

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health & Human Services 2020

## Nebraska Refugee Health Status Report

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## Introduction

According to Nebraska's Refugee Resettlement Program, a refugee is any person outside of his or her country of nationality who is unable or unwilling to return to that country due to persecution or fear of persecution based on race, religion, nationality, or membership of a particular social group or political opinion.<sup>1</sup> In the past decade, conflict and persecution have forced countless individuals from their homes, causing some of the highest levels of displacement on record.

The United States has one of the world's largest refugee resettlement programs, which has welcomed more than three million refugees since 1975. From 2010-2015, more than 397,000 refugees arrived in the United States.<sup>2</sup> With refugee policy increasingly in the spotlight, it is important to remember the many ways in which previous generations of immigrants have contributed to America. Refugees, like the many immigrants before them, are an integral component of American society.

A recent study followed 2.3 million refugees in the United States and found that they contributed a collective \$20.9 billion in taxes in 2015.<sup>3</sup> While some refugees need initial assistance upon entering the United States and refugees living in the United States for five years or less, have a median income of approximately \$22,000, their median income increases to approximately \$67,000 after living in the United States for at least 25 years. Refugees are also more likely to be entrepreneurs than U.S.-born individuals and non-refugee immigrants. Refugee entrepreneurs produced \$4.5 billion in business income in 2015 alone. Finally, approximately 50% of the U.S.-born population is currently working age, compared to approximately 77% of the refugee population. As the proportion of the U.S. population older than age 65 begins to rise, the refugee population will play an important role in lessening the expected strain on America's workforce and security programs.<sup>4</sup>

Despite the economic potential of the refugee population in the United States, refugees face many barriers to achieving adequate education, work, and health services. While resettlement and social service agencies are in place to assist refugees with integrating into their surrounding communities, there is a need for additional support to address refugee needs adequately. In particular, refugees have unique health needs and often face barriers to receiving appropriate and timely health care. Understanding refugee health needs and barriers to health services is imperative to helping refugees succeed in their new home.

<sup>&</sup>lt;sup>1</sup>Nebraska Refugee Resettlement Program. (2017). Population definitions. Retrieved from http://dhhs.ne.gov/children\_family\_services/Pages/refugees\_definitions.aspx

<sup>&</sup>lt;sup>2</sup> U.S. Department of State Bureau of Population, Refugees, and Migration. (2015). Cumulative summary of refugee admissions.

<sup>&</sup>lt;sup>3</sup> New American Economy. (2017). From struggle to resilience: the economic impact of refugees in America.

<sup>&</sup>lt;sup>4</sup> Ibid.

## Investing in Refugee Health

Health status can affect educational attainment, employment, and economic stability. These elements are all interconnected and can influence one another both positively and negatively. Poor health, for example, can put education at risk by decreasing an individual's attendance or even concentration. Poor health may also make finding suitable employment difficult by limiting an individual's availability and ability to work. Unfortunately, refugees often face many barriers to accessing health care. Improving refugee access to quality health services is the first step towards helping refugees reach their full potential and the highest level of health possible.

Especially upon arrival, language barriers are a major challenge for refugees trying to navigate the new health care system. Language barriers can make simple tasks, from making an appointment to buying medication, extremely difficult. Cultural differences are often also a barrier for refugees seeking health care. According to the Centers for Disease Control and Prevention, some refugee populations prefer to seek care only for serious health problems and do not place high importance on preventative care. Other refugee populations can be overly modest or polite, which may lead to misunderstandings with healthcare providers. In addition to cultural and language differences, healthcare providers and staff may not be equipped or trained to handle health issues unique to refugees. Finally, refugees often face financial barriers that affect health care access. Especially upon arrival, many refugees are unemployed and face financial constraints. Additionally, refugees' understanding of the health care system and perceived costs may limit their utilization of health services.

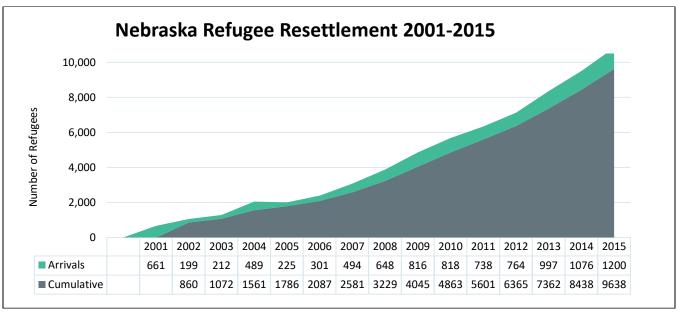
In part due to the many barriers faced by refugees, there is limited data addressing refugee health status, risk factors, and needs. To serve Nebraska's refugee populations better, the Office of Health Disparities and Health Equity (OHDHE) conducted its first statewide Refugee Needs Assessment Survey in 2017. This survey focuses on identifying key risk factors for the five largest refugee populations in Nebraska. The results of this survey deepen our understanding of refugee health status and allow for a more focused approach to promoting positive health outcomes.

<sup>&</sup>lt;sup>5</sup> Centers for Disease Control and Prevention. (2016). Refugee health profiles: Bhutanese refugees. Retrieved from: www.cdc.gov/immigrantrefugeehealth/profiles/bhutanese/background/index.html

<sup>&</sup>lt;sup>6</sup> Centers for Disease Control and Prevention. (2016). Refugee health profiles: Burmese refugees. Retrieved from: www.cdc.gov/immigrantrefugeehealth/profiles/burmese/background/index.html

## Nebraska's Refugee Population

The refugee population in Nebraska has significantly increased in the past years. From 2002-2016, Nebraska received 10,418 refugees. However, this number does not include those who have moved to Nebraska from other states. While many refugees have resettled in Nebraska to be reunited with family already living in the state, Nebraska's low unemployment rate and affordable cost of living are also drawing refugees to the area. The majority of the refugees in Nebraska live in Omaha and Lincoln.



Source: U.S. Office of Refugee Resettlement, Refugee Arrival Data, 2002 – 2016

#### **Top Refugee Populations in Nebraska**

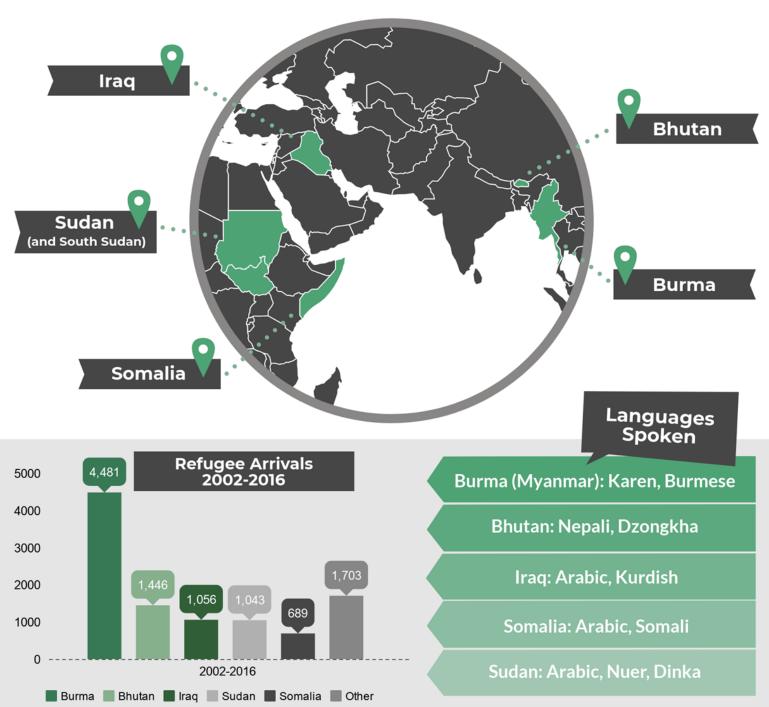
The top refugee populations in Nebraska were identified and surveyed for this project. Refugees from Burma represented the largest number of Nebraska refugee arrivals from 2002-2016. The majority of refugees from Burma were of the Karen ethnicity, a minority population from Burma. From 2002-2016, refugees from Bhutan represented approximately 14% of Nebraska refugee arrivals and refugees from Iraq and Sudan each represented approximately 10% of Nebraska refugee arrivals. The fifth largest population of refugees arrived from Somalia (6.6%).

Country of Origin	Total Arrivals (2002 2016)	Percent of Total Arrivals
Burma (Myanmar)	4,481	43.0%
Bhutan	1,446	13.9%
Iraq	1,056	10.1%
Sudan	1,043	10.0%
Somalia	689	6.6%
Total Arrivals	10,418	

Source: U.S. Office of Refugee Resettlement, Refugee Arrival Data, 2002 - 2016

# Top Five Refugee Arrivals in Nebraska

From 2002-2016, Nebraska welcomed **10,418** refugees from **48** countries.



Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services <sup>4</sup> Source: US Office of Refugee Resettlement, Refugee Arrival Data, 2002-2016



## Methodology

## **Project Development**

In an effort to gain a deeper and more comprehensive understanding of the health needs of refugee communities in the state, the Nebraska Office of Health Disparities and Health Equity conducted its first statewide Refugee Needs Assessment Survey in 2017. A qualitative and quantitative mixed methods approach was used in this project. Qualitative research was first conducted through focus groups and task force meetings with refugee communities and partner organizations. These focus groups and task force meetings served to address survey strategies, including training and other logistics issues, and were fundamental to the creation of the statewide quantitative needs assessment.

Based on the Nebraska 2007-2016 Refugee Resettlement data, the needs assessment primarily targeted the top five refugee populations from Burma, Bhutan, Iraq, Somalia, and Sudan.

## Survey Design

Combining the findings of the focus group discussions and task force meetings, the Nebraska Refugee Behavioral Risk Factor Surveillance System Questionnaire was developed, consisting of 123 questions.

### **Eligibility Questions**

At the beginning of the survey, participants were asked three eligibility questions. The first two questions were designed to ensure that each participant was at least 18 years of age and had come to the United States as a refugee. The third question was added to confirm that the participant was not a second-generation refugee or born in the United States.

#### **State-Added Questions**

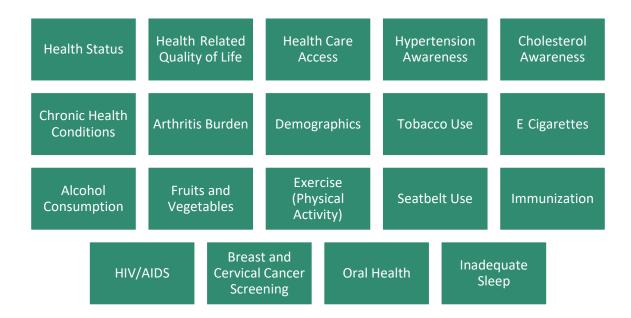
The next section included 19 state-added questions. These questions were chosen and composed after discussions between the Office of Health Disparities and Health Equity and partner organizations during focus groups and task force meetings. Many of these questions are refugee-specific demographic questions aimed at gathering detailed information about each participant, such as their home country, native language, and English level. Other questions focused on overall needs and challenges, as well as difficulties in navigating the health care system.

#### **Core Questions**

The majority of the questions in the survey were standardized questions from the Nebraska Behavioral Risk Factor Surveillance System (BRFSS). The Nebraska BRFSS has been conducting surveys annually since 1986 in order to collect data on the prevalence of major health risk factors among adults residing in the state. This surveillance system is based on a research design developed by the Centers for Disease

Control and Prevention (CDC) and used in all 50 states, the District of Columbia, and three of the U.S. territories. Information gathered through the BRFSS can be used to target health education and risk reduction activities in order to lower rates of premature death and disability. Of the survey questions, 101 questions came from the 2016 2017 CDC BRFSS core questions. These questions were grouped into the 19 sections shown below.

### **Core Question Sections**



## Implementation

To implement the needs assessment, OHDHE contracted with several partner organizations, including the Karen Society of Nebraska and the Asian Community and Cultural Center. These organizations assisted in identifying participants and bilingual individuals to conduct the interviews.

Before conducting the interviews, OHDHE staff trained interviewers to ensure the survey was given in a standardized manner. More than 60 interviewers completed training through a series of twenty workshops. The surveys were all completed in face-to-face interviews. Participants were anonymous and informed that their answers would be kept confidential. Participants were also able to skip any question they did not want to answer and could end the interview at any time.

In order to ensure the validity and integrity of the data collected, quality control measures were put in place. These measures included selecting at least 5% of participants at random and contacting them by phone or in person to confirm selected answers. An interviewer other than the individual who conducted the initial interview with the participant completed the quality control calls.

More than 2,300 surveys were completed in Lincoln, Omaha, Grand Island, Lexington and other cities and towns across Nebraska.

## Methodology Limitations and Challenges

Surveying Nebraska's refugee populations presented unique challenges. While using a mixed-methods approach and working closely with the refugee communities and interpreters helped to mitigate certain challenges, the employed methodology is still subject to limitations.

The validity of the data is always a primary concern when using questionnaires, as the information collected relies on the honesty of participants. Participants may hesitate to answer sensitive questions truthfully for a variety of reasons. Social desirability bias, or the tendency of participants to answer questions in a manner they may view as socially acceptable, can lead to skewed results. For example, in a culture where alcohol consumption is not accepted, participants may be reluctant to answer alcohol-related questions honestly.

Information also heavily relies on the participant's understanding of the questions. During training, interviewers were instructed to translate the questions as written and to not explain the questions in to limit misinterpretation. While questions were written to ensure consistency, misinterpretation may still occur, in part due to cultural and linguistic differences. Additionally, even when the questions are interpreted as intended, the participants' answers rely on their ability to accurately recall information.

According to the Centers for Disease Control and Prevention, priority health concerns among many refugee populations include various infectious diseases, such as intestinal parasites and malaria.<sup>7</sup> These diseases are often treated overseas before the departure of refugees to their host countries. Due to this reason, and the fact that many refugees in Nebraska have already been in the country for numerous years, such diseases were not investigated in this survey.

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<sup>&</sup>lt;sup>7</sup> Centers for Disease Control and Prevention. (2013). Refugee health guidelines. Retrieved from www.cdc.gov/immigrantrefugeehealth/guidelines/refugee-guidelines.html

# Demographics

According to the United Nations High Commissioner for Refugees (UNHR), the population of displaced people rose from 33.9 million in 1997 to 65.6 million at the end of 2016. Of this 65.6 million, 40.3 million were internally displaced, 22.5 million were refugees, and 2.8 million were asylum-seekers. While countries such as Turkey, Pakistan, and Lebanon hosted over one million refugees each, only 189,300 refugees were resettled around the world in 2016. The United States was the world's top resettlement country, admitting 96,900 of those refugees.<sup>8</sup>

In fiscal year 2016, Nebraska admitted 1,441 refugees.<sup>9</sup> This was more refugees per capita than any other state, amounting to 76 refugees resettled per 100,000 residents.<sup>10</sup> In the past fifteen years, the top refugee groups arriving in Nebraska have come from Burma, Bhutan, Iraq, Sudan and South Sudan, and Somalia. Nebraska has seen consistent growth among these populations due to continuing conflicts. Sudan, South Sudan, Somalia, and Burma remain on the global list of the top ten major source countries of refugees. Additionally, due to famine and drought, the situation in South Sudan has worsened significantly, causing the refugee population from South Sudan to grow by 85% in 2016.<sup>11</sup>

It is important to remember that the demographic landscape of refugees in Nebraska is constantly changing. Just over 10 years ago, from 2002-2007, the top five refugee populations admitted into Nebraska included refugees from Vietnam and refugees from countries of the former Soviet Union and the former Yugoslavia. More recently, the worldwide increase in refugees has been driven largely by the Syrian conflict. In 2016, Nebraska accepted its first refugees from the conflict and resettled 118 refugees from Syria. Though Syrian refugees are not currently one of the top five arrival groups in Nebraska, there are 5.5 million Syrian refugees worldwide. This rise and fall of conflicts around the world has the potential to reshape resettlement patterns in Nebraska.

This section focuses on the demographics of the top five refugee populations in Nebraska as of 2017. The section contains both state-added questions and questions from the demographics section of the 2017 Centers for Disease Control and Preventions (CDC) Behavioral Risk Factor Surveillance System (BRFSS).

<sup>&</sup>lt;sup>8</sup> United Nations High Commissioner for Refugees. (2017). Global trends: forced displacement in 2016. Geneva: United Nations High Commissioner for Refugees.

<sup>&</sup>lt;sup>9</sup> Office of Refugee Resettlement. (2016). Refugee arrival data.

<sup>&</sup>lt;sup>10</sup> US. Census Bureau. (2016). 2016 Population Estimates.

<sup>&</sup>lt;sup>11</sup> United Nations High Commissioner for Refugees. (2017). Global trends: forced displacement in 2016. Geneva: United Nations High Commissioner for

<sup>&</sup>lt;sup>12</sup> Office of Refugee Resettlement. (2016). Refugee arrival data: 2002-2016.

<sup>&</sup>lt;sup>13</sup> United Nations High Commissioner for Refugees. (2017). Global trends: forced displacement in 2016. Geneva: United Nations High Commissioner for Refugees.

## Home Country

The table below represents the home country reported by refugees surveyed.

- Of the refugees surveyed, just over 51% came from Burma, representing the largest refugee group in Nebraska.
- The second largest group of refugees surveyed came from Bhutan (16.2%), followed by refugees from Somalia (12.9%), refugees from Sudan and South Sudan (9.2%), and refugees from Iraq (6.4%).
- Refugees from Sudan and South Sudan were combined into one category, as many refugees came to Nebraska before South Sudan gained independence in 2011.

Home Country	Percent	Total
Burma	51.5%	1,166
Bhutan	16.2%	368
Somalia	12.9%	293
Sudan & South Sudan	9.2%	209
Iraq	6.4%	146
Other	3.7%	84

## Native Language

The table below represents the native languages reported by refugees surveyed. Native languages that were reported by less than 1% of refugees surveyed are combined in the "other" category. These languages include Dinka, Burmese, and Kurdish.

- Over half of refugees surveyed (51.4%) reported Karen as their native language.
- Approximately 16% of refugees surveyed reported Nepali as their native language and 12.5% reported Somali as their native language.
- Seven percent of refugees surveyed reported Arabic as their native language and just over 6% reported Nuer as their native language. Approximately 2% of refugees surveyed reported Kurmanji as their native language.

Native Language	Percent	Total	•Karen, Burmese	Burma
Arabic	7.0%	159		) Darma
Karen	51.4%	1169	<ul><li>Nepali, Dzongkha</li></ul>	<b>&gt;</b> Bhutan
Kurmanji	1.8%	41	- Augleig Kongligh Kongganii	i
Nepali	16.3%	371	•Arabic, Kurdish, Kurmanji	} Iraq
Nuer	6.2%	142	•Arabic, Somali	Somalia
Somali	12.5%	285		
Other	4.4%	101	<ul><li>Arabic, Dinka, Nuer</li></ul>	Sudan & South Sudan

## **Current Residence**

The table below represents the counties of residence of refugees surveyed.

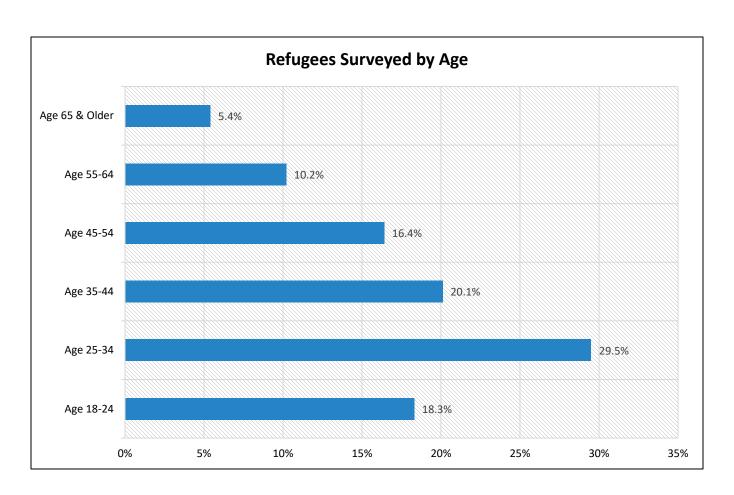
- At the time the survey was conducted, almost half of all refugees surveyed (47.3%) lived in Douglas County in the Omaha area.
- Just over one-third of refugees surveyed (36.3%) lived in Lancaster County in the Lincoln area.
- Approximately 9% of refugees surveyed lived in Dawson County and approximately 3% each lived in Hall County and Madison County.

County	Number	Percent
Dawson	194	8.8%
Douglas	1038	47.3%
Hall	62	2.8%
Lancaster	795	36.3%
Madison	61	2.8%
Norfolk	11	0.5%
Saline	14	0.6%
Sarpy	5	0.2%
Other	13	0.6%
Total	2193	

## Age

The chart below represents the age groups of refugees surveyed.

- Of refugees surveyed, approximately half were between the ages of 25 and 44, with approximately 30% being between the ages of 25 and 34 and approximately 20% being between the ages of 35 and 44.
- Approximately one-fourth of refugees surveyed were between the ages of 45 and 64, with approximately 16% being between the ages of 45 and 54 and approximately 10% being between the ages of 55 and 64.
- Just over 18% of refugees surveyed were between ages 18 and 24, while approximately 5% of refugees surveyed were age 65 or older.

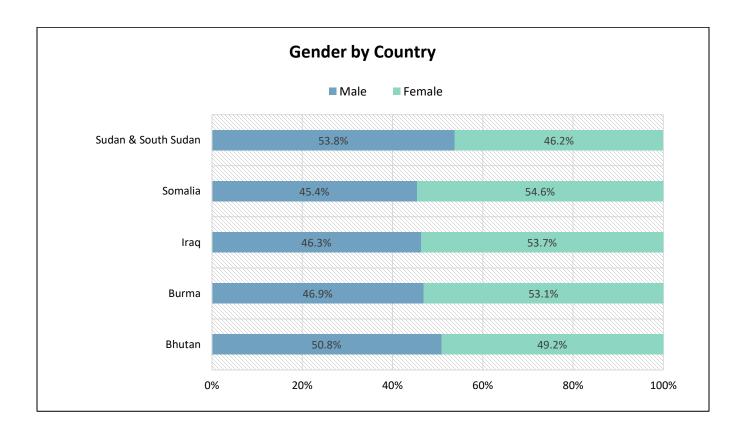


## Gender

## By Country of Origin

The below chart represents the gender of refugees surveyed by country of origin.

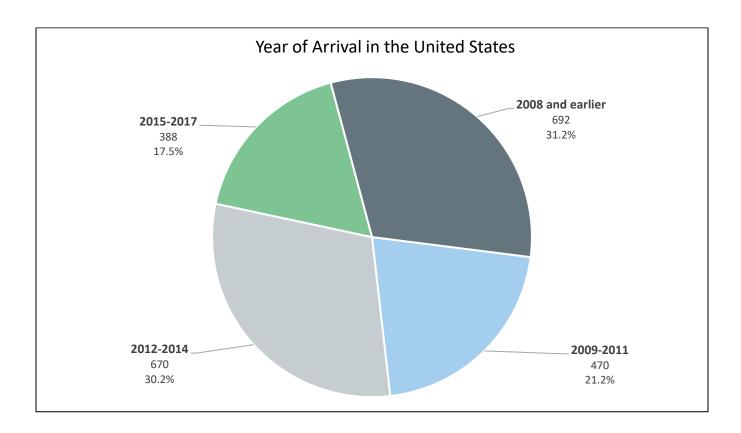
- The proportions of female and male refugees surveyed were similar for all countries.
- Slightly more male refugees were surveyed from Bhutan and from Sudan and South Sudan.
- Slightly more female refugees were surveyed from Somalia, Iraq, and Burma.



## Year of Arrival in the United States

The chart below represents the year refugees surveyed reported arriving in the United States.

- Approximately 18% of refugees surveyed arrived in the United States between 2015 and 2017.
- The largest number of refugees surveyed, approximately 31%, arrived in the United States in 2008 and earlier and the second largest number of refugees surveyed (30.2%) arrived between 2012 and 2014.
- Approximately 21% of refugees surveyed arrived in the United States between 2009 and 2011.

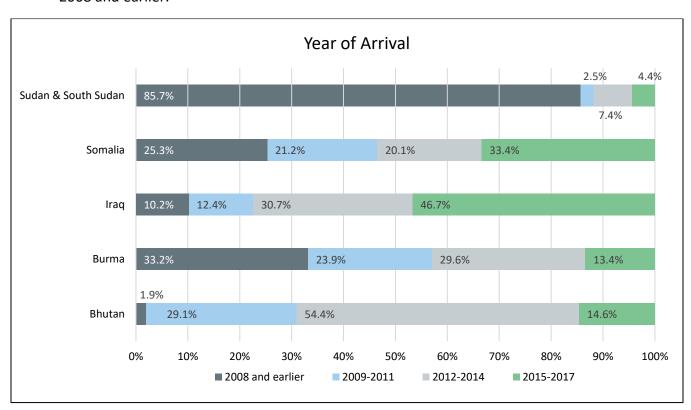


## Year of Arrival

## By Country of Origin

The chart below represents year of arrival by country of origin.

- Over half of refugees from Bhutan (54.4%) arrived in 2012-2014 and approximately 30% arrived in 2009-2011. Only 1.9% of refugees from Bhutan arrived in 2008 and earlier.
- Approximately one-third of refugees from Burma arrived in the United States in 2008 and earlier.
   Approximately 24% arrived in 2009-2011 and approximately 30% arrived in 2012-2014. The smallest percentage of refugees from Burma (13.4%) arrived in the most recent years, 2015-2017.
- Just under 50% of refugees from Iraq (46.7%) arrived in 2015-2017 and approximately 31% arrived in 2012-2014. Approximately 23% arrived in 2011 and earlier.
- The proportion of refugees arriving from Somalia was more evenly distributed over the four categories, with 33.4% arriving in 2015-2017 and between 20-25% arriving in each of the preceding timeframes.
- The majority of refugees from Sudan and South Sudan (85.7%) arrived in the United States in 2008 and earlier.





## **Challenges and Needs**

The following section examines the greatest challenges and most urgent needs reported by refugees surveyed. For both questions, participants could choose more than one response and had the option of writing in any challenge or need not listed. The pre-listed responses to these questions were generated through discussions with refugee communities prior to the creation of this survey. These two questions are listed below.

#### What are your biggest challenges?

Language Barriers **Transportation Issues** 

Access to Health Services

Mental Health Issues Documentation and Bill Pay

Other

Discrimination and Oppression

Navigating and Understanding U.S. Systems

#### What are your most urgent needs?

**Financial** Social Support Housing Food Other

Interpretation

Education Healthcare Work Legal

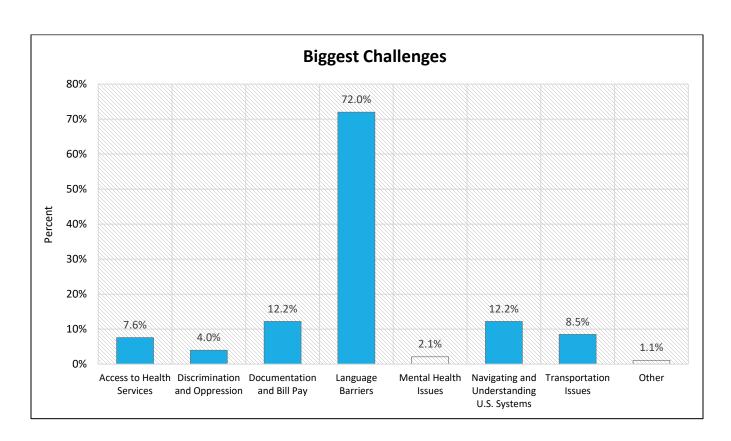
The question regarding biggest challenges focuses on hurdles in everyday life, including language barriers, having access to transportation, and other issues that may prevent refugees from thriving in Nebraska. The second question, which asks specifically about most urgent needs, identifies those areas where refugees feel they need immediate support, such as education, employment, or housing.

