histolytica	33	7.0
	Trichuris trichiura	7	2.0
	<b>Total</b>	<b>328</b>	<b>100.0%</b>
<b>Malaria</b>	Not Screened	1365	99.6
	Screened, no species	5	0.4
	Screened, species found	0	0.0
	Missing	1	0.1
	<b>Total</b>	<b>1371</b>	<b>100.0%</b>