The responses to these questions, presented in the following pages, are important in understanding the situation of refugees in Nebraska on a broader level. Identifying and examining Nebraska refugees' biggest challenges and most urgent needs will help to ensure that future projects and support intended for the refugee community are relevant and successful. To this end, it is also important to consider the differences in responses dependent upon country of origin or date of entry into the United States. While there are clear trends among the overall refugee population, these variances are integral to understanding specific populations.

## **Biggest Challenges**

The chart below represents the biggest challenges reported by refugees surveyed.

- Language barriers were by far the biggest challenge reported by refugees surveyed. Seventy-two
  percent of refugees felt that languages barriers alone or in combination with other issues were
  the most challenging aspect of everyday life. This percentage was approximately six times greater
  than that of the next most commonly cited challenges.
- After language barriers, refugees surveyed reported that documentation and bill pay (12.2%) and navigating and understanding U.S. systems (12.2%) were their biggest challenges.
- Other notable challenges included transportation issues (8.5%) and access to health services (7.6%).
- Discrimination and oppression (4.0%), mental health issues (2.1%), and other issues (1.1%) were the least cited challenges.

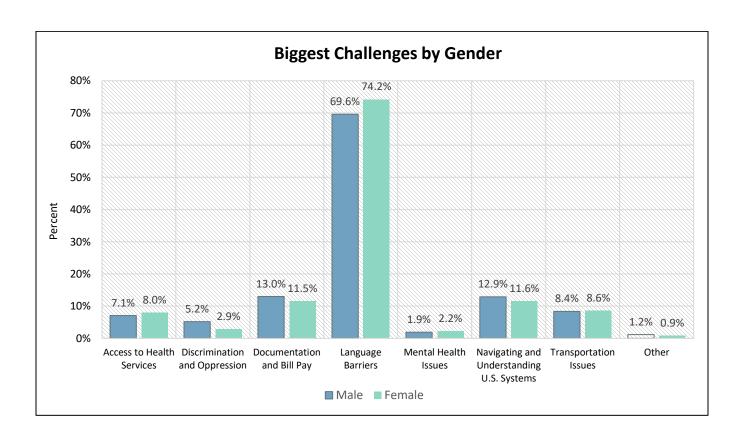


## **Biggest Challenges**

### By Gender

The chart below represents the biggest challenges of refugees by gender.

- The biggest challenges reported by female and male refugees were generally similar in proportion.
- Female refugees (74.2%) were approximately five percentage points more likely to report language barriers as their biggest challenge than male refugees (69.6%) were.
- Male refugees (5.2%) were more likely to consider discrimination and oppression to be one of their biggest challenges than female refugees (2.9%) were. Male refugees (13.0%) were also somewhat more likely to consider documentation and bill pay to be one of their biggest challenges than female refugees (11.5%) were.



## **Biggest Challenges**

### By Year of Arrival

The chart below represents the biggest challenges of refugees by year of arrival.

### **Key Findings**

- For all groups, a language barrier was the top challenge faced by refugees. However, this percentage was less for those who arrived in 2008 and earlier (61.9%) than for those who had arrived in the most recent timeframe (2015-2017, 80.2%).
- Documentation and bill pay was the second biggest challenge for refugees arriving in 2011 and earlier, while navigating and understanding U.S. systems was the second biggest challenge for refugees arriving in 2012-2017.
- Access to health services appeared among the top five biggest challenges of each group, with refugees arriving in 2012-2014 reporting it as the fourth biggest challenge and all other refugee groups reporting it as the fifth biggest challenge.
- Transportation issues also appeared among the top five biggest challenges for each group.

#### 2008 and Earlier: Top Five Biggest Challenges

#### 2009-2011: Top Five Biggest Challenges

Rank	Biggest Challenge	Percent	Rank	Biggest Challenge	Percent
1	Language Barriers	61.9%	1	Language Barriers	77.4%
2	Documentation and Bill Pay	14.6%	2	Documentation and Bill Pay	9.2%
3	Navigating & Understanding U.S. Systems	12.7%	3	Navigating & Understanding U.S. Systems	8.0%
4	Transportation Issues	10.4%	4	Transportation Issues	5.7%
5	Access to Health Services	8.3%	5	Access to Health Services	5.2%

2012-2014: Top Five Biggest Challenges

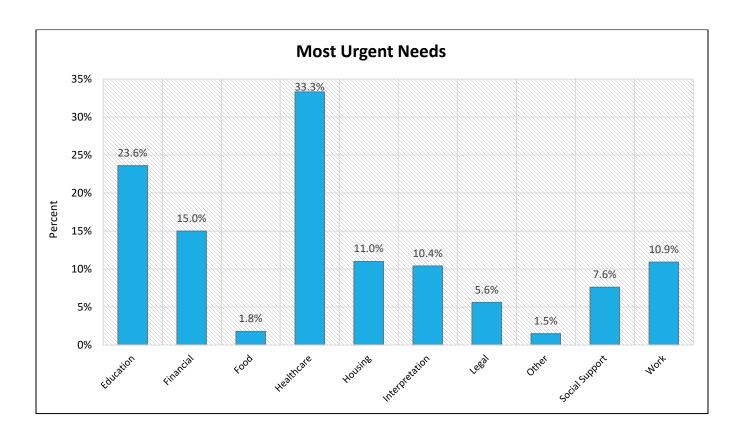
#### 2015-2017: Top Five Biggest Challenges

Rank	Biggest Challenge	Percent	Rank	Biggest Challenge	Percent
1	Language Barriers	74.2%	1	Language Barriers	80.2%
2	Navigating & Understanding U.S. Systems	14.7%	2	Navigating & Understanding U.S. Systems	12.7%
3	Documentation and Bill Pay	13.9%	3	Transportation Issues	9.0%
4	Access to Health Services	8.4%	4	Documentation and Bill Pay	8.4%
5	Transportation Issues	8.1%	5	Access to Health Services	6.6%

## Most Urgent Needs

The chart below represents the most urgent needs reported by refugees surveyed.

- Healthcare and education were the most urgent needs reported by refugees surveyed.
   Approximately one-third of refugees surveyed (33.3%) reported healthcare as one of their most urgent needs and just under one-fourth of refugees surveyed (23.6%) reported education as one of their most urgent needs.
- Financial needs (15.0%) were the third most often cited urgent need of refugees surveyed, followed by housing (11.0%), work (10.9%), and interpretation (10.4%).
- Other urgent needs included social support (7.6%), legal needs (5.6%), and food (1.8%).

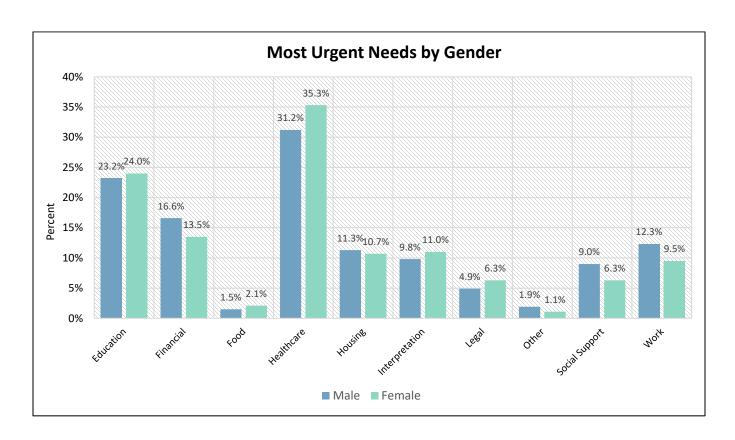


## Most Urgent Needs

## By Gender

The chart below represents the most urgent needs of refugees by gender.

- In general, the most urgent needs reported by female and male refugees were similar in proportion.
- Female refugees (35.3%) were somewhat more likely to report healthcare as one of their most urgent needs than male refugees (31.2%) were.
- Male refugees were somewhat more likely to report financial, housing, social support, and work needs than female refugees were.



## Most Urgent Needs

## By Year of Arrival

The chart below represents the most urgent needs of refugees by year of arrival.

## **Key Findings**

- Healthcare was the top most urgent need, with approximately 30-40% of each group reporting it as an urgent need.
- Education was the second most reported urgent need among all refugee groups.
- While interpretation was the third most reported urgent need among refugees arriving in 2012-2017, it was the fifth most urgent need for those arriving in 2009-2011, and did not make the top five most urgent needs for those arriving in 2008 and earlier.
- Work was also among the top five most urgent needs for refugees arriving in 2014 and earlier.

### 2008 and Earlier: Top Five Most Urgent Needs

2009-2011: Top Five Most Urgent Needs

Rank	Most Urgent Need	Percent	Rank	Most Urgent Need	Percent
1	Healthcare	29.1%	1	Healthcare	37.0%
2	Education	23.8%	2	Education	19.2%
3	Financial	21.4%	3	Work	12.5%
4	Housing	15.4%	4	Financial	11.8%
5	Work	13.5%	5	Interpretation	8.2%

2012-2014: Top Five Most Urgent Needs

2015-2017: Top Five Most Urgent Needs

Rank	Most Urgent Need	Percent	Rank	Most Urgent Need	Percent
1	Healthcare	36.5%	1	Healthcare	30.3%
2	Education	26.5%	2	Education	24.8%
3	Interpretation	12.3%	3	Interpretation	16.1%
4	Financial	12.1%	4	Housing	15.6%
5	Work	9.5%	5	Financial	10.6%



## Social Determinants of Health

While health is often influenced by genetics and individual behavior, it is also determined in part by social and economic factors. These factors, the social determinants of health, are often created by the conditions in which people live and work, and can be divided into five broad categories: economic stability, education, social and community context, health and health care, and neighborhood and built environment. <sup>14</sup> These categories can be measured by various indicators. For instance, economic stability can be measured in part by employment status and income, while education can be measured by indicators such as graduation or enrollment in higher education.

The International Organization for Migration identifies migration as a social determinant of health by acknowledging that "most migrants face a combination of legal, social, cultural, economic, behavioral, and communication barriers which put their physical, mental, and social well-being at risk." These barriers can be even more severe for those migrants, such as refugees, who are forcibly displaced from their homes. Refugees are generally unable to choose their host country and are not adequately prepared for the transition. Additionally, refugees have often been exposed to violence and poverty and many have lived for years in refugee camps before coming to the United States. These factors, along with country of origin, may influence a refugee's health behaviors and beliefs about health.

Upon arrival, some of the most common barriers faced by refugees include individual factors, such as educational attainment, employment status, income level, and language ability. Higher education and income have repeatedly been linked to better health. Especially upon arrival, such individual factors can contribute to less desirable living and working conditions. Unsafe housing, poor working conditions, and limited access to resources and healthy foods often contribute to negative health outcomes.

Furthermore, there are social and community influences that can have an effect on health. Many refugees have been separated from their families and are faced with a level of social isolation upon arrival in the United States. While many refugees eventually become part of a local community, lack of culturally and linguistically appropriate services may hinder access to local health care. <sup>18</sup> Identifying and understanding the vulnerabilities regarding the social determinants of health is an important step in promoting positive health outcomes among Nebraska's refugee population.

<sup>&</sup>lt;sup>14</sup> Healthy People. (2018). Social determinants of health. Retrieved from: www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

<sup>&</sup>lt;sup>15</sup> International Organization for Migration. (2018). Social determinants of migrant health. Retrieved from www.iom.int/social-determinants-migrant-health

<sup>&</sup>lt;sup>16</sup> Hahn, R.A. & Truman, B.I. (2015). Education improves public health and promotes health equity. International Journal of Health Services, 45(4), 657-678.

<sup>&</sup>lt;sup>17</sup> Feinstein, J.S. (1993). The relationship between socioeconomic status and health: A review of the literature. The Milbank Quarterly, 71(2), 279-322.

<sup>&</sup>lt;sup>18</sup> International Organization for Migration. (2018). Social determinants of migrant health. Retrieved from www.iom.int/social-determinants-migrant-health



## Social Determinants of Health



## **Education**





Over half of Nebraska's refugee population has a middle school education or less.



## **Household Income**





One of every ten Nebraska refugees had a household income of less than \$10,000 annually.





## **Marital Status**



Approximately 67% of Nebraska's refugee population was married.

## English Language Ability



Approximately eight of every ten Nebraska refugees surveyed reported speaking a language other than English at home.



72.5%

Just under three-fourths of Nebraska refugees reported speaking English not well or not at all.



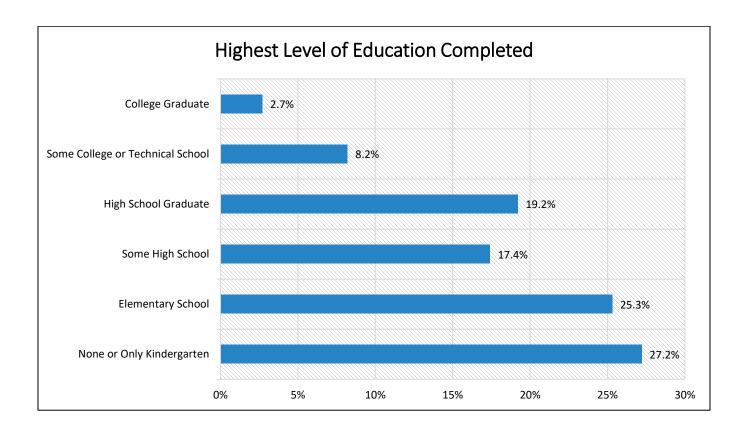
## **Educational Attainment**

What is the highest grade or year of school you completed?

Education has long been positively associated with health. Individuals with higher educational attainment live longer and are generally healthier than are those with fewer years of schooling.

The chart below represents the highest level of education completed of refugees surveyed.

- Over one-fourth of refugees surveyed (27.2%) reported never having attended school or only attending school through kindergarten or its equivalent.
- Just over one-fourth of refugees surveyed (25.3%) reported having only completed elementary school.
- Approximately 30% of refugees surveyed reported having graduated high school. Of those who
  had graduated high school, 19.2% had only completed high school, 8.2% had completed some
  college or technical school, and 2.7% were college graduates.

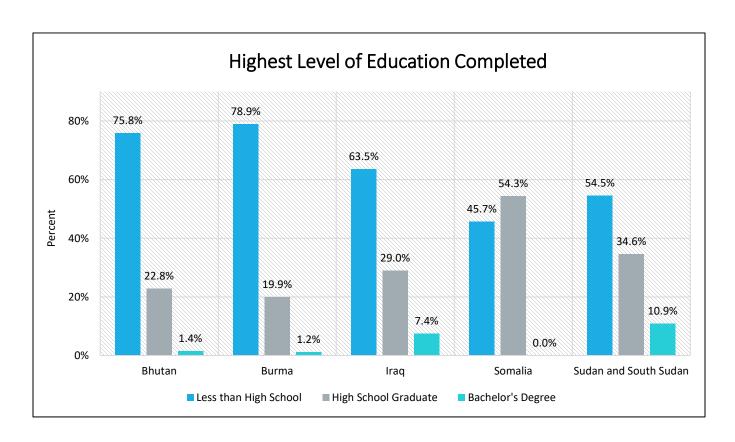


## **Educational Attainment**

## By Country of Origin

The chart below represents the highest level of education completed by country of origin.

- Refugees from Burma (78.9%) and refugees from Bhutan (75.8%) were most likely to report
  having less than a high school education. Over 60% of refugees from Iraq and over 50% of
  refugees from Sudan and South Sudan reported the same.
- Refugees from Somalia (54%) were most likely to be high school graduates, but least likely to have a bachelor's degree.
- Refugees from Sudan and South Sudan were somewhat more likely to be high school graduates (34.6%) or bachelor's degree holders (10.9%) than other refugees were.
- Approximately 1% of refugees from Bhutan and refugees from Burma reported having a Bachelor's degree.

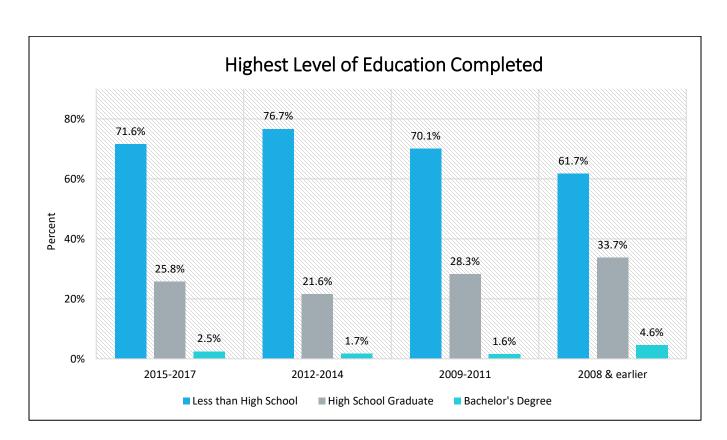


## **Educational Attainment**

### By Year of Arrival

The chart below represents the highest level of education completed by year of arrival.

- Refugees arriving in 2008 and earlier were most likely to be high school graduates (33.7%) and most likely to have earned a bachelor's degree (4.6%).
- Refugees arriving in 2012-2014 (76.7%) were most likely to have less than a high school education, followed by refugees arriving in 2015-2017 (71.6%) and refugees arriving in 2009-2011 (70.1%).
- Only approximately 2-3% of refugees arriving in 2009-2011, 2012-2014, and 2015-2017 reported having earned a bachelor's degree.



## **Employment Status**

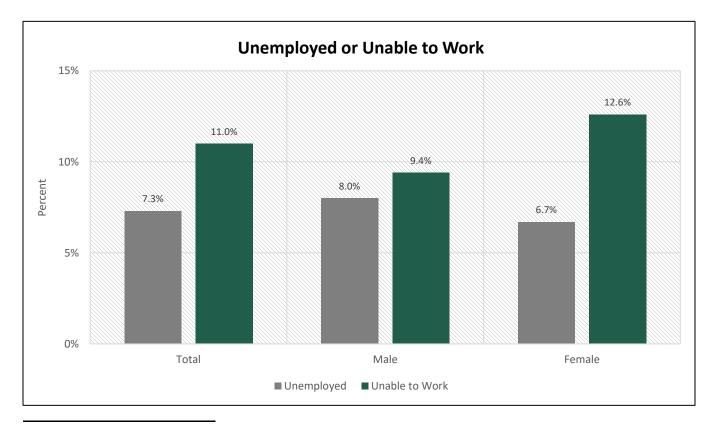
#### **Employment Status**

Employed for Wages • Self-employed • Out of Work • Homemaker • Student • Retired • Unable to Work

A secure job that pays well makes affording health care and maintaining a healthy lifestyle easier. In contrast, unemployed individuals are more likely to lack funds for health services and to be diagnosed with depression or develop a stress-related condition.<sup>19</sup>

The chart below represents the proportion of refugees surveyed who are unemployed or unable to work.

- Approximately 7.3% of refugees surveyed reported being unemployed and 11% reported being unable to work.
- Male refugees (8%) were slightly more likely to report being unemployed than female refugees (6.7%) were.
- Female refugees (12.6%) were more likely to report being unable to work than male refugees (9.4%) were.



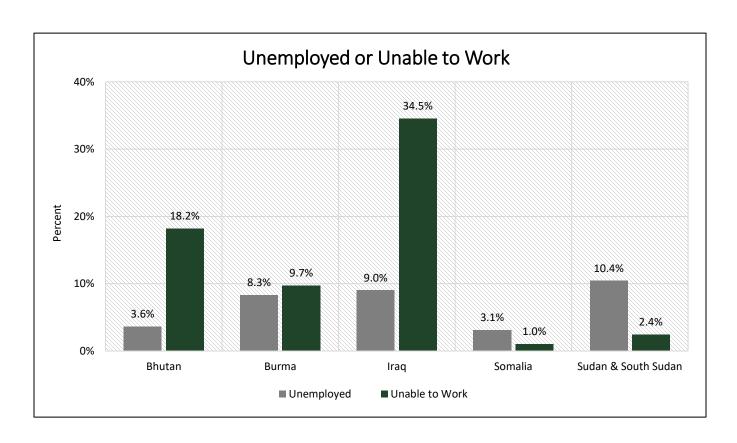
<sup>&</sup>lt;sup>19</sup> Jin, R.L., Shah, C.P., & Svoboda, T.J. (1995). The impact of unemployment on health: a review of the evidence. *Canadian Medical Association Journal,* (153)5, 529-540.

## **Employment Status**

### By Country of Origin

The chart below represents the proportion of refugees surveyed who are unemployed or unable to work by country of origin.

- Approximately one of every ten refugees surveyed from Sudan or South Sudan reported being unemployed, with an additional 2.9% who reported being unable to work.
- Refugees from Iraq were more likely to report being unemployed at 9.4% and most likely to report being unable to work at 34.5%.
- Refugees from Bhutan (18.2%) were more likely to report being unable to work and approximately one out of every ten refugees from Burma (9.7%) reported being unable to work.
- Refugees from Somalia reported the lowest rates of those unemployed (3.1%) and unable to work (1.0%).

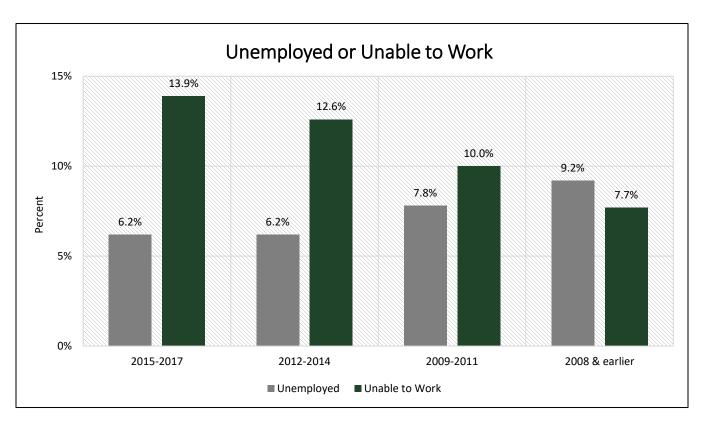


## **Employment Status**

### By Year of Arrival

The chart below represents the proportion of refugees surveyed who are unemployed or unable to work by year of arrival.

- The percentage of refugees unemployed increased with length of stay in the United States.
- Refugees arriving in 2008 and earlier (9.2%) were most likely to be unemployed, while refugees arriving in 2012-2014 and 2015-2017 (6.2%) were least likely to be unemployed.
- The percentage of refugees unable to work decreased with the length of stay in the United States.
- Refugees arriving in 2015-2017 (13.9%) were most likely to report being unable to work, followed by refugees arriving in 2012-2014 (12.6%), and refugees arriving in 2009-2011 (10%). Refugees arriving in 2008 and earlier (7.7%) were least likely to report being unable to work.



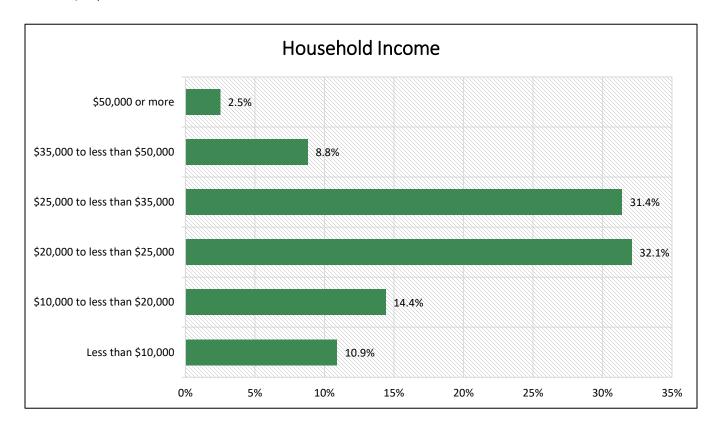
### Household Income

What is your annual household income from all sources?

The link between income and health is complex, but it is clear that higher income is positively correlated with lower rates of death and disease.<sup>20</sup> Those with higher incomes are often more likely to live in better areas and to be able to purchase healthier groceries, while those with lower incomes are often faced with limited funds to spend on health care needs.

The chart below represents the annual household income of refugees surveyed.

- Only 2.5% of refugees surveyed reported having a household income of \$50,000 or more and approximately 9% reported a household income of \$35,000 to \$50,000.
- Just under two-thirds of refugees surveyed reported a household income of \$20,000-35,000.
- Approximately one-fourth of refugees surveyed reported a household income of less than \$20,000.



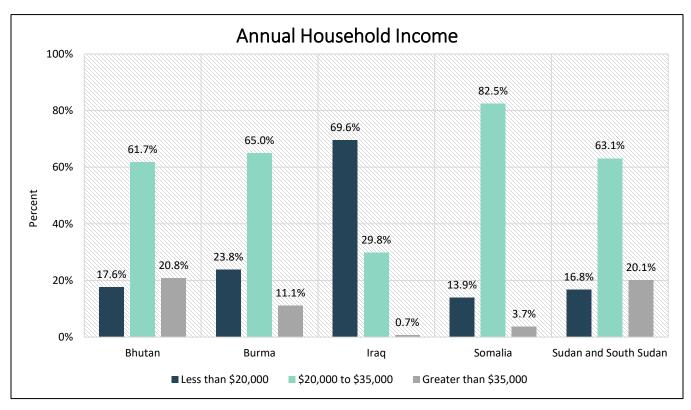
<sup>&</sup>lt;sup>20</sup> National Center for Health Statistics. (2012). Health, United States, 2011: with special feature on socioeconomic status and health. Retrieved from www.cdc.gov/nchs/data/hus/hus11.pdf

### Household Income

### By Country of Origin

The chart below represents the annual household income of refugees surveyed by country of origin.

- Refugees from Iraq (69.6%) were most likely to have an annual household income of less than \$20,000. This percentage was almost three times that of the next group likely to report having an annual household income of less than \$20,000, refugees from Burma (23.8%).
- Refugees from Bhutan (17.6%), Sudan and South Sudan (16.8%), and Somalia (13.9%) also reported relatively high rates of refugees who reported an annual household income of less than \$20,000.
- Only 0.7% of refugees from Iraq reported an annual household income of greater than \$35,000 and only 3.7% of refugees from Somalia reported the same.
- Approximately one of every ten refugees from Burma reported an annual household income of greater than \$35,000, while approximately two of every ten refugees from Bhutan and Sudan and South Sudan reported the same.

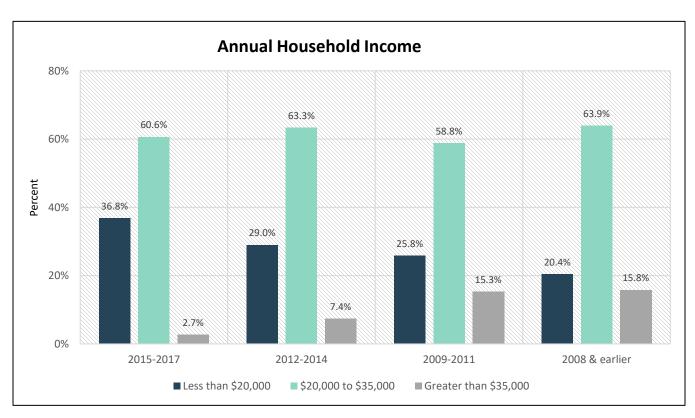


### Household Income

### By Year of Arrival

The chart below represents the annual household income of refugees surveyed by year of arrival.

- The percentage of refugees with an annual household income of less than \$20,000 decreased with length of stay in the United States. Approximately 37% of refugees arriving in 2015-2017 reported an annual household income of less than \$20,000 and approximately 20% of refugees arriving in 2008 and earlier reported the same.
- Similarly, the percentage of refugees with an annual household income of greater than \$35,000 increased with length of stay in the United States. Approximately 16% of refugees arriving in 2008 and earlier reported an annual household income of greater than \$35,000, while only approximately 3% of refugees arriving in 2015-2017 reported the same.
- The majority of refugees surveyed in each group, approximately 60%, reported an annual household income of \$20,000 to \$35,000.



## **Limited English Proficiency**

How well do you speak English?

Very Well • Well • Not Well • Not at all

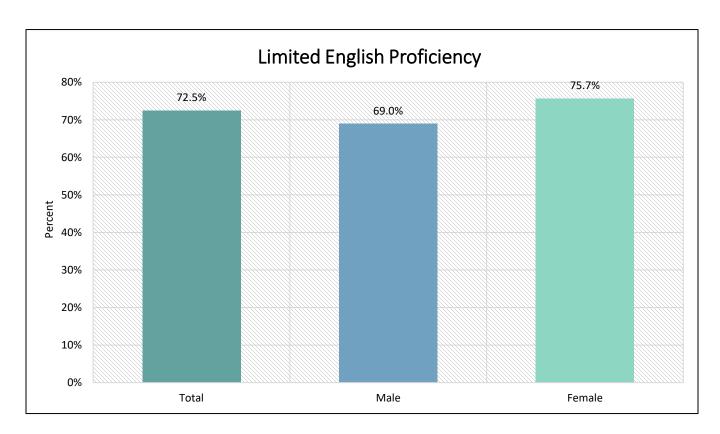
In Nebraska, English language knowledge is often essential in navigating the health care system. Research has shown that those with limited English proficiency are more likely to have difficulty understanding medical situations, more likely to have trouble understanding labels, and more likely to have adverse reactions to medications.<sup>21</sup>

The chart below represents the proportion of refugees with limited English proficiency. Refugees considered to have limited English proficiency are those who reported speaking English "not well" or "not at all."

### **Key Findings**

Approximately 73% of refugees surveyed reported speaking English "not well" or "not all."

• Female refugees (75.7%) were slightly more likely to report limited English proficiency than male refugees (69.0%) were.



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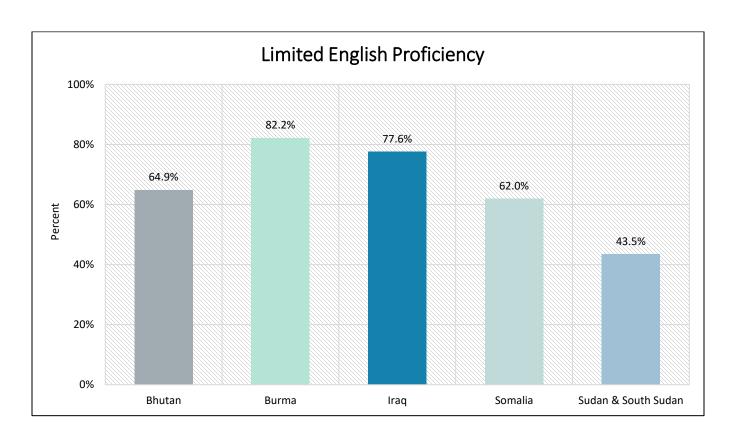
<sup>&</sup>lt;sup>21</sup> Wilson, E., Chen, A.H., Grumbach, K., Wang, F., & Fernandez, A. (2005). Effects of limited English proficiency and physician language on health care comprehension. *Journal of General Internal Medicine*, 20, 800–806.

## **Limited English Proficiency**

### By Country of Origin

The chart below represents the proportion of refugees with limited English proficiency by country of origin. Refugees considered to have limited English proficiency are those who reported speaking English "not well" or "not at all."

- Refugees from Burma (82.2%) were most likely to report having limited English proficiency, followed by refugees from Iraq (77.6%).
- Approximately 65% of refugees from Bhutan and 62% of refugees from Somalia reported having limited English proficiency.
- Refugees from Sudan and South Sudan (43.5%) were least likely to report having limited English proficiency.

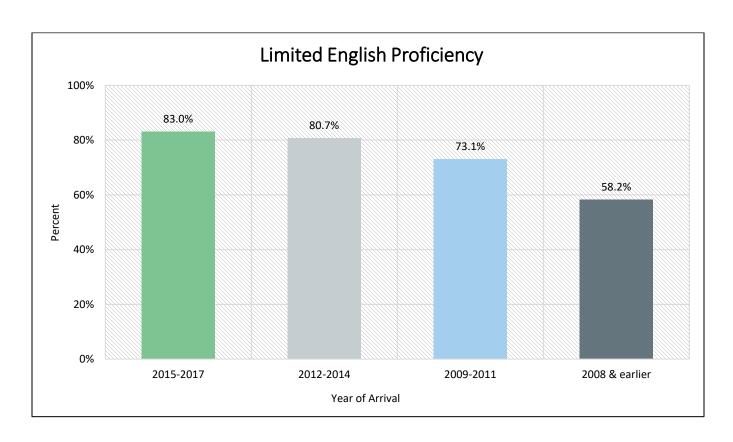


## **Limited English Proficiency**

### By Year of Arrival

The chart below represents the proportion of refugees with limited English proficiency by year of arrival. Refugees considered to have limited English proficiency are those who reported speaking English "not well" or "not at all."

- English proficiency among refugees improved with length of stay in the United States.
- Just over 58% of refugees arriving in the United States in 2008 or earlier reported limited English proficiency, compared to 83% of refugees who arrived in the United States in the most recent years.
- Approximately 81% of refugees arriving in 2012-2014 and approximately 73% of refugees arriving in 2009-2011 reported limited English proficiency.



## English Not Spoken At Home

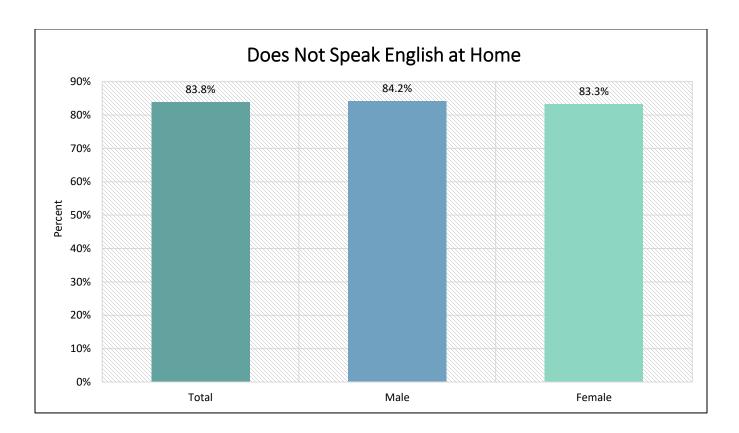
#### Do you speak English at home?

Language spoken at home can be a useful indicator when evaluating health care needs. While this indicator is not an accurate measure of English proficiency, research has shown that children and adults from non-English primary language homes report lower health outcomes in several areas.<sup>22</sup>

The chart below represents the proportion of refugees who reported English was not the primary language spoken in their home.

### **Key Findings**

- Approximately 84% of refugees reported not speaking English at home.
- Similar percentages of male refugees (84.2%) and female refugees (83.3%) reported not speaking English at home.



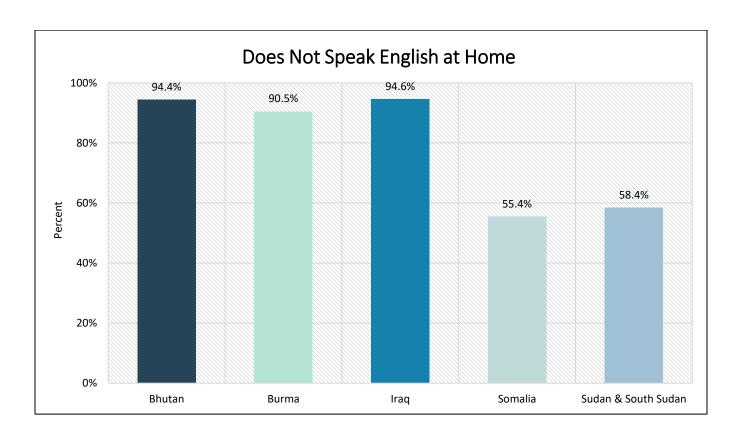
<sup>22</sup> Lau, M., Lin, H., & Flores, G. (2012). Primary language spoken at home and disparities in the health and healthcare of US adolescents. *Diversity and Equality in Healthcare, 9, 267-80.* 

## English Not Spoken At Home

### By Country of Origin

The chart below represents the proportion of refugees who reported that English was not the primary language spoken in their home by country of origin.

- Refugees from Bhutan (94.4%) and refugees from Iraq (94.6%) were most likely to report not speaking English at home.
- Nine out of ten (90.5%) refugees from Burma reported not speaking English at home.
- Over half of refugees from Somalia (55.4%) and refugees from Sudan and South Sudan (58.4%) reported not speaking English at home.

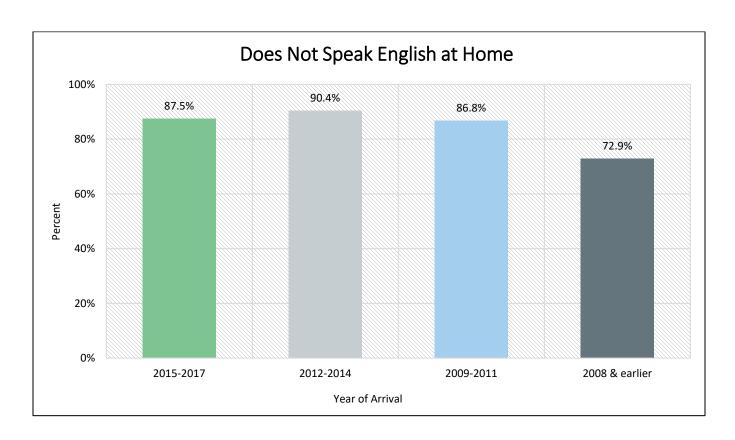


## English Not Spoken At Home

### By Year of Arrival

The chart below represents the proportion of refugees who reported that English was not the primary language spoken in their home by year of arrival.

- Refugees arriving in 2008 and earlier (72.9%) were least likely to report speaking a language other than English at home. All other refugee groups were over ten percentage points more likely to report the same.
- Refugees arriving in 2012-2014 (90.4%) were most likely to report speaking a language other than
   English at home.
- Approximately 88% of refugees arriving in 2015-2017 and approximately 87% of refugees arriving in 2009-2011 reported speaking a language other than English at home.



### **Marital Status**

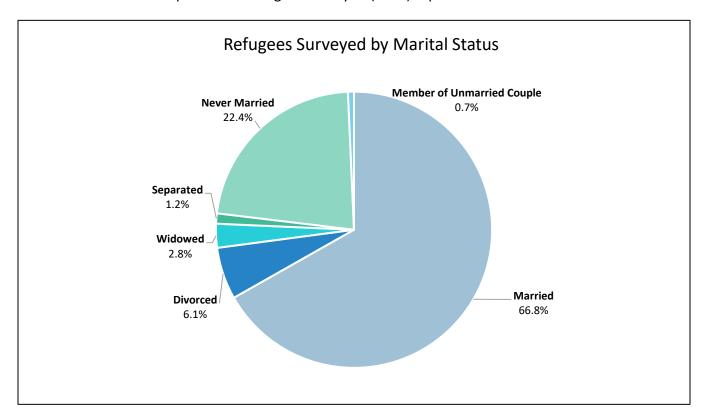
#### **Marital Status**

Married • Divorced • Widowed • Separated • Never Married • Member of an Unmarried Couple

Marital status and changes in marital status can have implications for an individual's health. Evidence has shown that, in general, married individuals are in better health and have lower mortality rates than those who are single. Additionally, children of married parents tend to be healthier.<sup>23</sup>

The chart below represents the marital status of refugees surveyed.

- Approximately 67% of refugees surveyed were married and under one percent reported being a member of an unmarried couple.
- Just over one-fifth of refugees surveyed (22.4%) reported having never been married.
- Approximately 6% of refugees surveyed reported being divorced and 1.2% reported being separated.
- Just under three percent of refugees surveyed (2.8%) reported their marital status as widowed.



<sup>&</sup>lt;sup>23</sup> Gallagher, M. & Waite, L. (2000) The case for marriage: why married people are happier, healthier, and better off financially. New York, NY: Broadway Books.

### Home Ownership

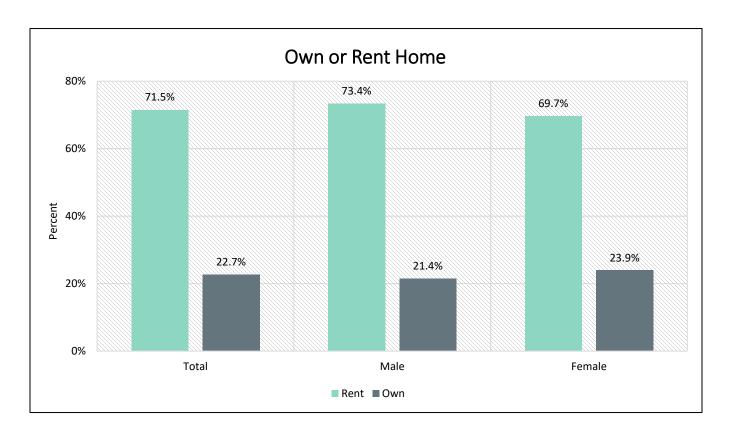
Do you own or rent your home?

Own • Rent • Other arrangement

Homeownership has been positively linked to physical and mental health. Studies have also found that the children of homeowners are more likely to perform better at school and have fewer behavioral problems.<sup>24</sup>

The chart below represents the percentage of refugees surveyed who rent and own their homes.

- Overall, approximately 72% of refugees reported renting their homes and approximately 23% reported owning their homes.
- Male refugees were much more likely to rent (73.4%) than own their homes (21.4%).
- Female refugees reported the same trend with approximately 70% reporting they rented their home and approximately 24% reporting that they owned their home.



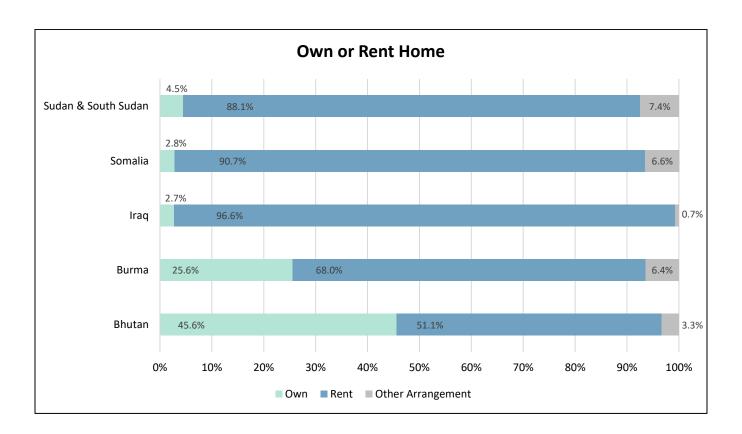
<sup>&</sup>lt;sup>24</sup> Dietz, R. (2003). *The social consequences of homeownership*. Columbus, OH: Homeownership Alliance.

## Home Ownership

### By Country of Origin

The chart below represents the percentage of refugees surveyed who rent and own their homes by country of origin.

- Refugees from Bhutan (45.6%) were most likely to own their homes, followed by refugees from Burma (25.6%).
- Approximately 5% of refugees from Sudan and South Sudan reported owning their homes.
- Refugees from Somalia (2.8%) and refugees from Iraq (2.7%) were least likely to own their homes.

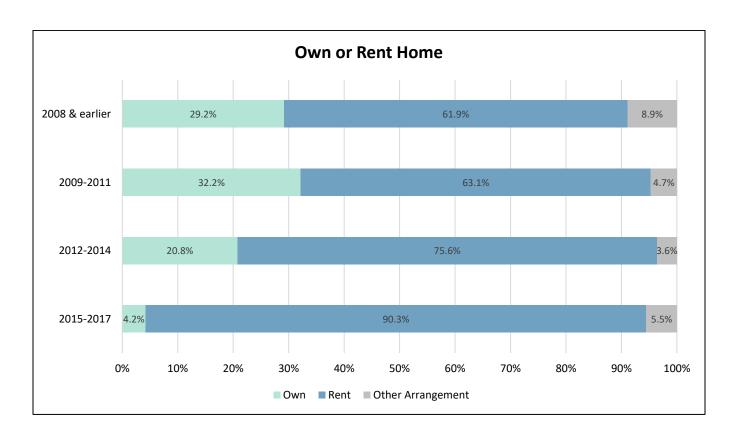


## Home Ownership

### By Year of Arrival

The chart below represents the percentage of refugees surveyed who rent and own their homes by year of arrival.

- Refugees arriving in 2009-2011 (32.2%) and refugees arriving in 2008 and earlier (29.2%) were most likely to report owning their homes.
- Approximately one-fifth of refugees arriving in 2012-2014 (20.8%) reported owning their homes.
- Refugees arriving in 2015-2017 (4.2%) were least likely to report owning their homes.





Measuring the overall health status of refugees is a complex issue, as health concerns among refugees often occur in stages depending on the duration of residence in the host country. These stages, which often overlap, are outlined below.

### Psychiatric Disorders Often developed in country of origin, can be exacerbated by

- Depressive disorders
- Stress-related disorders
- Post-traumatic stress disorders

### The Stages of Refugee Health

# Infectious and Parasitic Diseases Often acquired in country of origin

- Tuberculosis
- Malaria
- Hepatitis B
- HIV
- Gastrointestinal parasites

## Chronic Diseases Often acquired in host country

- Cancer
- Diabetes
- Hypertension
- Coronary Heart Disease
- Obesity

Adapted from Palinkas, L.A., Pickwell, S.M., Brandstein, K., Clark, T.J., Hill, L.L., Moser, R.J., & Osman, A. (2003). The journey to wellness: stages of refugee health promotion and disease prevention. *Journal of Immigrant Health*, 5(1), 19-28.

The first stage, psychiatric disorders, includes mental health issues that often occur among refugees due to the conditions faced in their countries of origin, including war, violence, poverty, and famine. Though these mental health issues are often developed in the country of origin, they often continue for years after resettlement. The stress of the resettlement process, difficulties adjusting to the new country, and loss of social support can exacerbate mental health issues.<sup>25</sup>

Despite pre-departure screenings, refugees sometimes arrive with infectious or parasitic diseases due to exposure in countries of origin or during the migration process. Unlike mental health issues, this stage of diseases are often resolved soon after resettlement through refugee screening and treatment programs that occur within the first 30 to 90 days after arrival. During these screenings, refugees are often tested for tuberculosis, parasitic infections, and hepatitis B, and are provided with immunizations. As many of the refugees surveyed in Nebraska have resided in the United States for multiple years, parasitic and infectious diseases will not be focused on in this report.

After residing in the United States for years, many refugees may encounter chronic diseases. Most research has attributed this to the adoption of a Western diet and lifestyle. One study conducted in Denmark found that the occurrence of stroke, diabetes, and breast cancer increased along with duration of residence.<sup>27</sup> Another study found that refugees who experienced food insecurity or deprivation were more likely to become overweight or obese after resettlement, due to unhealthy eating.<sup>28</sup> While weight

<sup>&</sup>lt;sup>25</sup> Porter, M. & Haslam, N. (2005). Predisplacement and post displacement factors associated with mental health of refugees and internally displaced persons. *Journal of the American Medical Association*, 294(5), 602-612.

<sup>&</sup>lt;sup>26</sup> Centers for Disease Control and Prevention. (2018). Refugee health guidelines. Retrieved from www.cdc.gov/immigrantrefugeehealth/guidelines/refugee-guidelines.html

<sup>&</sup>lt;sup>27</sup> Norredam, M., Agyemang, C., Hoejbjerg Hansen, O.K., Petersen, J.H., Byberg, S., Krasnik, A., & Kunst, A. (2014). Duration of residence and disease occurrence among refugees and reunited immigrants: test of the 'healthy migrant' hypothesis. *Tropical Medicine and International Health*, 19(8), 958-967.

<sup>&</sup>lt;sup>28</sup> Peterman, J.N., Wilde, P.E., Liang, S., Bermudez, O.I., Silka, L., & Rogers, B.L. (2010). Relationship between past food deprivation and current dietary practices and weight status among Cambodian refugee women in Lowell, MA. *American Journal of Public Health*, 100(10), 1930-1937.

gain may be valuable to an extent, rapid weight gain leading to obesity can put refugees at risk for chronic diseases.

Currently, limited research exists surrounding refugees and chronic diseases. Subsequent sections of this report will focus on chronic diseases in detail, along with related issues, such as access to health care and health behaviors. The following section will first give an overview of the general health status of refugees, as measured by perceived health status and the number of physically and mentally healthy days. When examining the following data, it is important to keep in mind the stages of refugee health and the way in which health status may change among individual refugees as they transition and integrate into their host countries.



## **Health Status**



Approximately 7% of Nebraska refugees reported being in poor physical health on 14 or more of the past 30 days.



Nebraska refugees from Iraq were significantly more likely than were other populations to report being in poor physical health.



Just over 5% of Nebraska refugees reported that poor physical or mental health limited their usual activities on 14 or more of the past 30 days.

### **Perceived Health Status**

How an individual views his or her own health



Three of every 10 Nebraska refugees reported being in fair or poor health.

Over half of refugees from Iraq reported being in fair or poor health.



### Perceived Health Status

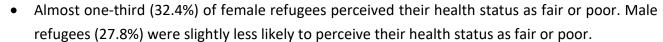
Would you say that in general your health is -? Excellent • Very Good • Good • Fair • Poor

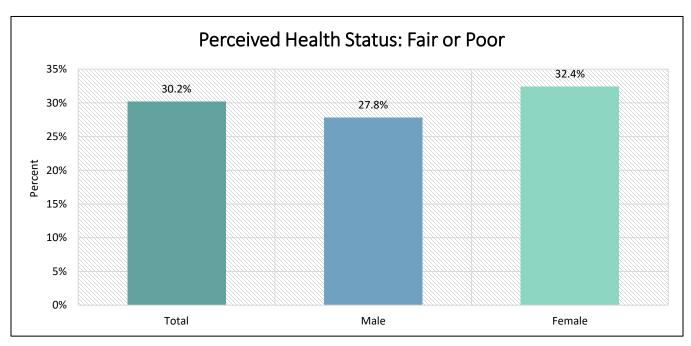
A study conducted in Canada found that refugees who had arrived in the past 12 months reported high levels of self-perceived physical and mental health. However, the report concluded that these high levels of self-perceived physical and mental health reported during the first year after resettlement were perhaps in part due to initial resettlement services and support, as well as the provided short-term healthcare. <sup>29</sup> Another study conducted with Iraqi immigrants and refugees in the United States established that both pre- and post-resettlement factors can influence current perceived health status.<sup>30</sup> Pre-resettlement factors can include an individual's exposure to trauma and environment stressors, while post-resettlement factors can include such stressors as unemployment.

The chart below represents the proportion of refugees who considered their health status as "fair" or "poor."

### **Key Findings**

Approximately 30% of refugees surveyed perceived their health status as fair or poor.





<sup>29</sup> Oda, A., Tuck, A., Agic, B., Hynie, M., Roche, B., & Kwame, M. (2017). Health care needs and use of health services among newly arrived Syrian refugees: a cross sectional study. Canadian Medical Association Journal, 5(2), E354-E358.

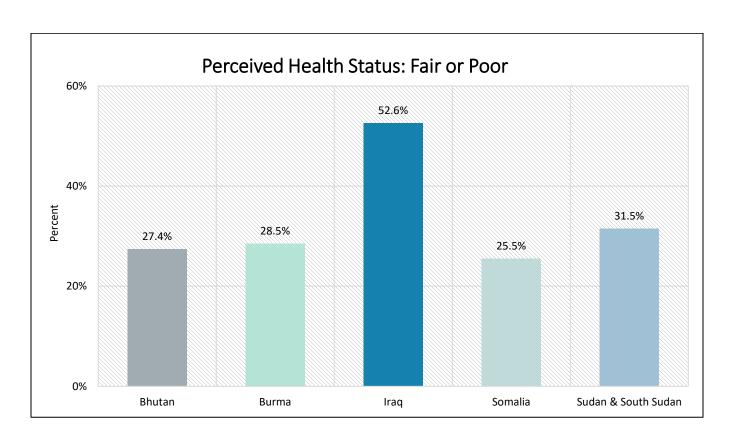
<sup>30</sup> Jamil, H., Nassar-McMillan, S., Lambert, R., Wang, Y., Ager, J., & Arnetz, B. (2010). Pre- and post-displacement stressors and time of migration as related to self-rated health among Iraqi immigrants and refugees in Southeast Michigan. Medicine, Conflict and Survival, 26(3), 207-222.

### Perceived Health Status

### By Country of Origin

The chart below represents the proportion of refugees who considered their health status as "fair" or "poor" by country of origin.

- Over one-fourth of refugees surveyed from each country considered their health status to be fair or poor.
- Refugees from Iraq were most likely to perceive their health status to be fair or poor, with over one-half (52.6%) of the population reporting such.
- Just under one-third of refugees from Sudan and South Sudan (31.5%) reported their health status to be fair or poor.

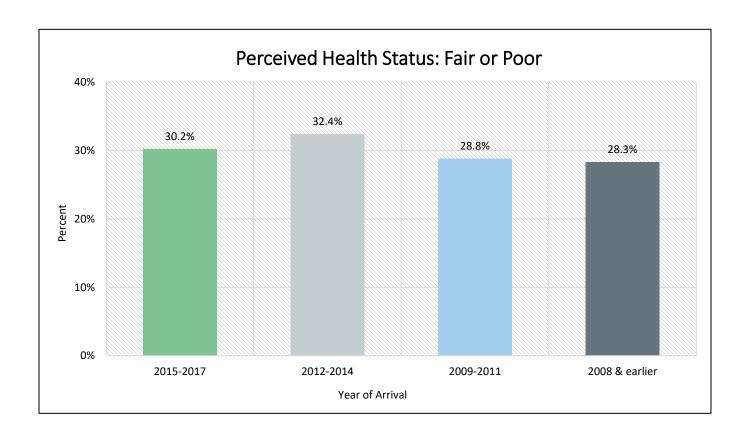


### Perceived Health Status

### By Year of Arrival

The chart below represents the proportion of refugees who considered their health status as "fair" or "poor" by year of arrival.

- Refugees with the longest stay in the United States (those arriving in 2008 and earlier) were least likely to report their health status as fair or poor at 28.3%, followed closely by those refugees arriving in 2009-2011 (28.8%).
- Refugees arriving in the United States in 2012-2014 (32.4%) were most likely to report their health status as fair or poor, followed by refugees arriving in 2015-2017 (30.2%).

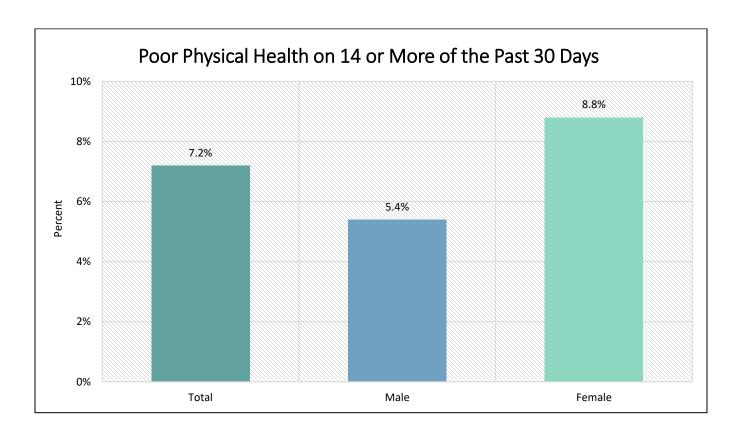


## Poor Physical Health

Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

The chart below represents the proportion of refugees who reported their physical health was not good on 14 or more of the past 30 days.

- Approximately 7% of all refugees surveyed reported being in poor physical health on 14 or more
  of the past 30 days.
- Female refugees (8.8%) were approximately three percentage points more likely to report being in poor physical health on 14 or more of the past 30 days than male refugees (5.4%) were.

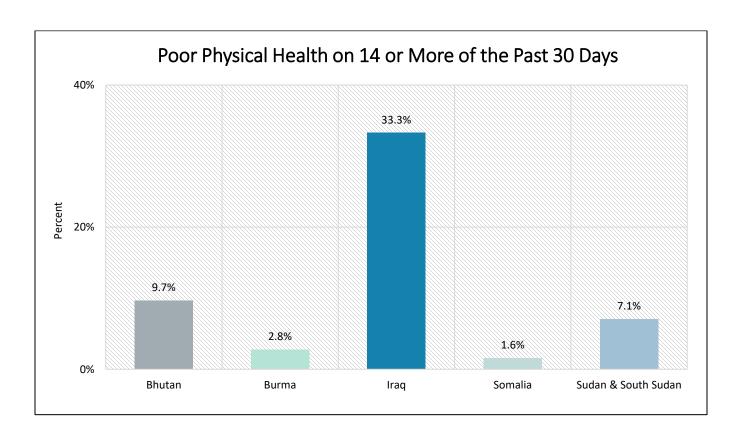


## Poor Physical Health

### By Country of Origin

The chart below represents the proportion of refugees who reported their physical health was poor on 14 or more of the past 30 days by country of origin.

- One-third of refugees from Iraq reported being in poor physical health on 14 or more of the past 30 days.
- Approximately one in ten refugees from Bhutan (9.7%) reported being in poor physical health on 14 or more of the past 30 days and 7.1% of refugees from Sudan and South Sudan reported the same.
- Refugees from Burma (2.8%) and Somalia (1.6%) were least likely to report being in poor physical health on 14 or more of the past 30 days.

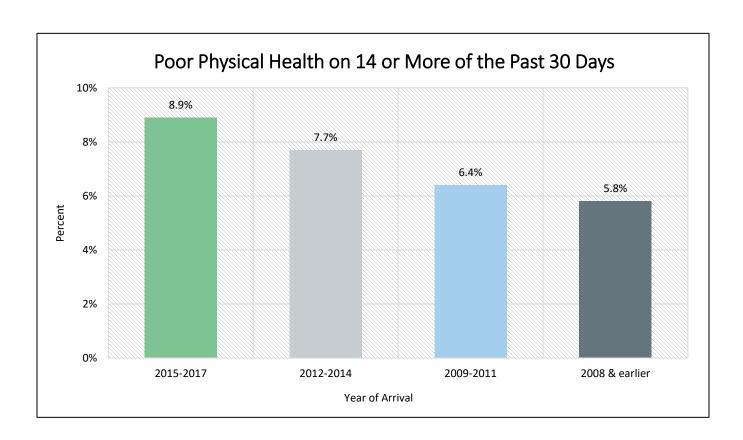


## Poor Physical Health

### By Year of Arrival

The chart below represents the proportion of refugees who reported their physical health was not good on 14 or more of the past 30 days by year of arrival.

- The percentage of refugees who reported their physical health was poor on 14 or more of the past 30 days decreased with the length of stay in the United States.
- The most recently arrived refugees (2015-2017) were most likely to report their physical health was poor on 14 or more of the past 30 days at 8.9%, followed by refugees arriving in 2012-2014 at 7.7%.
- Refugees arriving in 2009-2011 (6.4%) and in 2008 and earlier (5.8%) were less likely to report their physical health was poor on 14 or more of the past 30 days.

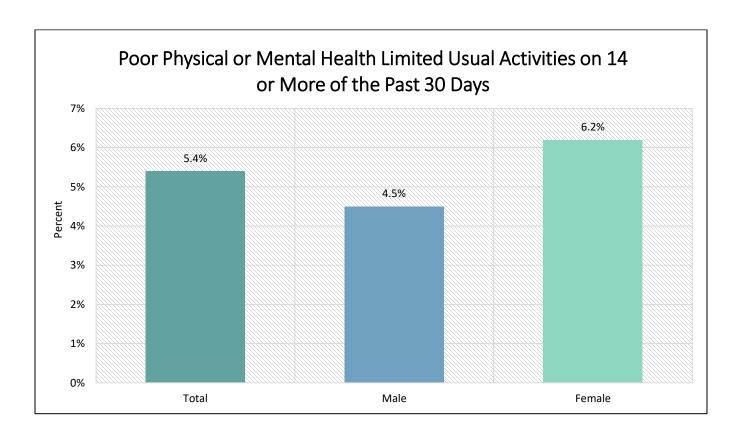


## **Activity Limitations**

During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

The chart below represents the proportion of refugees who reported poor physical or mental health limited their usual activities on 14 or more of the past 30 days.

- Overall, 5.4% of refugees surveyed reported poor physical or mental health limited their usual activities on 14 or more of the past 30 days.
- Female refugees (6.2%) were more likely to report poor physical or mental health limited their usual activities on 14 or more of the past 30 days than male refugees (4.5%) were.

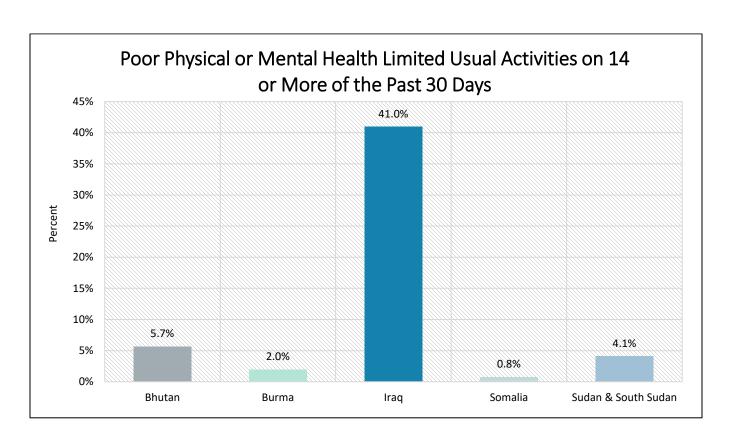


### **Activity Limitations**

### By Country of Origin

The chart below represents the proportion of refugees who reported poor physical or mental health limited their usual activities on 14 or more of the past 30 days by country of origin.

- Refugees from Iraq (41.0%) were most likely to report that poor physical or mental health limited their usual activities on 14 or more of the past 30 days. This percentage was over seven times greater than the percentage of Bhutan refugees (5.7%) who were somewhat more likely population to report the same.
- Refugees from Sudan and South Sudan (4.1%) were also somewhat more likely to report poor physical or mental health limited their usual activities on 14 or more of the past 30 days than refugees from Burma (2.0%) or Somalia (0.8%) were.

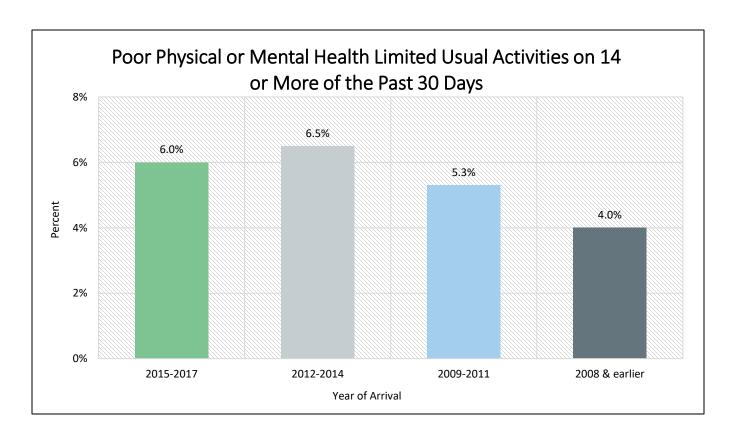


## **Activity Limitations**

### By Year of Arrival

The chart below represents the proportion of refugees who reported poor physical or mental health limited their usual activities on 14 or more of the past 30 days by year of arrival.

- Refugees arriving in 2008 and earlier (4.0%) were least likely to report poor physical or mental health limited their usual activities on 14 or more of the past 30 days.
- Refugees arriving in 2012-2014 (6.5%) were most likely to report poor physical or mental health limited their usual activities on 14 or more of the past 30 days, followed by refugees arriving in 2015-2017 (6.0%).





Before refugees arrive in the United States, they are subject to medical examinations as part of the application process. These examinations are used to identify any communicable diseases that may result in ineligibility for admission to the United States. These diseases include gonorrhea, infectious leprosy, infectious syphilis, and clinically active tuberculosis. Once refugees arrive in the United States, the Office of Refugee Resettlement is responsible for a second medical screening and medical treatment as needed. In Nebraska, this screening process is administered by the Nebraska Department of Health and Human Services. This health screening generally occurs within the first 90 days after arrival and addresses any issues identified in the overseas medical exam, evaluates current health status, provides immunizations, and ensures that refugees are referred for follow-up when needed. 32

In addition to these health screenings, refugees are often able to get short-term health insurance called Refugee Medical Assistance (RMA). However, this federally funded program is available only up to eight months from the date of admission.<sup>33</sup> Once the eight months is over, refugees who do not qualify for Medicaid must find another source of health insurance. While some refugees may be able to obtain health insurance through an employer, others must buy private health insurance, which can be expensive. Without education in the United States and with limited English proficiency, many refugees may find themselves in jobs without health insurance or unable to pay the premiums even with insurance. Among newly arrived refugees, even filling out paperwork can be a barrier to obtaining health care due to language and cultural barriers.

In addition to obtaining health insurance, refugees face other barriers to accessing health care. Language and communication barriers are often the biggest challenge and can affect all stages of accessing health care from making an appointment to understanding treatments and medicine.<sup>34</sup> While interpreters are required during visits to the doctor, this is not always the case and refugees may often use family members as interpreters.<sup>35</sup> In addition to language barriers, cultural beliefs may influence an individual's perspective on health care. For example, refugees may be unfamiliar with preventative care and less likely to use these types of health services. Furthermore, health professionals in the United States may have little experience in working with refugees and lack understanding of the unique health needs of refugees.

<sup>&</sup>lt;sup>31</sup> U.S. Citizenship and Immigration Services. (2018). Admissibility. *In USCIS policy manual*. Washington, District of Columbia: U.S. Citizenship and Immigration Services.

<sup>&</sup>lt;sup>32</sup> Nebraska Department of Health and Human Services. (2016). *Nebraska Refugee Health Screening Procedures*. Lincoln, NE: Nebraska Department of Health and Human Services

<sup>&</sup>lt;sup>33</sup> Office of Refugee Resettlement. (2015). Health insurance. Retrieved from www.acf.hhs.gov/orr/health

<sup>&</sup>lt;sup>34</sup> Morris, M.D., Popper, S.T., Rodwell, T.C., Brodine, S.K., & Brouwer, K.C. (2009). *Journal of Community Health, 34(6),* 529-538.

<sup>&</sup>lt;sup>35</sup> Title V of the Civil Rights Act of 1964, 42 U.S.C. (1964).



## **Access to Health Care**





Over two-fifths of Nebraska refugees had no health care coverage of any kind.

72.5%

Refugees from Somalia were the most likely population to have no health care coverage of any kind.

24.6%

Approximately one-fourth of Nebraska refugees were unable to see a doctor due to cost in the past year.

## **Understanding Health Information**



Just under three-fourths of Nebraska refugees had difficulty understanding information in English from health care providers.



Over four-fifths of refugees arriving in 2015-2017 had difficulty understanding information in English from health care providers.



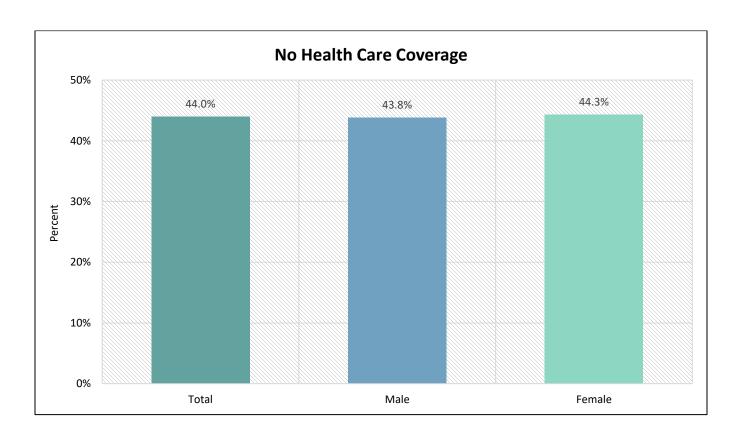
## No Health Care Coverage

Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, government plans such as Medicare, or Indian Health Services?

Lack of a health care plan or inadequate insurance coverage prevents many individuals from receiving needed care, as they are financially unable to pay for services without the help of insurance. Individuals with health insurance are generally more likely to have a primary care provider and to have received appropriate preventative care, such as early prenatal care, immunizations, or health screenings.

The chart below represents the proportion of refugees surveyed who reported not having health care coverage.

- Over two-fifths (44.0%) of refugees surveyed reported not having health care coverage.
- Similar percentages of male refugees (43.8%) and female refugees (44.3%) reported not having health care coverage.

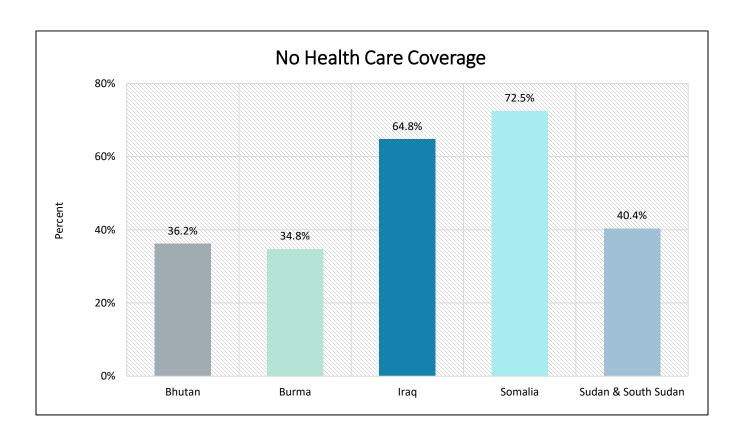


## No Health Care Coverage

### By Country of Origin

The chart below represents the proportion of refugees surveyed who reported not having health care coverage by country of origin.

- Refugees from Somalia (72.5%) were most likely to report not having health care coverage.
- Refugees from Iraq (64.8%) were also more likely to report not having health insurance, with almost two-thirds reporting such.
- Approximately two-fifths of refugees from Sudan and South Sudan (40.4%) reported not having health care coverage.
- Refugees from Bhutan (36.2%) and Burma (34.8%) were least likely to report not having health care coverage. Still, those without health care coverage constituted over one-third of each population.

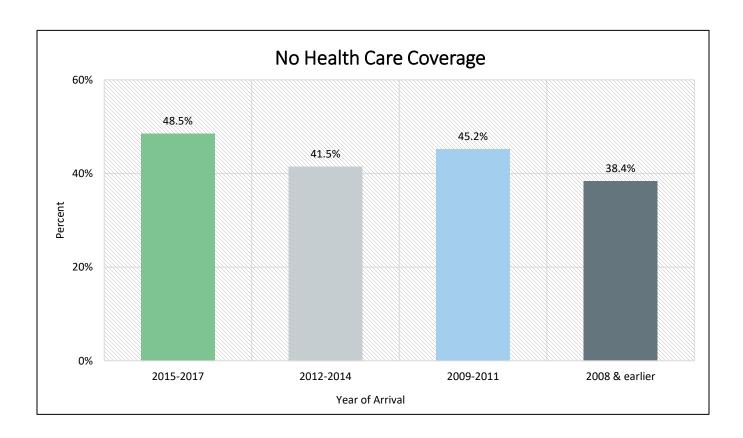


## No Health Care Coverage

### By Year of Arrival

The chart below represents the proportion of refugees surveyed who reported not having health care coverage by year of arrival.

- Over two-fifths of refugees arriving after 2009 reported not having health care coverage. The
  most recent arrival group (2015-2017) were most likely to report not having health care coverage
  at 48.5%.
- Just under 40% of refugees who arrived in 2008 and earlier (38.4%) reported not having health care coverage.



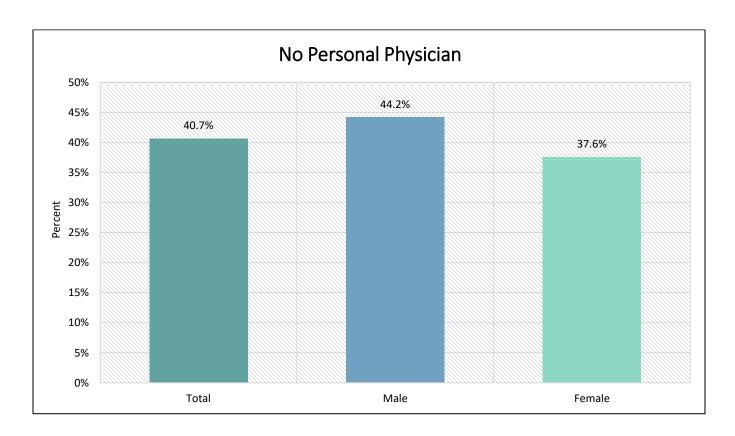
## No Personal Physician

Do you have one person (or more than one person) you think of as your personal doctor or health care provider?

Including various specialties in the medical profession, primary care physicians provide a combination of direct care and, as necessary, counsel the patient in the appropriate use of specialists and treatments. Individuals with a medical home are more likely to have routine medical visits and health screenings.<sup>36</sup>

The chart below represents the proportion of refugees surveyed who reported not having a personal physician.

- Just over two-fifths (40.7%) of refugees surveyed reported not having a personal physician.
- Male refugees (44.2%) were more likely to report not having a personal physician, compared to female refugees (37.6%).



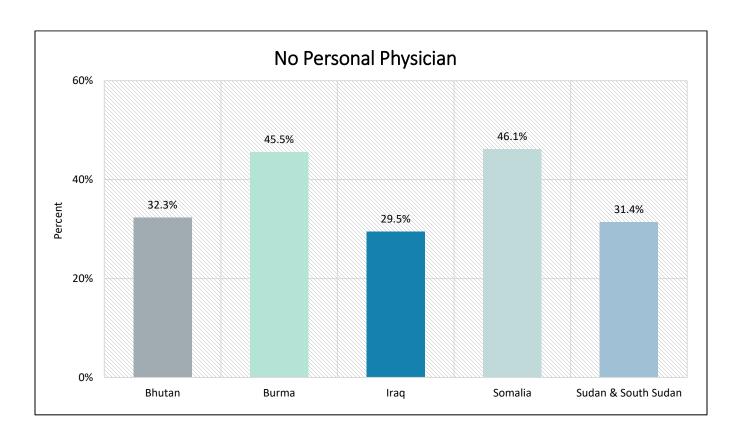
<sup>36</sup> National Institutes of Health. (2015). Choosing a primary care provider. Retrieved from https://medlineplus.gov/ency/article/001939.htm

## No Personal Physician

### By Country of Origin

The chart below represents the proportion of refugees surveyed who reported not having a personal physician by country of origin.

- Refugees from Somalia (46.1%) and refugees from Burma (45.5%) were most likely to report not having a personal physician.
- Approximately one-third of refugees from Bhutan (32.3%) and refugees from Sudan and South Sudan (31.4%) reported not having a personal physician.
- Three of every ten refugees from Iraq (29.5%) reported not having a personal physician.

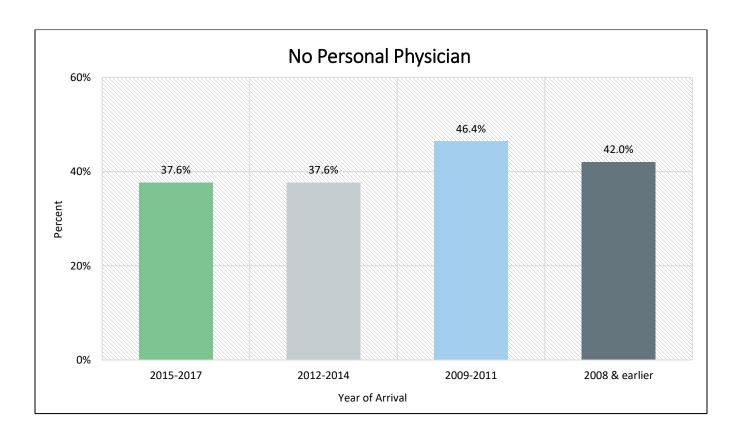


# No Personal Physician

# By Year of Arrival

The chart below represents the proportion of refugees surveyed who reported not having a personal physician by year of arrival.

- Approximately 38% of refugees arriving in 2015-2017 and refugees arriving in 2012-2014 reported not having a personal physician.
- Refugees arriving in 2009-2011 (46.4%) were most likely to report not having a personal physician, followed by refugees arriving in 2008 and earlier (42.0%).



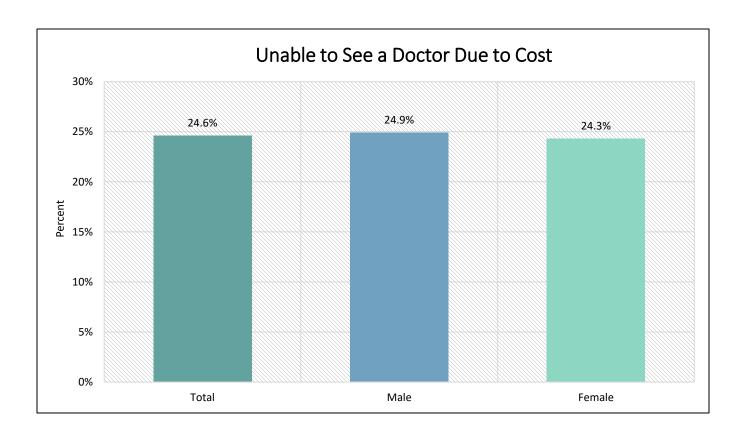
# Unable to See a Doctor Due to Cost

Was there a time in the past 12 months when you needed to see a doctor, but could not because of cost?

For people with no insurance and limited financial resources, the decision of whether or not to see a doctor is often a financial choice rather than a medical one. Even when health benefits are available, they may not be sufficient to ensure access to needed health care services. Individuals with health insurance may still be confronted with significant financial hardships in paying for or obtaining health services or products.

The chart below represents the proportion of refugees surveyed who reported being unable to see a doctor due to cost in the past 12 months.

- Approximately one-fourth of all refugees surveyed (24.6%) reported being unable to see a doctor due to cost in the past 12 months.
- Similar proportions of male refugees (24.9%) and female refugees (24.3%) reported being unable to see a doctor due to cost in the past 12 months.

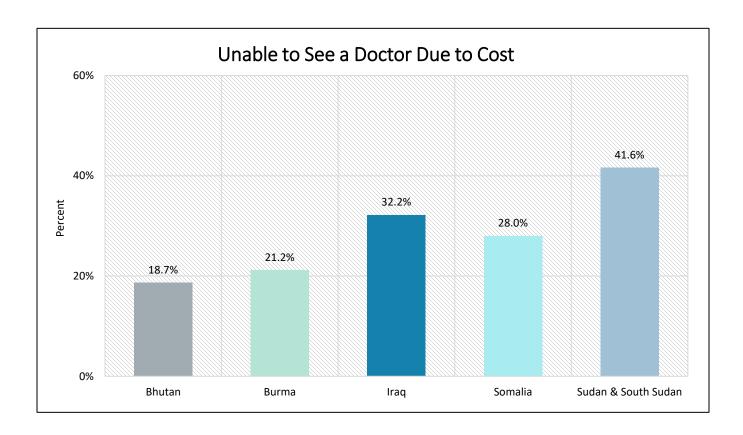


# Unable to See a Doctor Due to Cost

### By Country of Origin

The chart below represents the proportion of refugees surveyed who reported being unable to see a doctor due to cost in the past 12 months by country of origin.

- Refugees from Sudan and South Sudan (41.6%) were most likely to report being unable to see a
  doctor due to cost in the past 12 months, followed by approximately one-third of refugees from
  Iraq (32.2%) and 28% of refugees from Somalia.
- Refugees from Bhutan (18.7%) and refugees from Burma (21.2%) were somewhat less likely to report being unable to see a doctor due to cost in the past 12 months.

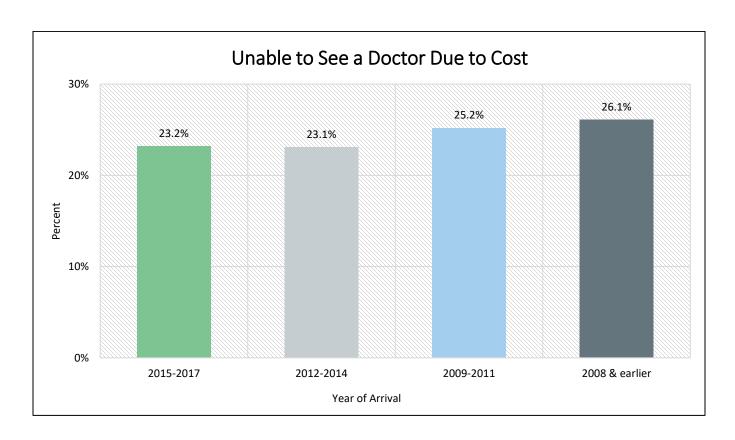


# Unable to See a Doctor Due to Cost

### By Year of Arrival

The chart below represents the proportion of refugees surveyed who reported being unable to see a doctor due to cost in the past 12 months by year of arrival.

- Just over one-fourth of refugees arriving in 2011 and earlier reported being unable to see a doctor due to cost in the past 12 months. Refugees arriving in 2008 and earlier (26.1%) were slightly more likely to report being unable to see a doctor due to cost than refugees arriving in 2009-2011 (25.2%) were.
- Approximately 23% of refugees arriving from 2012-2017 reported being unable to see a doctor due to cost in the past 12 months.



# **Understanding Health Information**

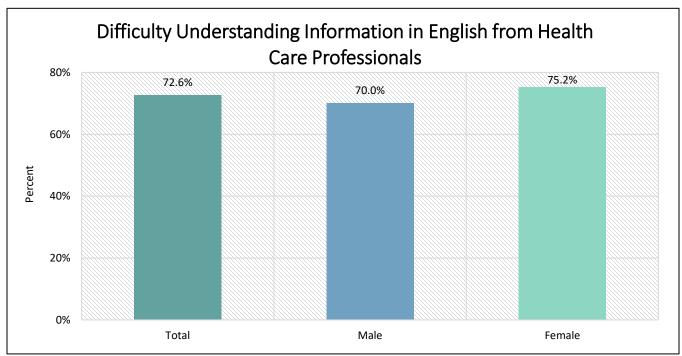
How difficult is it for you to understand information that doctors, nurses and other health professionals tell you in English?

Very Easy • Somewhat Easy • Somewhat Difficult • Very Difficult

Health literacy is defined as "the degree to which an individual has the capacity to obtain, communicate, process, and understand basic health information and services to make appropriate health decisions." Having the ability to understand spoken health information in English is essential to receiving necessary and adequate health services in Nebraska.

The chart below represents the proportion of refugees who reported having difficulty understanding spoken health information in English. Refugees were considered to have difficulty if they responded that it was "somewhat difficult" or "very difficult" to understand information in English from health care professionals.

- Just under three-fourths of refugees surveyed (72.6%) reported having difficulty understanding information in English from health care professionals.
- Female refugees (75.2%) were approximately five percentage points more likely to report having difficulty understanding information in English from health care professionals than male refugees (70.0%) were.



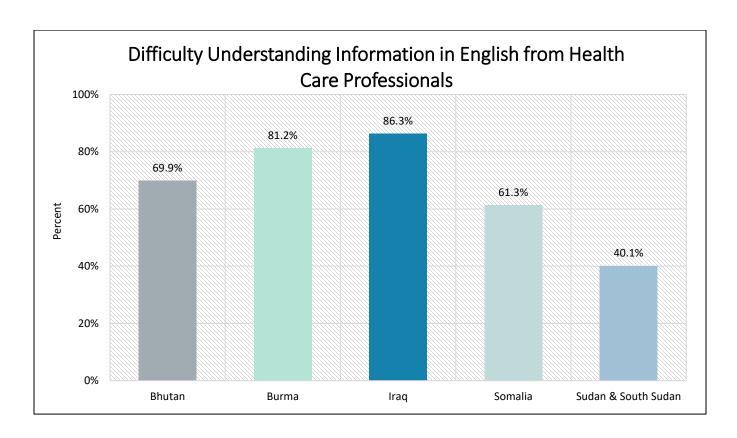
<sup>&</sup>lt;sup>37</sup> Title V of the Patient Protection and Affordable Care Act, 42 U.S.C. § 5002 (2010).

# **Understanding Health Information**

### By Country of Origin

The chart below represents the proportion of refugees who reported having difficulty understanding spoken health information in English by country of origin. Refugees were considered to have difficulty if they responded that it was "somewhat difficult" or "very difficult" to understand information in English from health care professionals.

- More than four out of five refugees from Iraq (86.3%) and refugees from Burma (81.2%) reported having difficulty understanding information in English from health care professionals.
- Well over half of refugees from Bhutan (69.9%) and refugees from Somalia (61.3%) reported having difficulty understanding information from health care professionals.
- Approximately two-fifths of refugees from Sudan and South Sudan (40.1%) reported having difficulty understanding information in English from health care professionals.

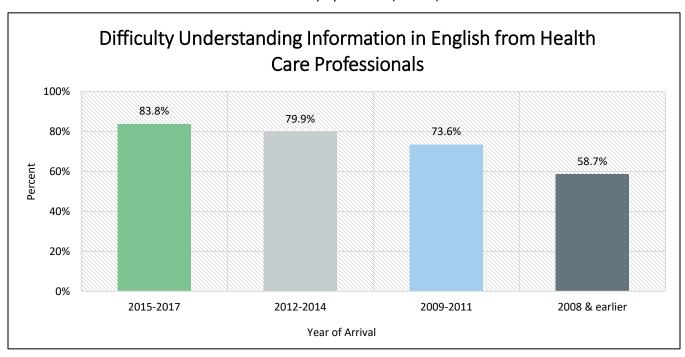


# **Understanding Health Information**

## By Year of Arrival

The chart below represents the proportion of refugees who reported having difficulty understanding spoken health information in English by year of arrival. Refugees were considered to have difficulty if they responded that it was "somewhat difficult" or "very difficult" to understand information in English from health care professionals.

- The difficulty of understanding information in English from health care professionals declined as refugees length of stay in the United States increased.
- The most recently arrived refugee group, those arriving in 2015-2017, was most likely to report
  having difficulty understanding information in English from health care professionals at
  approximately 84%.
- Refugees arriving in 2012-2014 (79.9%) were also more likely to report having difficulty understanding information in English from health care professionals, followed by refugees arriving in 2009-2011 (73.6%).
- Although refugees arriving in 2008 and earlier were least likely to report having difficulty understanding information in English from health care professionals, the percentage reporting difficulties still included over half of the population (58.7%).



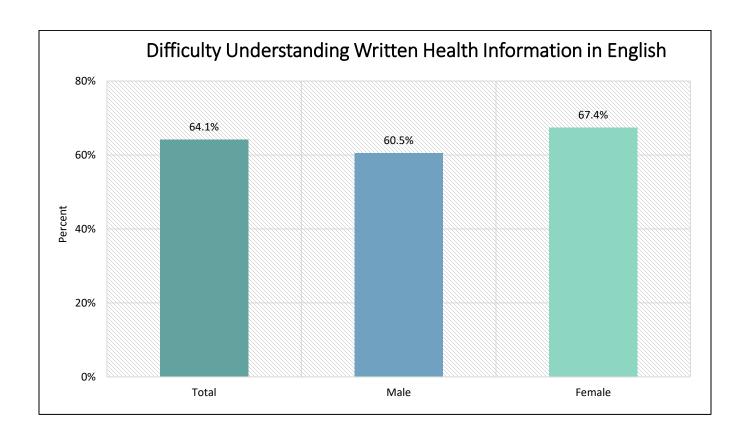
# **Understanding Written Health Information**

You can find written information about health on the internet, in newspapers and magazines, and in brochures in the doctor's office and clinic. In general, how difficult is it for you to understand written health information in English?

Very Easy • Somewhat Easy • Somewhat Difficult • Very Difficult

The chart below represents the proportion of refugees who reported having difficulty understanding written health information in English. Refugees were considered to have difficulty if they responded that it was "somewhat difficult" or "very difficult" to understand written health information in English.

- Approximately 64% of refugees surveyed reported having difficulty understanding written health information in English.
- Female refugees (67.4%) were approximately seven percentage points more likely to report having difficulty understanding written health information in English than male refugees (60.5%) were.

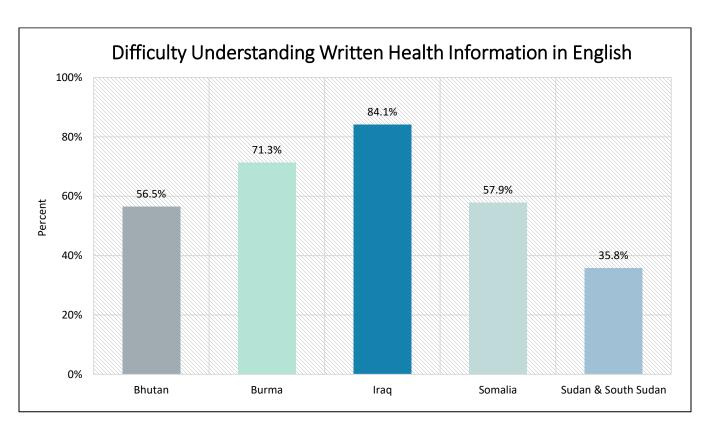


# **Understanding Written Health Information**

# By Country of Origin

The chart below represents the proportion of refugees who reported having difficulty understanding written health information in English by country of origin. Refugees were considered to have difficulty if they responded that it was "somewhat difficult" or "very difficult" to understand written health information in English.

- More than four out of every five refugees surveyed from Iraq (84.1%) reported having difficulty understanding written health information in English.
- Refugees from Burma (71.3%) were also more likely to report having difficulty understanding written health information in English.
- Over half of refugees from Bhutan (56.5%) and refugees from Somalia (57.9%) reported having difficulty understanding written health information in English.
- Refugees from Sudan and South Sudan (35.8%) were least likely to report having difficulty understanding written health information in English.

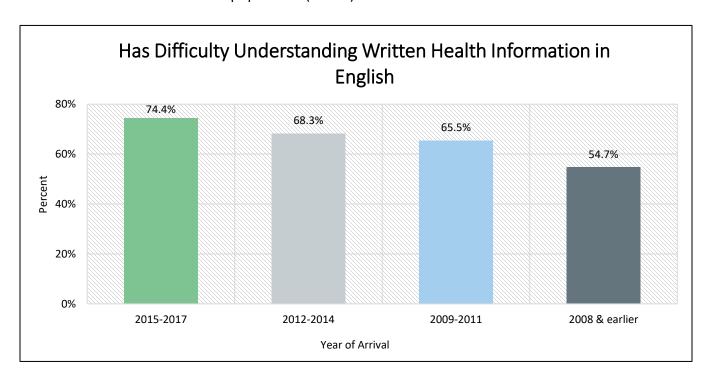


# **Understanding Written Health Information**

## By Year of Arrival

The chart below represents the proportion of refugees who reported having difficulty understanding written health information in English by year of arrival. Refugees were considered to have difficulty if they responded that it was "somewhat difficult" or "very difficult" to understand written health information in English.

- The difficulty of understanding written health information in English decreased as length of stay
  in the United States increased.
- Approximately three-fourths (74.4%) of those arriving in 2015-2017, reported having difficulty understanding written health information in English.
- Over two-thirds of refugees arriving in 2012-2014 (68.3%) reported having difficulty understanding written health information in English and just under two-thirds of refugees arriving in 2009-2011 (65.5%) reported the same.
- Although refugees arriving in 2008 and earlier were least likely to report having difficulty understanding written health information in English, the percentage reporting difficulties still included over half of the population (54.7%).



# Chronic Disease

The majority of research surrounding refugee health concentrates on health prior to resettlement and focuses on infectious disease. Limited data exists on the prevalence of chronic non-communicable diseases and associated risk factors among refugees. To adequately assist refugees in settling in and thriving in their new communities, post-resettlement health issues, and particularly chronic disease prevalence, must also be considered.

Though more research is needed, recent studies have shown that refugees may be entering the United States with preexisting chronic conditions at a higher rate than previously thought, namely, with diabetes and hypertension. <sup>38,39</sup> One study attributed the prevalence of diabetes among refugees to a history of trauma and malnutrition, various socioeconomic factors, and health care systems that are not accustomed to treating their complex issues. <sup>40</sup> Upon arrival in the United States, these issues may not be a priority for refugees who often face more immediate concerns, including finding housing and employment.

A recent study also showed that diabetes and hypertension increased significantly among refugees with increasing length of stay in the United States. <sup>41</sup> This correlation between the development of chronic diseases and length of residence in the United States is a relatively new topic that needs further exploration. Circumstances unique to resettled refugees should be considered when examining chronic disease. For example, barriers to accessing health care and cultural beliefs surrounding health may contribute to refugees' willingness to seek diagnoses and treatment. Additionally, as length of stay in the United States increases, refugees may adopt unhealthy lifestyle habits as a part of acculturation. These habits, such as alcohol consumption, unhealthy eating habits, and smoking can increase an individual's risk for chronic disease. <sup>42</sup>

Refugees are also less likely to have health insurance and chronic disease generally requires long-term treatment. Left untreated, chronic disease can cause serious complications and even death. Additionally, chronic disease can hinder an individual's ability to work. Both early detection and access to treatment will be essential in managing chronic diseases among refugees. The following section aims to address the gap in chronic disease data among refugees by identifying the prevalence of certain chronic diseases among the top refugee populations in Nebraska.

<sup>&</sup>lt;sup>38</sup> Yun, K., Hebrank, K., Graber, L., Sullivan, M., Chen, I., & Gupta, J. (2012). High prevalence of chronic non-communicable conditions among adult refugees: implications for practice and policy. *Journal of Community Health*, *37*(5), 1110-1118.

<sup>&</sup>lt;sup>39</sup> Doocy, S., Lyles, E., Roberton, T., Akhu-Zaheya, L., Oweis, A., & Burnham, G. (2015). Prevalence and care-seeking for chronic diseases among Syrian refugees in Jordan. *Conflict and Health*, *10*(21).

<sup>&</sup>lt;sup>40</sup> Wagner, J., Berthold, S.M., Buckley, T., & Scully, M. (2015) Diabetes among refugee populations: what newly arriving refugees can learn from resettled Cambodians. *Current Diabetes Reports*, *15*(8), 618.

<sup>&</sup>lt;sup>41</sup> Golub, N., Seplaki, C., Stockman, D., Thevenet-Morrison, K., Fernandez, D., & Fisher, S. (2017). Journal of Immigrant and Minority Health, 20(2), 296-306.

<sup>&</sup>lt;sup>42</sup> Hunter, P. (2016). The refugee crisis challenges national health care systems. *EMBO Reports, 17(4),* 492-495.



# **Chronic Disease**

9.9%

One of every ten Nebraska refugees had been diagnosed with high cholesterol.



Male refugees reported higher rates of heart attack, coronary heart disease, stroke, COPD, and kidney disease than did female refugees.



Female refugees (8.0%) were more likely than were male refugees (4.8%) to have ever been diagnosed with diabetes.

# Chronic Disease by Year of Arrival

1.5x

Refugees arriving in 2008 and earlier (5.1%) were more likely than were refugees arriving in 2015-2017 (3.3%) to have ever been diagnosed with asthma.



Refugees arriving in 2008 and earlier (2.6%) were almost twice as likely as were refugees arriving in 2015-2017 (1.4%) to have ever been diagnosed with a heart attack.



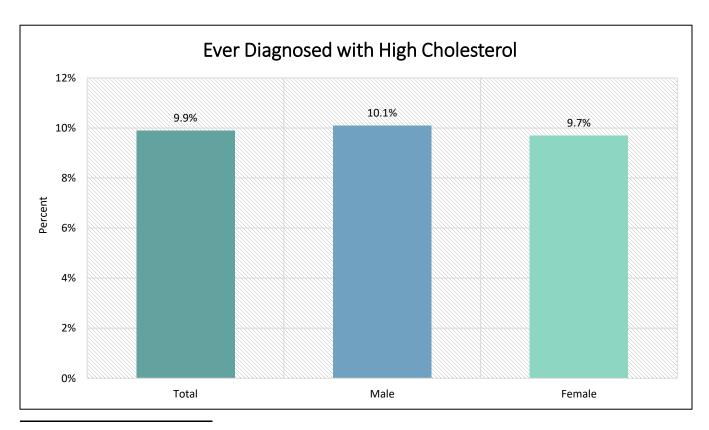
# **High Cholesterol**

Have you ever been told by a doctor, nurse, or other health professional that your blood cholesterol is high?

High cholesterol occurs when low-density lipoprotein (LDL) levels are high. LDL, often called bad cholesterol, makes up most of the body's cholesterol. An estimated 73.5 million adults in the United States (31.7%) have high LDL, or high cholesterol.<sup>43</sup> Health conditions, life style, and family history are the most common factors that can increase the risk of high cholesterol.<sup>44</sup>

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with high cholesterol.

- Approximately one-tenth of refugees surveyed reported having ever been diagnosed with high cholesterol.
- Similar percentages of male refugees (10.1%) and female refugees (9.7%) reported having ever been diagnosed with high cholesterol.



<sup>&</sup>lt;sup>43</sup> American Heart Association. (2015). Heart Disease and Stroke Statistics. Retrieved from http://circ.ahajournals.org/content/early/2014/12/18/CIR.000000000000152/tab-article-info

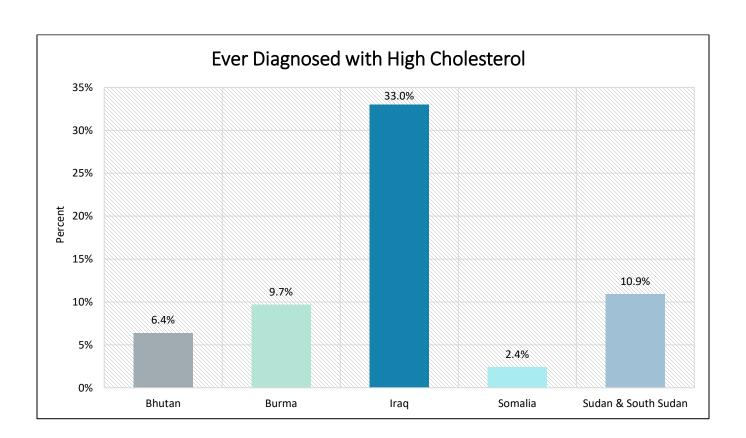
<sup>&</sup>lt;sup>44</sup> Centers for Disease Control and Prevention. (2016). High cholesterol risk factors. Retrieved from www.cdc.gov/cholesterol/risk\_factors.htm

# **High Cholesterol**

### By Country of Origin

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with high cholesterol by country of origin.

- Approximately one-third of refugees from Iraq (33.0%) reported having ever been diagnosed with high cholesterol. This was approximately three times the percentage of the refugees from Sudan & South Sudan (10.9%) who had the second highest percentage of those who reported having ever been diagnosed with high cholesterol.
- Approximately one of every ten refugees from Burma (9.7%) reported having ever been diagnosed with high cholesterol.
- Refugees from Bhutan (6.4%) and refugees from Somalia (2.4%) were somewhat less likely to report having ever been diagnosed with high cholesterol than other populations.

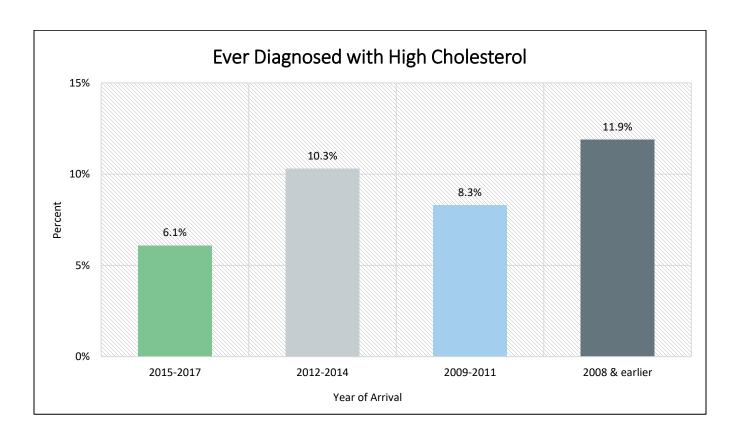


# **High Cholesterol**

### By Year of Arrival

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with high cholesterol by year of arrival.

- Refugees with the longest stay in the United States, those arriving in 2008 and earlier, were most likely to report having ever been diagnosed with high cholesterol at approximately 12%.
- Approximately one out of every ten refugees arriving in 2012-2014 (10.3%) reported having ever been diagnosed with high cholesterol.
- Refugees with the shortest stay in the United States, those arriving in 2015-2017, were least likely to report having ever been diagnosed with high cholesterol at approximately 6%.



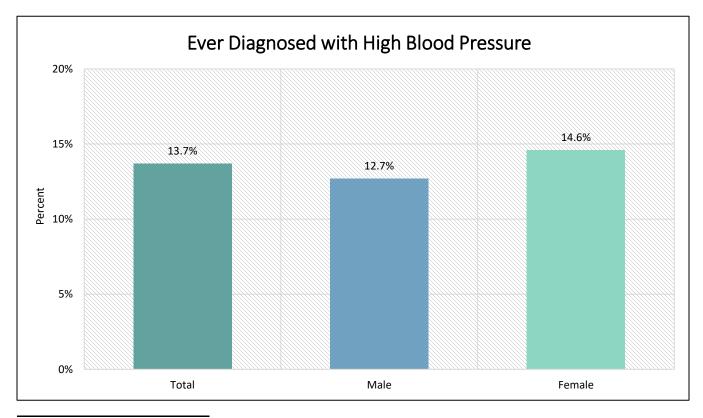
# High Blood Pressure

Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?

High blood pressure, clinically known as hypertension, occurs when blood flows through the vessels with a greater force than usual.<sup>45</sup> Conditions of the kidney or nervous system, body hormone levels, and water or salt levels in the body can affect blood pressure. Research has shown that individuals who are obese, African American, frequently stressed, or drink larger amounts of alcohol are more susceptible to hypertension.<sup>46</sup>

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with high blood pressure.

- Approximately 14% of refugees surveyed reported having ever been diagnosed with high blood pressure.
- Female refugees (14.6%) were slightly more likely to report having ever been diagnosed with high blood pressure than male refugees (12.7%) were.



<sup>45</sup> National Institutes of Health. (2016). Hypertension. Retrieved from www.ncbi.nlm.nih.gov/pubmedhealth/PMHT0024199/

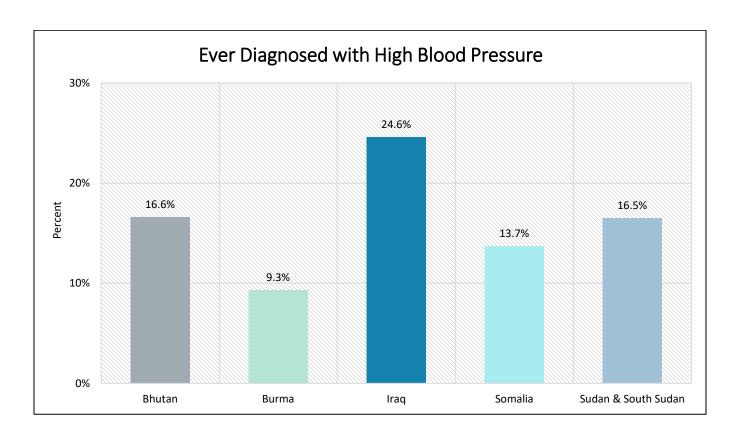
<sup>46</sup> Ibid.

# High Blood Pressure

# By Country of Origin

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with high blood pressure by country of origin.

- Approximately one-fourth of refugees from Iraq (24.6%) reported having ever been diagnosed with high blood pressure.
- Refugees from Bhutan (16.6%) and from Sudan and South Sudan (16.5%) reported similar percentages of individuals having ever been diagnosed with high blood pressure.
- Approximately 14% of refugees from Somalia and approximately 9% of refugees from Burma reported having ever been diagnosed with high blood pressure.

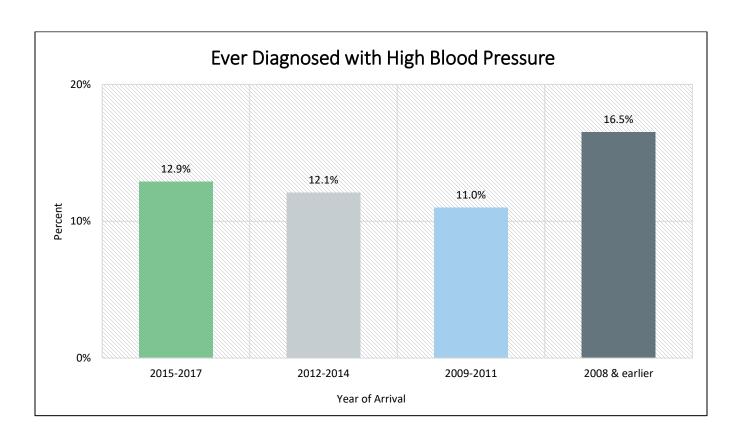


# High Blood Pressure

### By Year of Arrival

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with high blood pressure by year of arrival.

- Refugees with the longest stay in the United States, those arriving in 2008 and earlier, were noticeably more likely to report having ever been diagnosed with high blood pressure at 16.5% than other populations.
- Approximately 13% of refugees arriving in 2015-2017 and approximately 12% of refugees arriving in 2012-2014 reported having ever been diagnosed with high blood pressure.
- Refugees arriving in 2009-2011 were only slightly less likely to report having ever been diagnosed with high blood pressure at 11% than other populations.



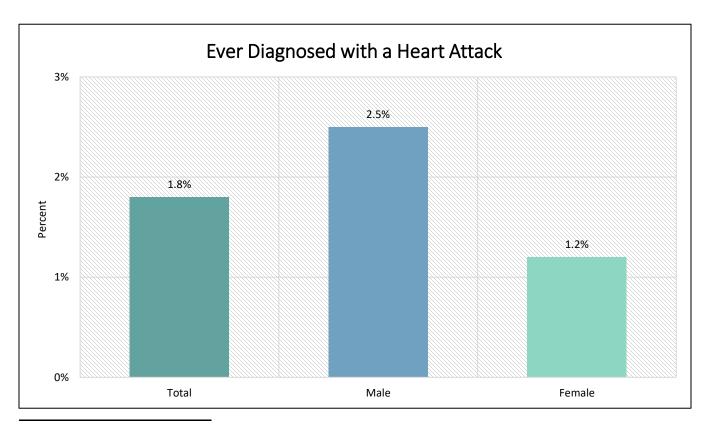
# Heart Attack

Has a doctor, nurse, or other health professional ever told you that you had a heart attack, also called a myocardial infarction?

A heart attack or myocardial infarction (MI) is permanent damage to the heart muscle. Heart attacks can occur when the heart cannot get enough oxygen, due to oxygen-rich blood being blocked off from the heart muscle.<sup>47</sup> Heart attacks often occur in individuals with coronary heart disease. Increasing physical activity, maintaining a healthy diet, and reducing stress can help to improve heart health.<sup>48</sup>

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with a heart attack.

- Just under 2% of refugees surveyed reported having ever been diagnosed with a heart attack.
- Male refugees (2.5%) were twice as likely to report having ever been diagnosed with a heart attack as female refugees (1.2%).



<sup>&</sup>lt;sup>47</sup> National Institutes of Health. (2016). Myocardial infarction. Retrieved from www.ncbi.nlm.nih.gov/pubmedhealth/PMHT0021982

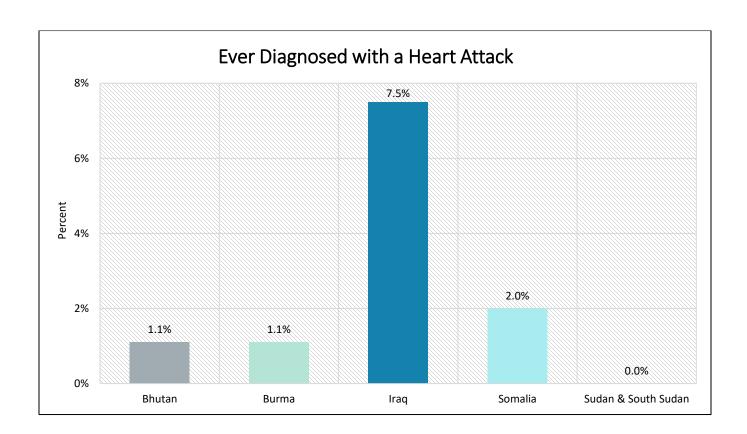
<sup>&</sup>lt;sup>48</sup> Centers for Disease Control and Prevention. (2016). Life after a heart attack. Retrieved from www.cdc.gov/heartdisease/heart\_attack\_recovery.htm

# **Heart Attack**

### By Country of Origin

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with a heart attack by country of origin.

- Refugees from Iraq (7.5%) were most likely to report having ever had a heart attack. This
  percentage was over three times higher than the percentage of refugees from Somalia (2.0%),
  which was the second highest percentage.
- Approximately one percent of refugees from both Bhutan and Burma reported the same.

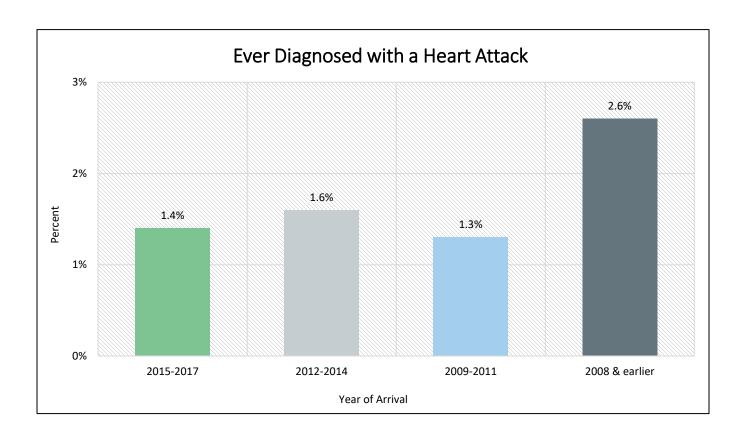


# Heart Attack

### By Year of Arrival

The below chart represents the proportion of refugees surveyed that reported having ever been diagnosed with a heart attack by year of arrival.

- Refugees with the longest stay in the United States (arriving in 2008 and earlier) were most likely to report having ever been diagnosed with a heart attack at 2.6%.
- Refugees arriving in the United States in 2009 or later were somewhat less likely to report having ever had a heart attack, ranging from 1.3% to 1.6%.



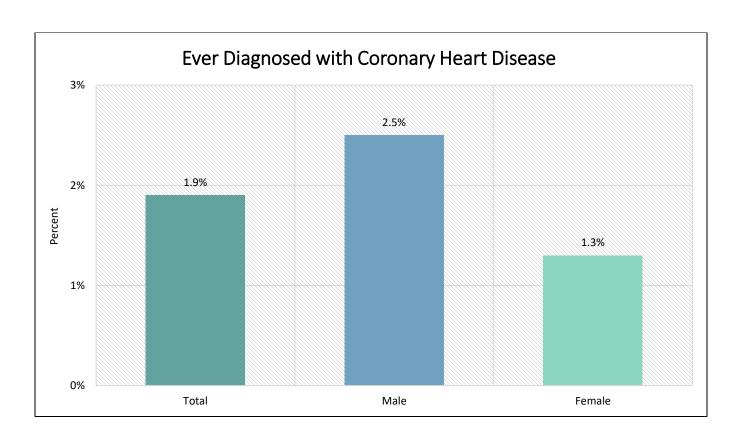
# Coronary Heart Disease

Has a doctor, nurse, or other health professional ever told you that you had angina or coronary heart disease?

Coronary heart disease is the narrowing of coronary arteries due to the buildup of plaque. With narrowed passageways, the amount of blood delivered is lessened, thus increasing the risk for a heart attack. Various tests can be used to diagnose coronary heart disease, such as electrocardiograms (EKGs), stress testing, or echocardiography.<sup>49</sup>

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with coronary heart disease.

- Approximately 2% of refugees surveyed reported having ever been diagnosed with coronary heart disease.
- Male refugees (2.5%) were almost twice as likely to report having ever been diagnosed with coronary heart disease as female refugees (1.3%).



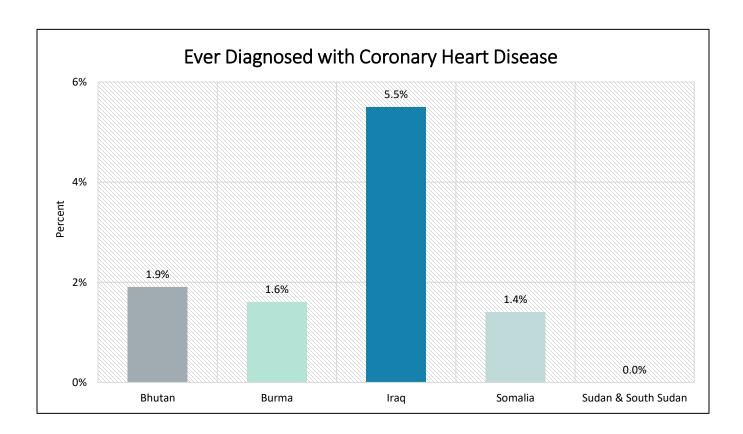
<sup>49</sup> National Institutes of Health. (2016). What is coronary heart disease. Retrieved from www.nhlbi.nih.gov/health/health-topics/topics/cad

# Coronary Heart Disease

### By Country of Origin

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with coronary heart disease by country of origin.

- Refugees from Iraq (5.5%) were most likely refugee to report having ever been diagnosed with coronary heart disease. They were almost three times more likely to report having been diagnosed with coronary heart disease than refugees from Bhutan (1.9%) who had the second highest percentage.
- Refugees from Sudan and South Sudan (0.0%) were least likely to report having ever been diagnosed with coronary heart disease, followed by refugees from Somalia (1.4%) and refugees from Burma (1.6%).

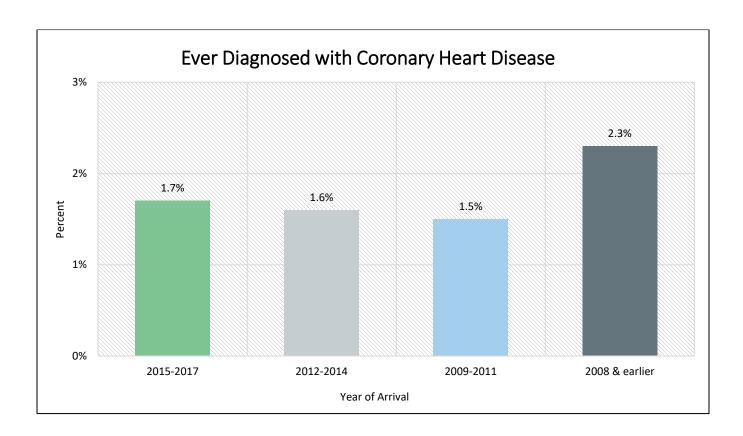


# Coronary Heart Disease

# By Year of Arrival

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with coronary heart disease by year of arrival.

- Refugees with the longest stay in the United States (arriving in 2008 and earlier) were most likely to report having ever been diagnosed with coronary heart disease (2.3%).
- Similar percentages of refugees arriving in 2009 and later, between 1.5% and 1.7%, reported having ever been diagnosed with coronary heart disease.



# Stroke

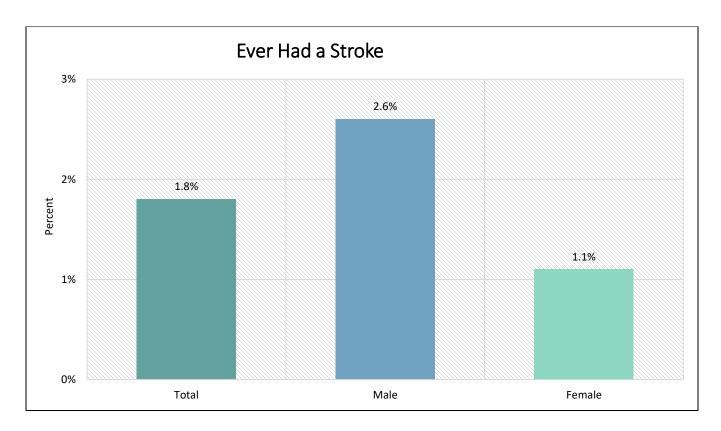
Has a doctor, nurse, or other health professional ever told you that you had a stroke?

A stroke occurs when blood flow to part of the brain stops. As the blood flow is interrupted, brain cells begin to die, as they cannot get the necessary oxygen. Strokes can cause brain damage, long-term disability, or death.<sup>50</sup> The risk of having a stroke may be reduced by refraining from smoking, maintaining a healthy weight, getting physical activity, and controlling high blood pressure and cholesterol.

The chart below represents the proportion of refugees surveyed that reported having ever had a stroke.

#### **Key Findings**

- Just under 2% of refugees surveyed reported having ever had a stroke.
- Male refugees (2.6%) were over twice as likely to have ever had a stroke as female refugees (1.1%) were.



# Stroke

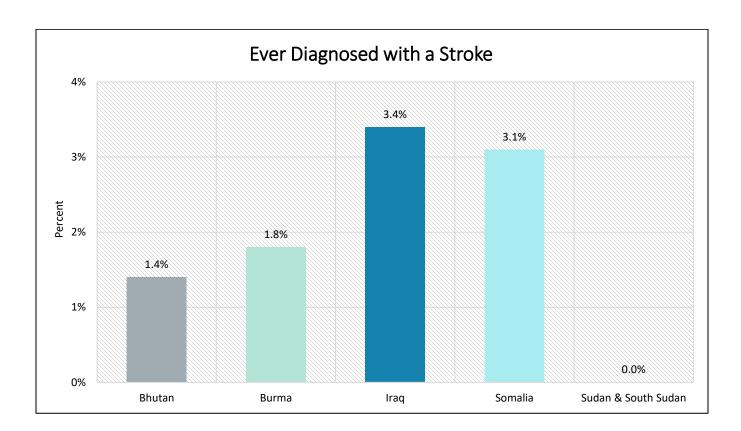
in .

<sup>&</sup>lt;sup>50</sup> Centers for Disease Control and Prevention. (2016). About stroke. Retrieved from www.cdc.gov/stroke/about.htm

### By Country of Origin

The chart below represents the proportion of refugees surveyed that reported having ever had a stroke by country of origin.

- Refugees from Iraq (3.4%) and Somalia (3.1%) were most likely to report having ever had a stroke.
- Just under two percent of refugees from Burma (1.8%) reported having ever had a stroke and 1.4% of refugees from Bhutan reported the same.

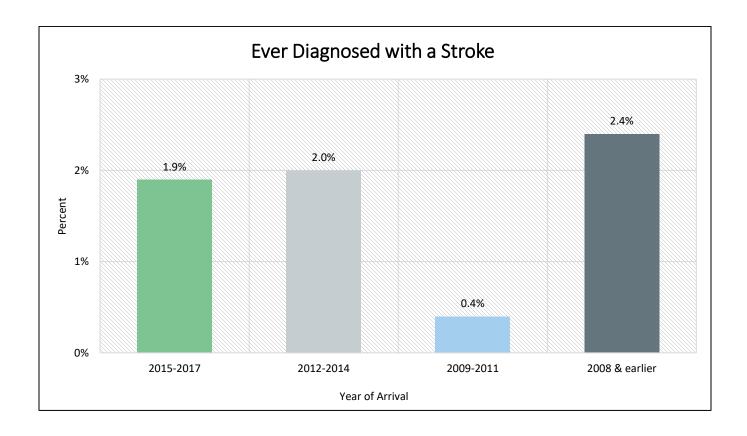


# Stroke

### By Year of Arrival

The chart below represents the proportion of refugees surveyed that reported having ever had a stroke by year of arrival.

- Refugees arriving in 2008 and earlier (2.4%) were most likely to report having ever had a stroke.
- Approximately 2% of refugees arriving in 2012-2014 and in 2015-2017 reported having ever had a stroke.
- Only 0.4% of refugees arriving in 2009-2011 reported having ever had a stroke.



# **Asthma**

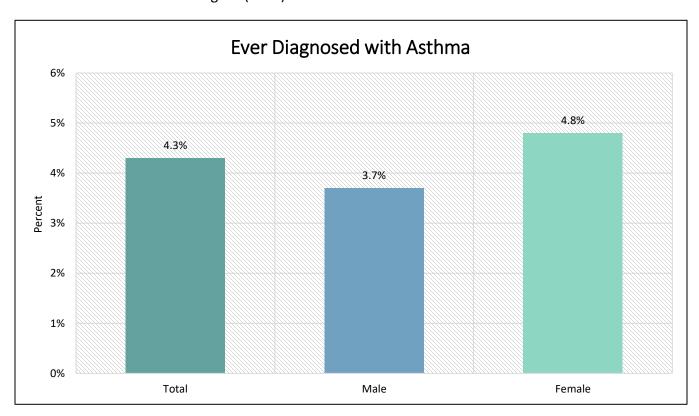
Has a doctor, nurse, or other health professional ever told you that you had asthma?

Asthma is a chronic inflammatory disease of the airways that is characterized by recurring symptoms such as wheezing, breathlessness, chest tightness, and coughing. In persons with asthma, the airways are more responsive to various stimuli, such as pollen, cigarette smoke, respiratory infections, or exercise. When exposed to these stimuli, the airways narrow or become obstructed, which results in respiratory symptoms.<sup>51</sup>

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with asthma.

### **Key Findings**

- Approximately 4% of refugees surveyed reported having ever been diagnosed with asthma.
- Female refugees (4.8%) were somewhat more likely to report having ever been diagnosed with asthma than male refugees (3.7%).



<sup>&</sup>lt;sup>51</sup> Centers for Disease Control and Prevention. (2016). Asthma. Retrieved from www.cdc.gov/asthma/default.htm

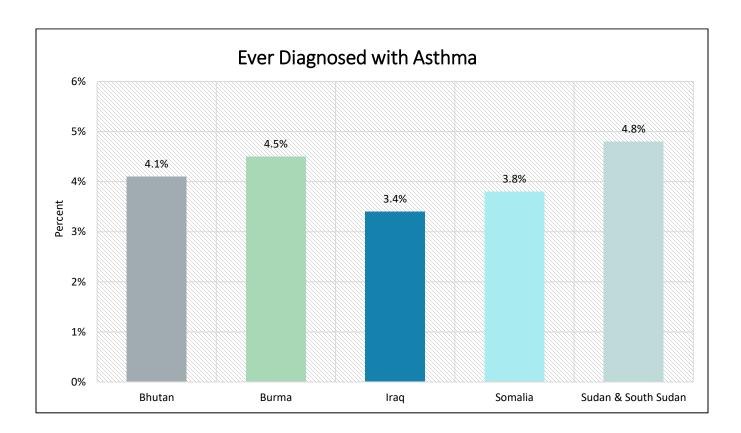
91

# **Asthma**

### By Country of Origin

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with asthma by country of origin.

- Refugees from Sudan and South Sudan (4.8%) were most likely to report having ever been diagnosed with asthma, followed by refugees from Burma (4.5%).
- Approximately 4% of refugees from Bhutan (4.1%) and refugees from Somalia (3.8%) reported having ever been diagnosed with asthma.
- Refugees from Iraq (3.4%) were least likely to report having ever been diagnosed with asthma.

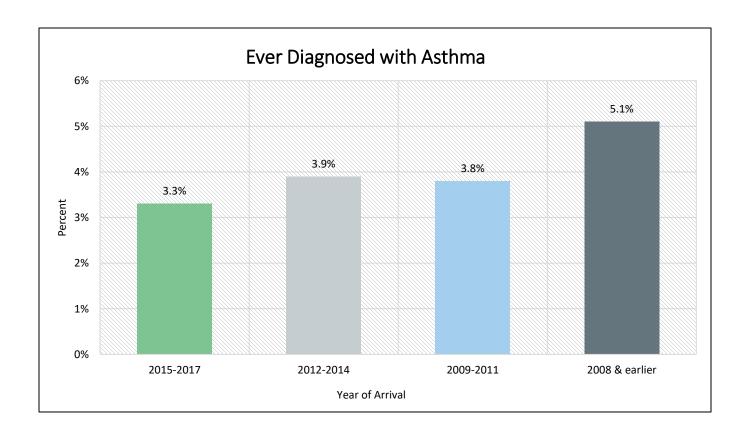


# **Asthma**

### By Year of Arrival

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with asthma by year of arrival.

- Refugees with the longest stay in the United States (arriving in 2008 and earlier) were most likely to report having ever been diagnosed with asthma at 5.1%, while the most recently arrived refugee population (2015-2017) was least likely to report the same at 3.3%.
- Approximately 4% of refugees arriving in 2009-2014 reported having ever been diagnosed with asthma.



# Chronic Obstructive Pulmonary Disease (COPD)

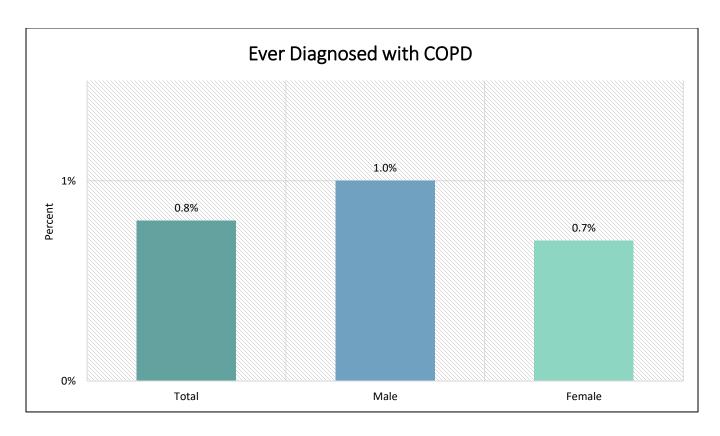
Has a doctor, nurse, or other health professional ever told you that you have Chronic Obstructive Pulmonary Disease (COPD), emphysema, or chronic bronchitis?

Chronic Obstructive Pulmonary Disease (COPD) is an umbrella term for diseases that impair lung function and create breathlessness. Smoking is the leading cause of COPD, though individuals who are exposed to dust, air pollution or other irritants long-term are also at a higher risk for COPD.<sup>52</sup> Chronic bronchitis and emphysema are common types of COPD.

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with COPD, emphysema, or chronic bronchitis.

#### **Key Findings**

- Just under 1% of refugees surveyed reported having ever been diagnosed with COPD.
- One percent of male refugees and 0.7% of female refugees reported having ever been diagnosed with COPD.



<sup>&</sup>lt;sup>52</sup> National Institutes of Health. (2013). What is COPD. Retrieved from www.nhlbi.nih.gov/health/health-topics/topics/copd

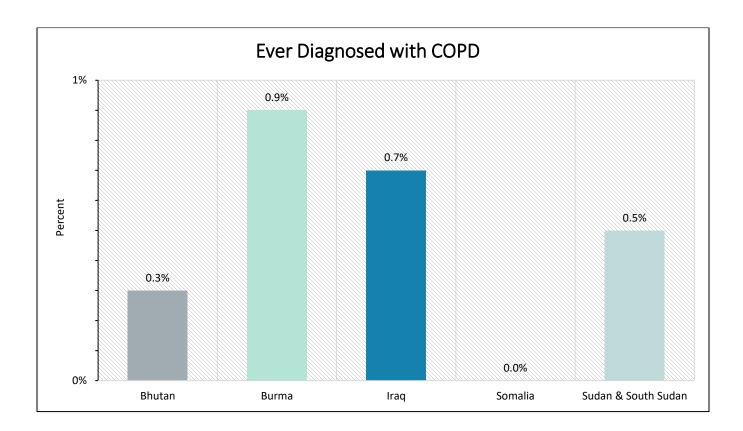
94

# Chronic Obstructive Pulmonary Disease (COPD)

# By Country of Origin

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with COPD, emphysema, or chronic bronchitis by country of origin.

- Under 1% of all refugee populations reported having ever been diagnosed with COPD.
- Refugees from Burma (0.9%) were most likely to report having ever been diagnosed with COPD. However, this percentage was only slightly higher than other populations to report the same, refugees from Iraq (0.7%) and Sudan and South Sudan (0.5%).

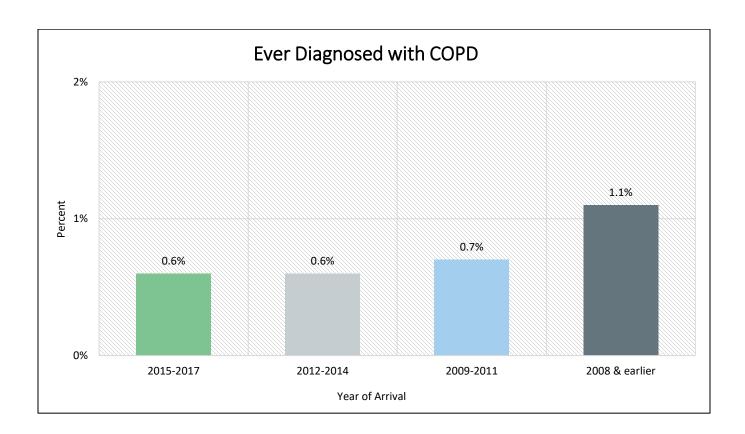


# Chronic Obstructive Pulmonary Disease (COPD)

# By Year of Arrival

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with COPD, emphysema, or chronic bronchitis by year of arrival.

- Refugees arriving in 2008 and earlier (1.1%) were slightly more likely to report having ever been diagnosed with COPD than other populations were.
- Under 1% of all other populations reported having ever been diagnosed with COPD.



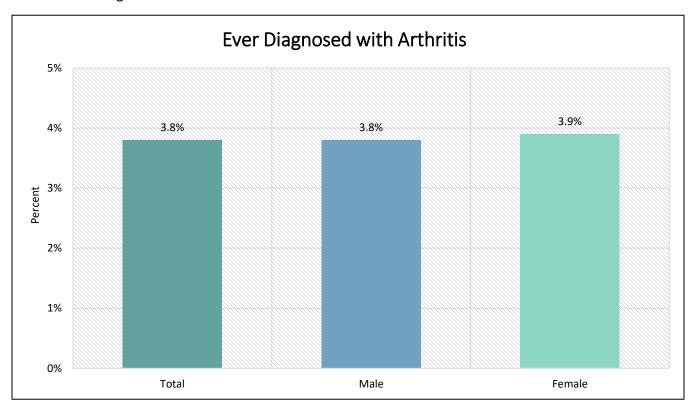
# **Arthritis**

Has a doctor, nurse, or other health professional ever told you that you have arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?

Arthritis includes more than 100 diseases that affect joints and the surrounding tissues and can cause pain and stiffness in the affected areas.<sup>53</sup> The most common type of arthritis in the United States is osteoarthritis, which wears down cartilage and makes it difficult for bones to glide over each other.<sup>54</sup> Osteoarthritis occurs mostly in older people, though excess weight and joint injuries or infections can increase the likelihood of all types of arthritis.

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with arthritis.

- Just under 4% of refugees surveyed reported having ever been diagnosed with arthritis.
- Similar percentages of male refugees (3.8%) and female refugees (3.9%) reported having ever been diagnosed with arthritis.



<sup>53</sup> Centers for Disease Control and Prevention. (2016). Arthritis. Retrieved from www.cdc.gov/arthritis/basics/faqs.htm

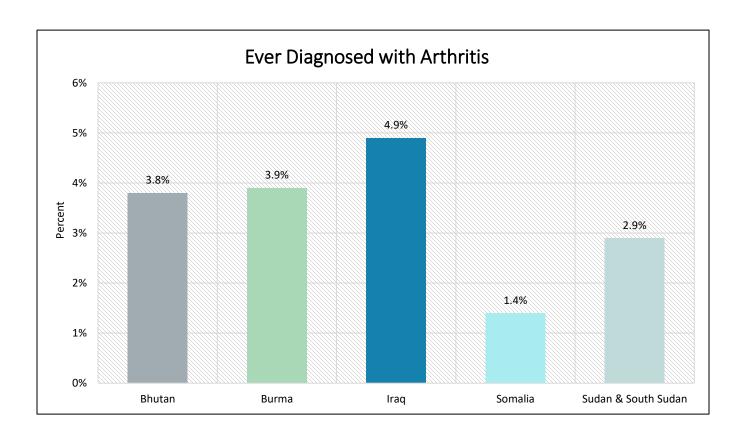
<sup>&</sup>lt;sup>54</sup> National Institutes of Health. (2016). What is osteoarthritis. Retrieved from www.niams.nih.gov/health\_info/osteoarthritis/osteoarthritis\_ff.asp

# **Arthritis**

### By Country of Origin

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with arthritis by country of origin.

- Refugees from Iraq (4.9%) were most likely to report having ever been diagnosed with arthritis.
- Refugees from Burma (3.9%) and Bhutan (3.8%) were also more likely to report having ever been diagnosed with arthritis.
- Refugees from Sudan and South Sudan (2.9%) and refugees from Somalia (1.4%) were least likely to report having ever been diagnosed with arthritis.

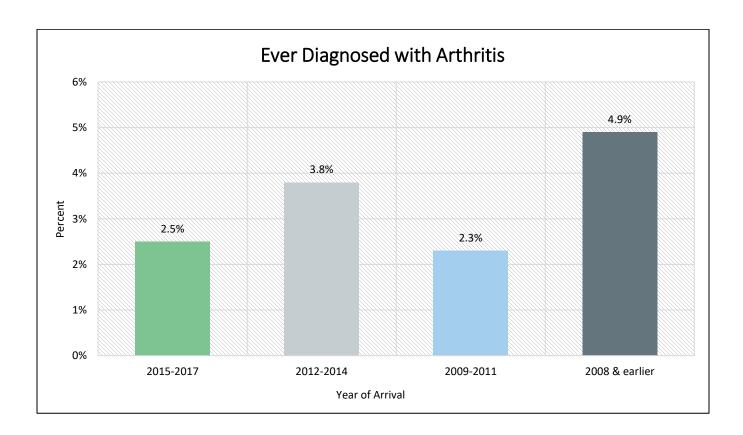


# **Arthritis**

#### By Year of Arrival

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with arthritis by year of arrival.

- Refugees with the longest stay in the United States, arriving in 2008 and earlier, were most likely to report having ever been diagnosed with arthritis at approximately 5%.
- Refugees arriving in 2012-2014 (3.8%) had the second highest percentage of individuals who reported having ever been diagnosed with arthritis.
- Refugees arriving in 2009-2011 (2.3%) and refugees arriving in 2015-2017 (2.5%) were least likely to report having ever been diagnosed with arthritis.



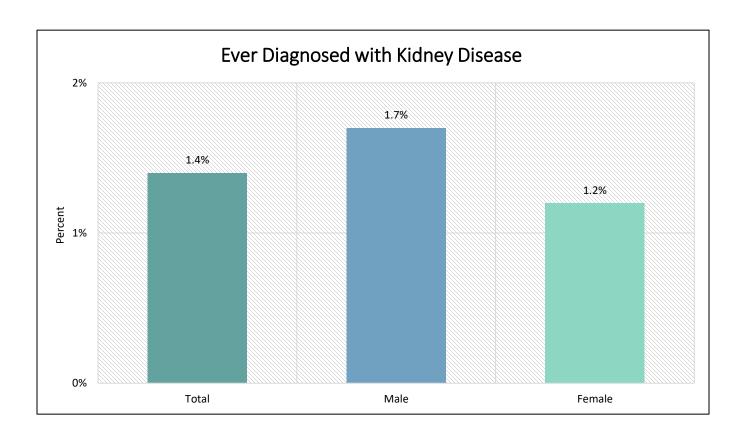
## Kidney Disease

Has a doctor, nurse, or other health professional ever told you that you have kidney disease?

Kidneys help to regulate blood chemicals and control blood pressure. When the kidneys are damaged, they cannot filter blood properly, causing excess fluid and waste to remain in the body. This can cause other health problems, such as heart disease and stroke.<sup>55</sup>

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with kidney disease.

- Approximately 1% of refugees surveyed reported having ever been diagnosed with kidney disease.
- Male refugees (1.7%) and were slightly more likely to report having ever been diagnosed with kidney disease than female refugees (1.2%).



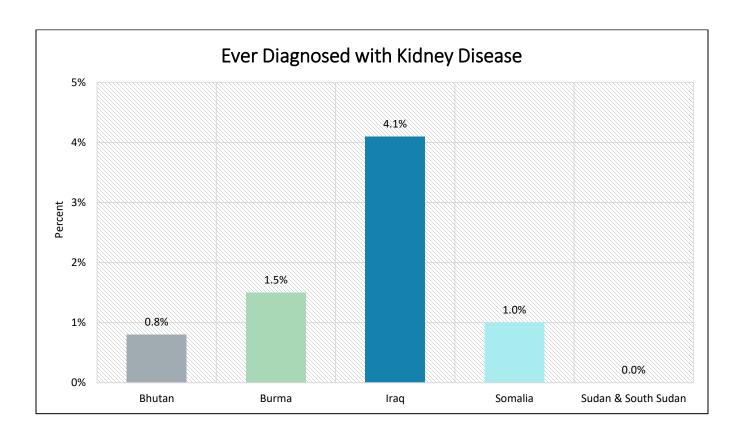
<sup>55</sup> Centers for Disease Control and Prevention. (2018). Chronic kidney disease basics. Retrieved from www.cdc.gov/kidneydisease/basics.html

## Kidney Disease

## By Country of Origin

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with kidney disease by country of origin.

- Refugees from Iraq (4.1%) were most likely to report having ever been diagnosed with kidney disease. This percentage was 2.7 times greater than that of the population with the next highest percentage, refugees from Burma (1.5%).
- Refugees from Somalia (1.0%) had the third highest percentage of individuals who reported having ever been diagnosed with kidney disease.
- Refugees from Sudan and South Sudan (0.0%) and from Bhutan (0.8%) were least likely to report having ever been diagnosed with kidney disease.

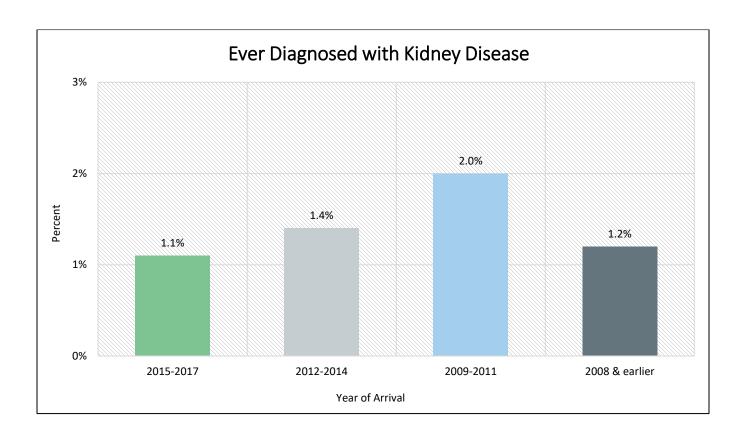


## Kidney Disease

## By Year of Arrival

The below chart represents the proportion of refugees surveyed that reported having ever been diagnosed with kidney disease by year of arrival.

- Refugees arriving in 2009-2011 (2.0%) were most likely to report having ever been diagnosed with kidney disease, followed by refugees arriving in 2012-2014 (1.4%).
- Refugees arriving in 2015-2017 (1.1%) were least likely to report having ever been diagnosed with kidney disease, followed by refugees arriving in 2008 and earlier (1.2%).



## **Diabetes**

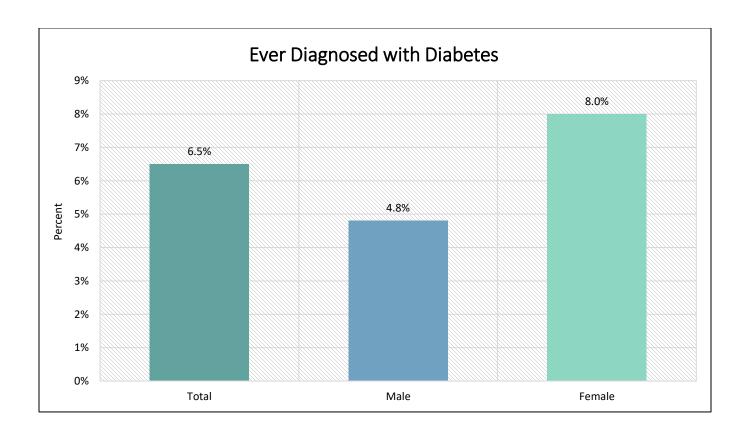
Has a doctor, nurse, or other health professional ever told you that you have diabetes?

Diabetes is a chronic disease, characterized by high levels of sugar in the blood. Diabetes can be caused by the resistance to or creation of too little insulin, a hormone produced to control blood sugar. While the cause of type 1 diabetes is unknown, some cases of type 2 diabetes can be prevented by increasing physical activity, eating a healthy diet, and decreasing excess body weight.<sup>56</sup>

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with diabetes.

#### **Key Findings**

- Overall, 6.5% of refugees surveyed reported having ever been diagnosed with diabetes.
- Female refugees (8.0%) were 1.5 times more likely to report having ever been diagnosed with diabetes than male refugees (4.8%).



<sup>&</sup>lt;sup>56</sup> A.D.A.M Medical Encyclopedia. (2012). Diabetes. Retrieved from http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0002194/

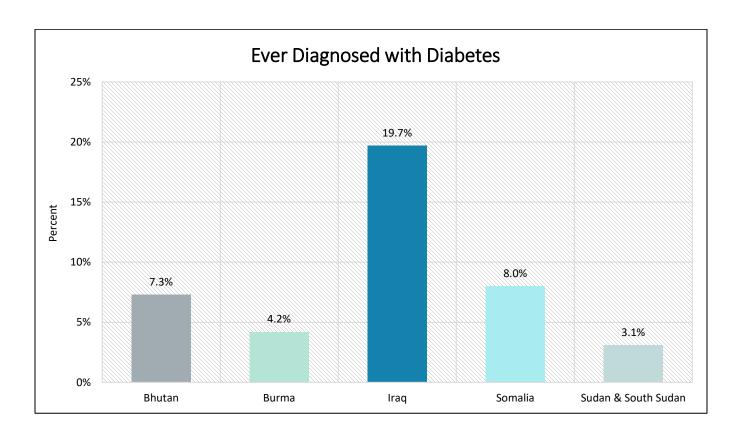
103

## Diabetes

#### By Country of Origin

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with diabetes by country of origin.

- Refugees from Iraq (19.7%) were more than twice as likely to report having ever been diagnosed with diabetes as other populations.
- Refugees from Somalia (8.0%) had the second highest percentage of individuals who reported having ever been diagnosed with diabetes, followed by refugees from Bhutan (7.3%).
- Refugees from Burma (4.2%) and refugees from Sudan and South Sudan (3.1%) were somewhat less likely to report having ever been diagnosed with diabetes than other refugee populations.

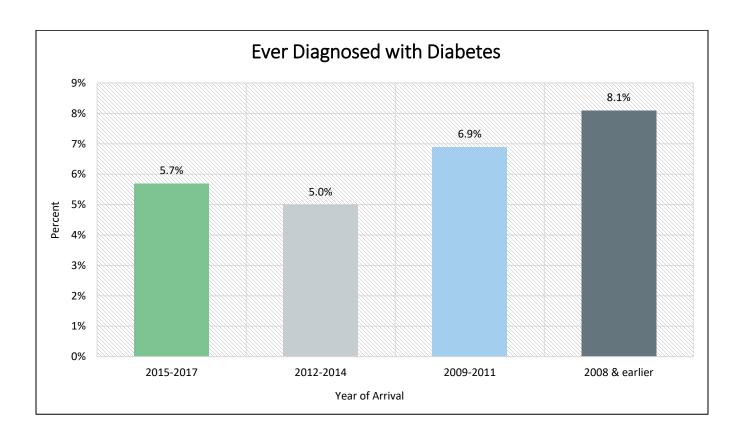


## Diabetes

## By Year of Arrival

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with diabetes by year of arrival.

- Refugees with the longest stay in the United States, those arriving in 2008 and earlier, were most likely to report having ever been diagnosed with diabetes at approximately 8%.
- Those arriving in 2009-2011 had the second highest percentage of individuals to report having ever been diagnosed with diabetes at approximately 7%.
- Refugees arriving in 2012-2014 (5.0%) and refugees arriving in 2015-2017 (5.7%) were somewhat less likely to report having ever been diagnosed with diabetes.



## Skin Cancer

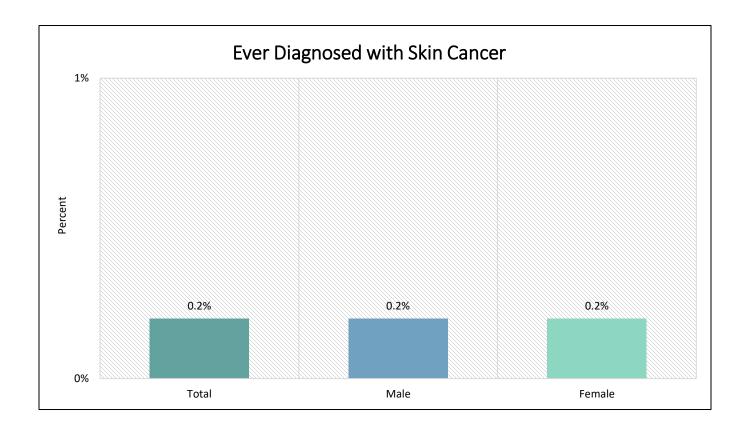
Has a doctor, nurse, or other health professional ever told you that you had skin cancer?

Skin cancer is the most common cancer in the United States.<sup>57</sup> The two most common types of skin cancer, basal cell and squamous cell carcinomas, are curable. The third most common type of skin cancer, melanoma, is the deadliest and is caused by exposure to ultraviolet light.<sup>58</sup>

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with skin cancer.

#### **Key Findings**

• Under 1% of refugees surveyed (0.2%) reported having ever been diagnosed with skin cancer.



<sup>&</sup>lt;sup>57</sup> Centers for Disease Control and Prevention. (2016). Skin cancer. Retrieved from www.cdc.gov/cancer/skin/

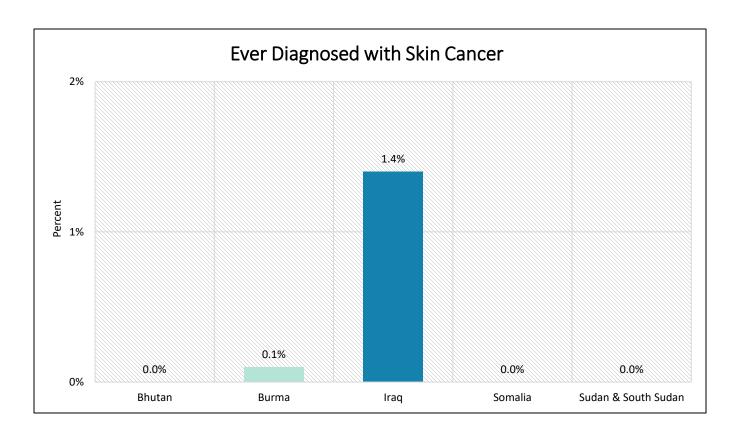
<sup>58</sup> Centers for Disease Control and Prevention. (2016). What is skin cancer. Retrieved from www.cdc.gov/cancer/skin/basic\_info/what-is-skin-cancer.htm

## Skin Cancer

## By Country of Origin

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with skin cancer by country of origin.

- Just over one percent of refugees from Iraq (1.4%) reported having ever been diagnosed with skin cancer.
- Just 0.1% of refugees from Burma reported having ever been diagnosed with skin cancer and 0% of refugees from Bhutan, Somalia, and Sudan and South Sudan reported having ever been diagnosed with skin cancer.

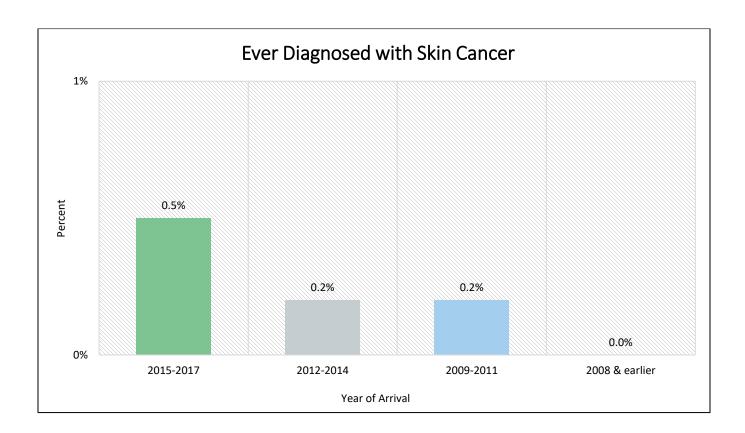


## Skin Cancer

#### By Year of Arrival

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with skin cancer by year of arrival.

- Under one percent of all refugee populations reported having ever been diagnosed with skin cancer.
- Refugees arriving in 2015-2017 (0.5%) were slightly more likely to report having ever been diagnosed with skin cancer than other populations.



## Cancer

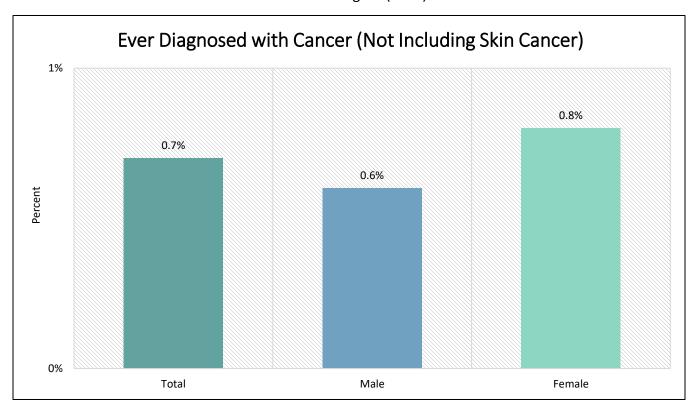
Has a doctor, nurse, or other health professional ever told you that you had any other types of cancer (not including skin cancer)?

In general, cancer results from the abnormal growth of cells, which can invade nearby tissues. Cancer cells can also spread to other parts of the body through blood or lymph systems.<sup>59</sup> There are more than 100 types of cancer. Those represented in the charts below reported having been told they have a cancer other than skin cancer.

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with cancer (other than skin cancer).

#### **Key Findings**

- Under one percent (0.7%) of refugees surveyed reported having ever been diagnosed with cancer other than skin cancer.
- Female refugees (0.8%) were slightly more likely to report having ever been diagnosed with cancer other than skin cancer than male refugees (0.6%).



<sup>&</sup>lt;sup>59</sup> National Institutes of Health. (2016). Cancer. Retrieved from www.ncbi.nlm.nih.gov/pubmedhealth/PMHT0015630/

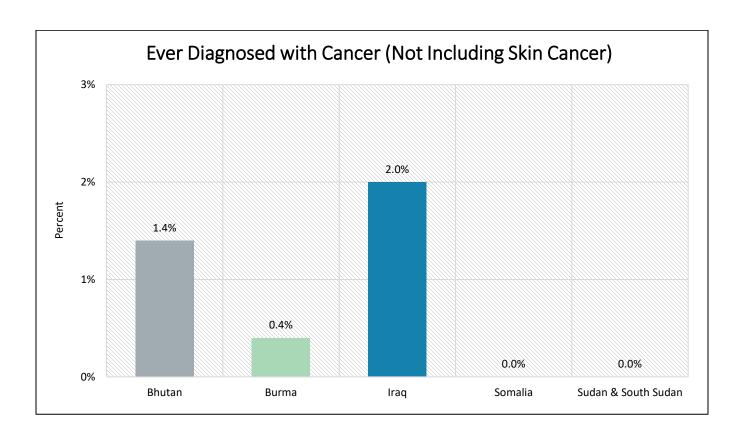
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## Cancer

## By Country of Origin

The chart below represents the proportion of refugees surveyed that reported having ever been diagnosed with cancer (other than skin cancer) by country of origin.

- Two percent of refugees from Iraq reported having ever been diagnosed with cancer, not including than skin cancer.
- Just over 1% of refugees from Bhutan (1.4%) reported having ever been diagnosed cancer, not including skin cancer, and 0.4% of refugees from Burma reported the same.
- Zero percent of refugees from Somalia and Sudan and South Sudan reported having ever been diagnosed with cancer, not including skin cancer.



## Mental Health

Research has found that depression, anxiety, and post-traumatic stress disorder (PTSD) may affect an average of one out of three refugees. These high rates of mental health disorders are often related to the number of traumatic experiences and stressors experienced before, during, and after resettlement. The most traumatic circumstances are likely to occur pre-resettlement, when refugees are often exposed to war, persecution, and human rights violations. During this time, many refugees suffer violence, loss of family and friends, imprisonment, physical assault, torture, loss of property, and malnutrition.

Upon arrival in the United States, refugees face additional stressors, which can negatively influence mental health. Difficulties in adapting to a new culture and experiencing the loss of culture and support are risk factors that have been linked to post-traumatic stress disorder symptoms and emotional distress.<sup>62</sup> Refugees with certain post-resettlement characteristics are also more susceptible to these issues. Post-resettlement factors that may be associated with poor mental health include unstable living arrangements, lack of economic opportunities, and lack of resolution of conflict in the home country.<sup>63</sup>

While the research documenting mental health disorders among refugees is considerable, little information exists on the effectiveness and appropriateness of mental health services for refugees. This gap in research is, in part, due to the variety of obstacles that refugees may face when seeking treatment for mental health issues. These obstacles include cost, lack of appropriate services, language barriers, cultural beliefs, and differences in perceptions of health.<sup>64</sup>

Especially upon arrival in the United States, mental health is not a priority for many refugees, who face more immediate needs, such as securing employment and housing. Even once immediate needs are resolved, cultural beliefs often play a role in the underuse of mental health services. For example, discussing mental health can be considered taboo in some populations. Additionally, a fatalistic mentality is common among certain cultures, which may prevent refugees from seeking mental health services. <sup>65</sup> As refugees continue to arrive in Nebraska, it will be essential to keep these obstacles in mind to improve the availability of culturally sensitive mental health services and practitioners.

<sup>60</sup> Turrini, G., Purgato, M., Ballette, F., Nose, M., Ostuzzi, G., & Barbui, C. (2017). International Journal of Mental Health Systems, 11(51).

<sup>&</sup>lt;sup>61</sup> Lindert, J., Carta, M.G., Schaefer, I., & Mollica, R.F. (2016). Refugee mental health – a public mental health challenge. *European Journal of Public Health,* 26(3), 374-375.

<sup>&</sup>lt;sup>62</sup> Carswell, K., Blackburn, P., & Barker, C. (2011). The relationship between trauma, post-migration problems and the psychological well-being of refugees and asylum seekers. *International Journal of Social Psychiatry, 57(2),* 107-119.

<sup>63</sup> Ringold, S. (2005). Refugee mental health. The Journal of the American Medical Association, 294(5), 646.

<sup>&</sup>lt;sup>64</sup> Ovitt, N., Larrison, C.R., Nackerud, L. (2003). Refugees' response to mental health screening. International Social Work, 49(2), 235-250.

<sup>&</sup>lt;sup>65</sup> Asgary, R. & Segar, N. (2011). Barriers to health care access among refugee asylum seekers. *Journal of Health Care for the Poor and Underserved, 22(2),* 506-522.



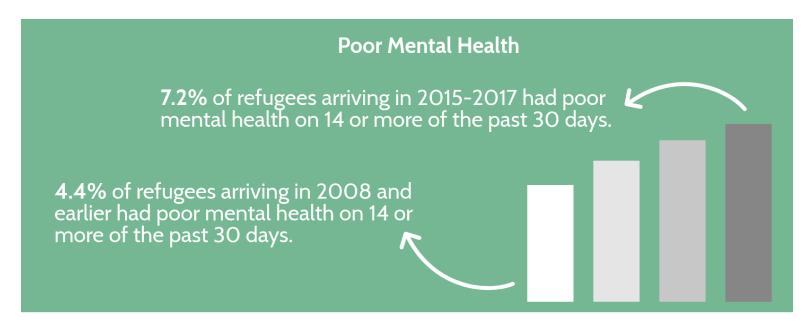
## **Mental Health**

Approximately one of every five refugees from Iraq had been diagnosed with a depressive disorder.



Approximately 5% of Nebraska refugees had been diagnosed with a depressive disorder.

Female refugees (6.0%) were more likely than were male refugees (4.1%) to report having ever had a depressive disorder.



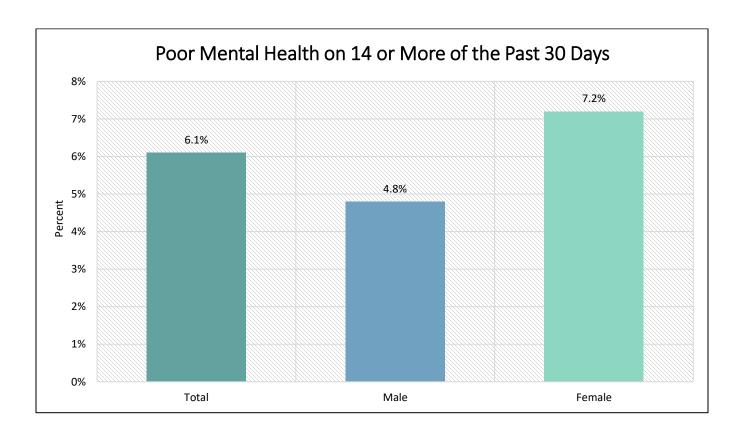


## Poor Mental Health

Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your emotional health not good?

The chart below represents the proportion of refugees who reported their mental health was not good on 14 or more the past 30 days.

- Of all refugees surveyed, 6.1% reported their mental health was not good on 14 or more of the past 30 days.
- Female refugees (7.2%) were 1.5 times more likely to report poor mental health on 14 or more of the past 30 days than male refugees (4.8%) were.

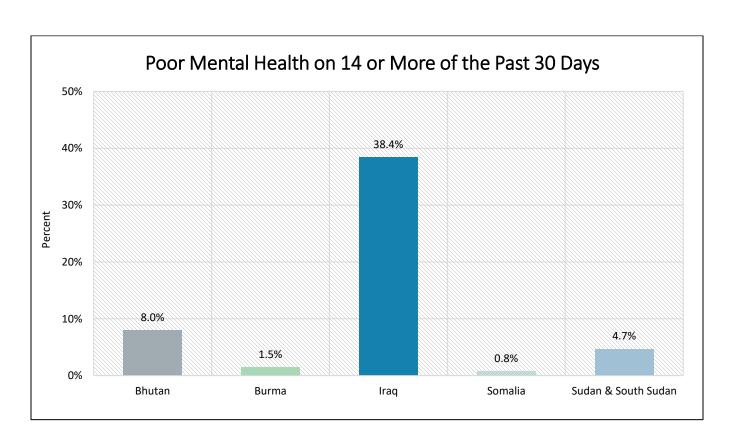


## Poor Mental Health

## By Country of Origin

The chart below represents the proportion of refugees who reported their mental health was not good on 14 or more the past 30 days by country of origin.

- Refugees from Iraq (38.4%) were by far most likely to report their mental health was not good on 14 or more of the past 30 days.
- Refugees from Bhutan (8.0%) and refugees from Sudan and South Sudan (4.7%) had the next highest percentages of individuals who reported their mental health was not good on 14 or more of the past 30 days.
- Refugees from Burma (1.5%) and refugees from Somalia (0.8%) were less likely to report that their mental health was not good on 14 or more of the past 30 days than other populations.

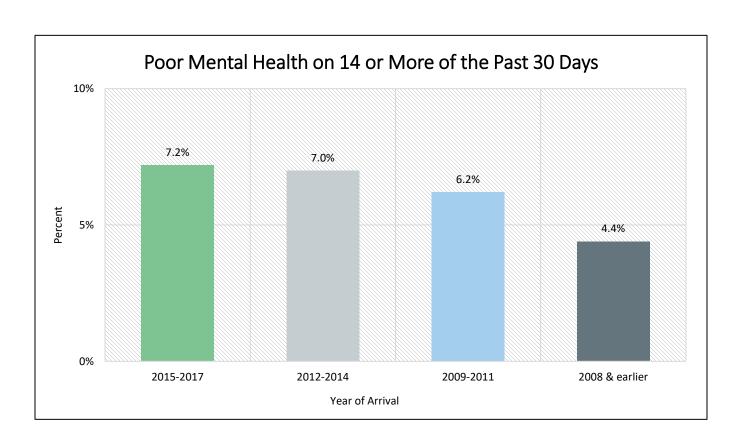


## Poor Mental Health

## By Year of Arrival

The chart below represents the proportion of refugees who reported their mental health was not good on 14 or more the past 30 days by year of arrival.

- The percentage of refugees who reported their mental health was poor on 14 or more of the past
   30 days decreased with length of stay in the United States.
- The most recently arrived refugee population (2015-2017) was most likely to report having poor mental health on 14 or more of the past 30 days at 7.2%, followed closely by 7.0% of refugees arriving in 2012-2014.
- Refugees arriving in 2008 and earlier (4.4%) were least likely to report having poor mental health on 14 or more of the past 30 days.



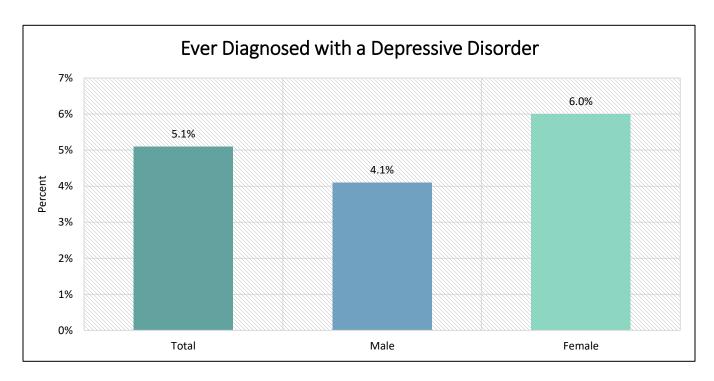
## **Depressive Disorder**

Has a doctor, nurse, or other health professional ever told you that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?

Depressive disorders are often characterized by feelings of sadness and hopelessness, though individuals with a major depressive disorder may also experience loss of interest in activities, changes in weight or activity, insomnia and difficulties concentrating. Depression is a major cause of illness and injury worldwide for both men and women. If not treated, individuals with depression face a higher risk of suicide, heart disease, and other mental disorders.<sup>66</sup>

The chart below represents the proportion of refugees who reported having ever been diagnosed with a depressive disorder.

- Approximately 5% of refugees surveyed reported having ever been diagnosed with a depressive disorder.
- Female refugees (6.0%) were 1.5 times more likely to report having ever been diagnosed with a depressive disorder than male refugees (4.1%).



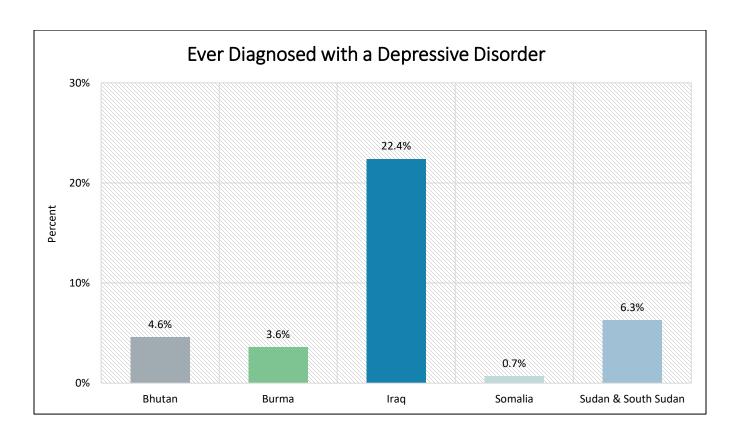
<sup>66</sup> Centers for Disease Control and Prevention. (2016). Depression. Retrieved from www.cdc.gov/mentalhealth/basics/mental-illness/depression.htm

## **Depressive Disorder**

## By Country of Origin

The chart below represents the proportion of refugees who reported having ever been diagnosed with a depressive disorder by country of origin.

- More than one of every five refugees from Iraq (22.4%) reported having ever been diagnosed with a depressive disorder. This percentage was approximately 3.5 times that of refugees from Sudan and South Sudan (6.3%) who had the second highest percentage of individuals who reported the same.
- Refugees from Bhutan (4.6%) and refugees from Burma (3.6%) also had higher percentages of individuals who reported having ever been diagnosed with depressive disorder.
- Refugees from Somalia (0.7%) were least likely to report having ever been diagnosed with a depressive disorder.

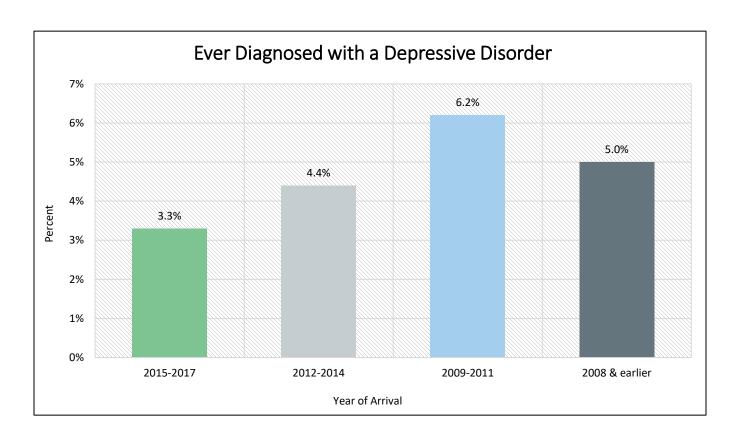


## Depressive Disorder

## By Year of Arrival

The chart below represents the proportion of refugees who reported having ever been diagnosed with a depressive disorder by year of arrival.

- Refugees arriving in 2009-2011 (6.2%) were most likely to report having ever been diagnosed with a depressive disorder, followed by refugees arriving in 2008 and earlier (5.0%).
- Refugees with the shortest length of stay in the United States, those arriving in 2015-2017, were least likely to report having ever been diagnosed with a depressive disorder at 3.3%.





## Health Behaviors and Risk Factors for Illness

Health behaviors refer to an individual's actions regarding their health and well-being. Positive health behaviors include getting adequate exercise, never smoking, consuming alcohol in moderation, maintaining a healthy body weight, and eating nutritious foods. Promoting positive health behaviors stresses individual responsibility in maintaining health and preventing illness through various activities and prevention measures.

Limited research has been conducted on refugee health behaviors, including how they may transform and develop over the course of resettlement in the United States. Even prior to becoming a refugee, cultural beliefs surrounding health may cause certain populations to be less likely to get routine screenings or follow preventative guidelines. Upon becoming a refugee, the effects of the refugee experience coupled with adjusting to the health environment in the United States can contribute to unhealthy practices, which have the potential to lead to chronic disease.

As part of the process of acculturation, refugees may adopt certain negative health behaviors after resettlement in the United States. This is particularly evident when looking at the consumption of nutritious foods among refugees. One study, following Dinka and Nuer refugees from Sudan in Nebraska, found that refugees were unfamiliar with U.S. foods and food preparation, which led them to consume more convenience foods and sugary beverages. <sup>67</sup> Lack of knowledge of new foods and preparation methods, transportation, and high costs may prevent refugees from accessing nutritious foods.

Upon arrival in the United States, many refugees are underweight and often gain needed weight after resettlement. However, research has shown that acculturation may cause unhealthy weight gain among refugees. In these cases, refugees often rapidly gain more weight than needed. One study found that the body mass index (BMI) among refugees from Southeast Asia and Africa had significant weight gain over a two-year period. The study suggested food insecurity, acculturation, and environmental factors as possible causes.<sup>68</sup>

The following chapter provides an overview of the prevalence of certain health behaviors reported by Nebraska's refugee populations. This research is a step towards identifying refugee health behaviors over time after resettlement, which can help to identify gaps in knowledge and inform interventions. Ensuring positive health behaviors among Nebraska's refugee populations will play an important role in the prevention and early detection of chronic diseases.

<sup>68</sup> Careyva, B., Mills, G., LaNoue, M., Bangura, M., de la Paz, A., Gee, A., & Patel, N. (2015). The impact of living in the United States on refugee patients' body mass index scores. *Journal of Health Care for the Poor and Underserved, 26(2), 421-430.* 

<sup>&</sup>lt;sup>67</sup> Willis, M.S. & Buck, J.S. (2007). From Sudan to Nebraska: Dinka and Nuer refugee diet dilemmas. *Journal of Nutrition Education and Behavior, 39(5),* 273-280.



# Health Behaviors and Risk Factors for Illness



Positive health behaviors, such as routine checkups and taking preventative measures, can help to prevent disease and play an important role in ensuring a healthy life.

- 58.7%
- Approximately 59% of Nebraska refugees reported having had a routine checkup in the past two years.
- 35.0%

Just over one-third of Nebraska refugees reported having visited a dentist in the past two years.

46.5%

Just under half of Nebraska refugees reported having had a flu shot in the past year.

## Healthy Lifestyle



Approximately **half** of Nebraska refugees reported eating fruit less than once daily.

Approximately **two-thirds** of Nebraska refugees reported eating vegetables less than once daily.





Approximately **51%** of Nebraska refugees reported getting less than seven hours of sleep daily.

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska 2017 Refugee BRFSS Survey



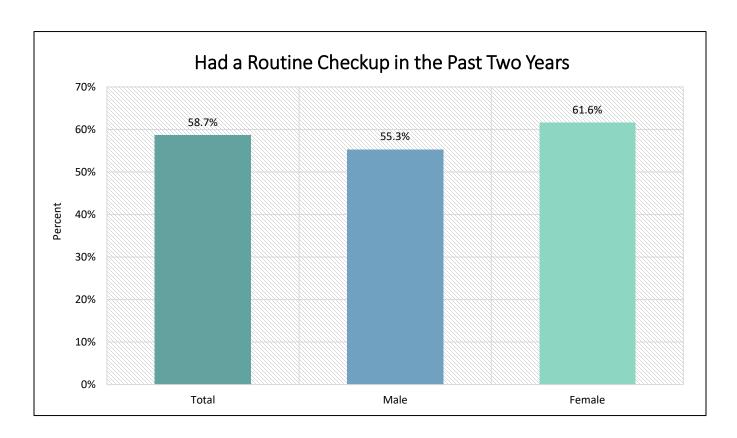
## Routine Checkup

A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition. About how long has it been since you last visited a doctor for a routine checkup?

Routine checkups are helpful in finding problems before they become a cause for concern. Finding problems early makes the chance for treatment better. Scheduling regular checkups with a physician is an important step in maintaining a long, healthy life.

The chart below represents the proportion of refugees surveyed who reported having had a routine checkup in the past two years.

- Approximately 59% of refugees surveyed reported having had a routine checkup in the past two years.
- Female refugees (61.6%) were more likely to report having had a routine checkup in the past two years than male refugees (55.3%) were.

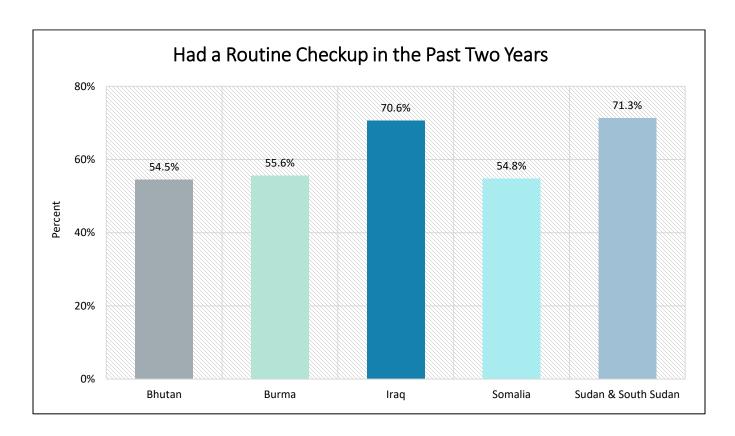


## Routine Checkup

## By Country of Origin

The chart below represents the proportion of refugees surveyed who reported having had a routine checkup in the past two years by country of origin.

- Over half of all refugee populations reported having had a routine checkup in the past two years.
- Refugees from Sudan and South Sudan (71.3%) and refugees from Iraq (70.6%) were most likely to report having had a routine checkup in the past two years.
- Between 54% and 56% of refugees from Bhutan, Burma, and Somalia reported having had a routine checkup in the past two years.

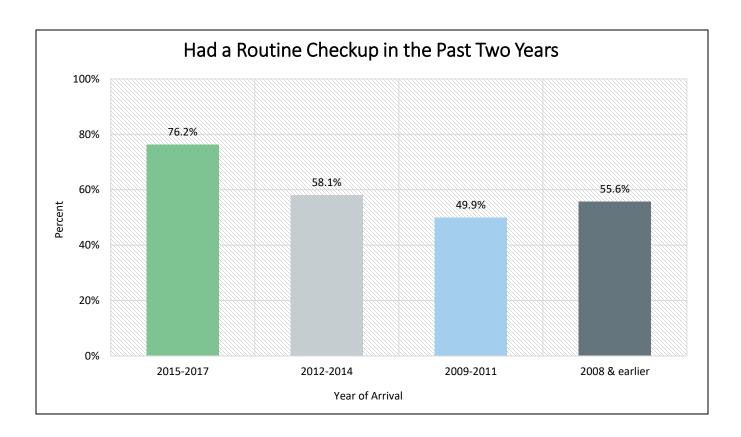


## Routine Checkup

## By Year of Arrival

The chart below represents the proportion of refugees surveyed who reported having had a routine checkup in the past two years by year of arrival.

- The most recently arrived refugee population in the United States (76.2%) was most likely to report having had a routine checkup in the past two years. Refugees arriving in 2012 and earlier were significantly less likely to report the same.
- Refugees arriving in 2009-2011 were least likely to report having had a routine checkup in the past two years at approximately 50% of the population.



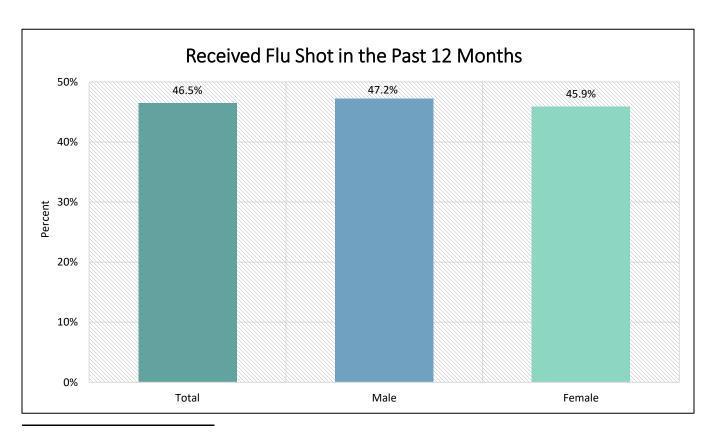
## Flu Vaccination

During the past 12 months, have you had either a flu shot or flu vaccine that was sprayed in your nose?

Flu shots protect individuals against the most common influenza viruses and it is recommended that everyone over six months of age get a flu shot every influenza season.<sup>69</sup> Influenza season in the United States can start as early as October and end as late as May. Flu shots not only reduce the risk of vaccinated individuals getting sick, but also decrease the chance of spreading the flu to others and throughout a community.

The chart below represents the proportion of refugees surveyed who reported having received a flu shot in the past 12 months.

- Approximately 47% of refugees surveyed reported having received a flu shot in the past 12 months.
- Male refugees (47.2%) were slightly more likely to report having received a flu shot in the past 12 months than female refugees (45.9%).



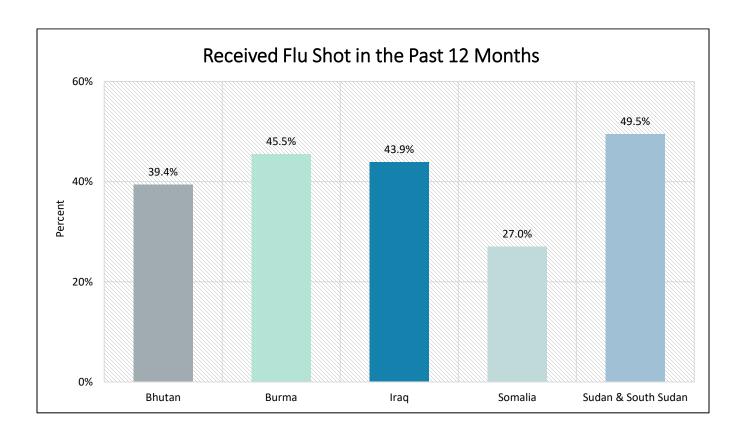
<sup>69</sup> Centers for Disease Control and Prevention. (2016). Key facts about seasonal flu vaccine. Retrieved from www.cdc.gov/flu/protect/keyfacts.htm

## Flu Vaccination

## By Country of Origin

The chart below represents the proportion of refugees surveyed who reported having received a flu shot in the past 12 months by country of origin.

- Just under one-half of refugees from Sudan and South Sudan (49.5%) reported having received a flu shot in the past 12 months.
- Approximately 46% of refugees from Burma and 44% of refuges from Iraq reported the same.
- Refugees from Somalia (27.0%) were least likely to report having received a flu shot in the past 12 months.

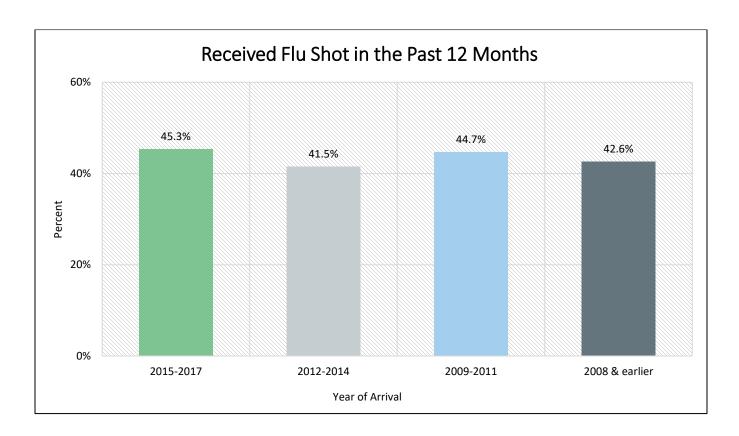


## Flu Vaccination

## By Year of Arrival

The chart below represents the proportion of refugees surveyed who reported having received a flu shot in the past 12 months by year of arrival.

- Refugees arriving in the most recent years (2015-2017) were most likely to report having received a flu shot in the past 12 months at 45.3%, followed by refugees arriving in 2009-2011 at 44.7%.
- Refugees arriving in 2012-2014 (41.5%) were least likely to report receiving a flu shot in the past 12 months, followed by refugees arriving in 2008 and earlier (42.6%).



## Pneumonia Vaccination

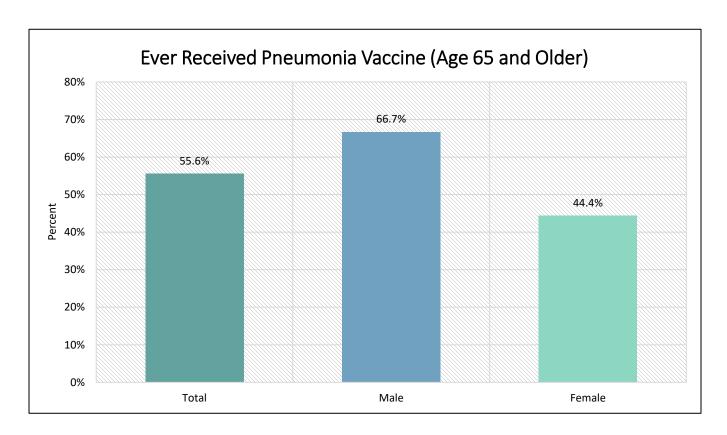
A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person's lifetime and is different from the flu shot. Have you ever had a pneumonia shot?

Pneumococcus can cause pneumonia (lung infection), ear infections, sinus infections, and meningitis. While pneumococcal disease is common in young children, adults over the age of 65 face the greatest risk of serious infection.<sup>70</sup>

The chart below represents the proportion of refugees, age 65 and older, surveyed who reported having ever received a pneumonia vaccine.

#### **Key Findings**

- Over half of refugees, age 65 and older (55.6%) reported having ever received a pneumonia vaccination.
- Approximately two-thirds of male refugees (66.7%) reported having ever received a pneumonia vaccination, while only approximately two-fifths of female refugees (44.4%) reported the same.



<sup>&</sup>lt;sup>70</sup> Centers for Disease Control and Prevention. (2016). Pneumococcal vaccination: what everyone should know. Retrieved from www.cdc.gov/vaccines/vpd/pneumo/public/index.html

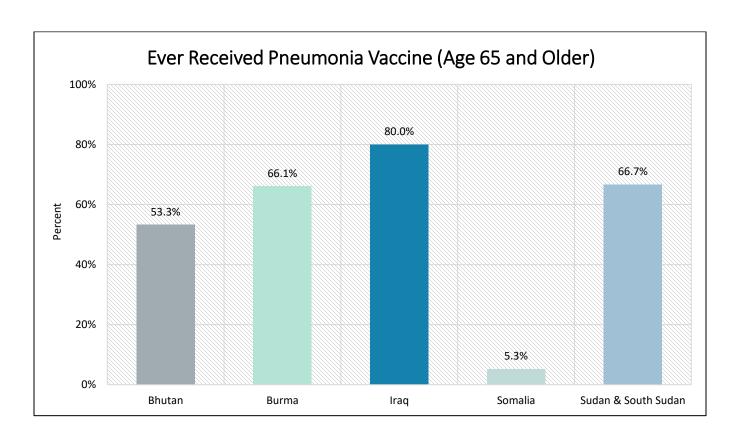
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## Pneumonia Vaccination

## By Country of Origin

The chart below represents the proportion of refugees, age 65 and older, surveyed who reported having ever received a pneumonia vaccine by country of origin.

- Refugees, age 65 and older, from Iraq (80.0%) were most likely to report having ever received a
  pneumonia vaccination, followed by those from Sudan and South Sudan (66.7%) and Burma
  (66.1%).
- Over half of refugees, age 65 and older, from Bhutan (53.3%) reported having ever received a pneumonia vaccination.
- Refugees, age 65 and older, from Somalia (5.3%) were least likely to report having ever received a pneumonia vaccination.

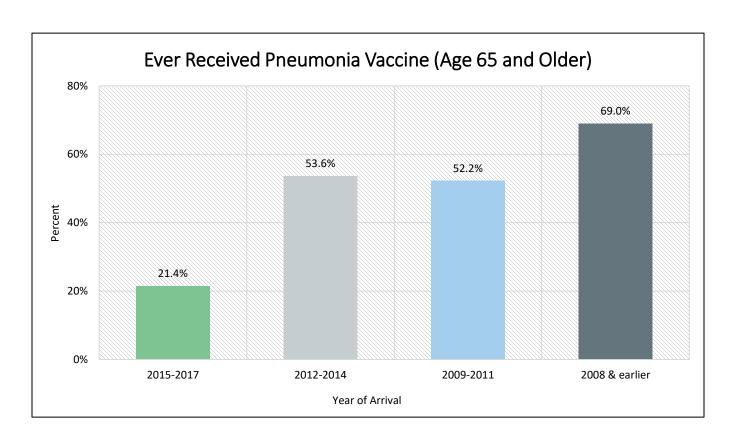


## Pneumonia Vaccination

## By Year of Arrival

The chart below represents the proportion of refugees, age 65 and older, surveyed who reported having ever received a pneumonia vaccine by year of arrival.

- The most recently arrived group of refugees, age 65 and older (2015-2017) was least likely to report having ever received a pneumonia vaccination at 21.4%.
- Refugees, age 65 and older, with the longest stay in the United States (arriving in 2008 and earlier) were most likely to report having ever received a pneumonia vaccination at 69.0%.
- Approximately 52-54% of refugees, age 65 and older, arriving in 2009-2014 reported having ever received a pneumonia vaccination.



## Pap Test

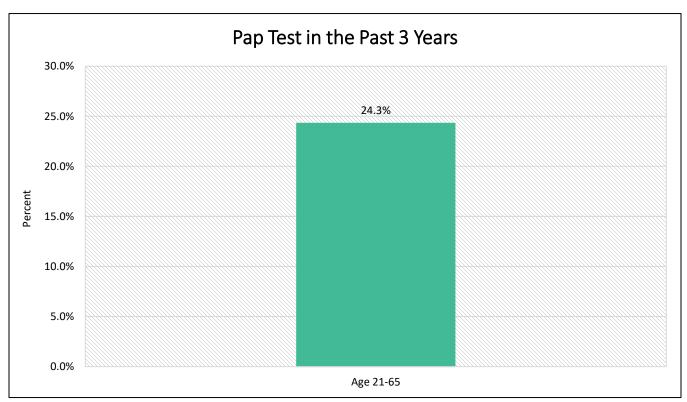
A Pap test is a test for cancer of the cervix. Have you ever had a pap test? How long has it been since you had your last Pap test?

The American Cancer Society recommends that women begin receiving a Pap test, a screening procedure for cervical cancer, at age 21.<sup>71</sup> Women should continue to get a Pap test every three to five years until age 65.

The chart below represents the proportion of female refugees (age 21 to 65) surveyed who reported having had a Pap test in the past three years.

#### **Key Findings**

 Just under one-fourth of female refugees, age 21 to 65, (24.3%) reported having had a pap test in the past three years.



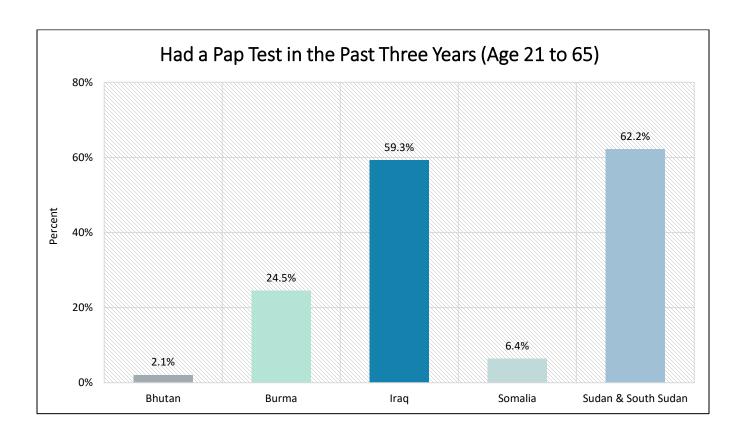
<sup>&</sup>lt;sup>71</sup> American Cancer Society. (2018). The American Cancer Society guidelines for the prevention and early detection of cervical cancer. Retrieved from www.cancer.org/cancer/cervical-cancer/prevention-and-early-detection/cervical-cancer-screening-guidelines.html

## Pap Test

## By Country of Origin

The chart below represents the proportion of female refugees (age 21 to 65) surveyed who reported having had a Pap test in the past three years by country of origin.

- Approximately 2% of female refugees from Bhutan (2.1%) reported having had a Pap test in the
  past three years and approximately six percent of female refugees from Somalia (6.4%) reported
  the same.
- Just under one-fourth of female refugees from Burma (24.5%) reported having had a Pap test in the past three years.
- Female refugees from Iraq (59.3%) and from Sudan and South Sudan (62.2%) were most likely to report having had a Pap test in the past three years.

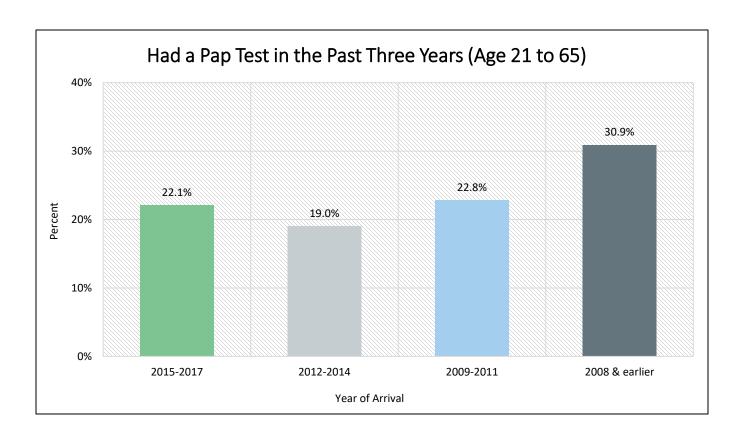


## Pap Test

## By Year of Arrival

The chart below represents the proportion of female refugees surveyed (age 21 to 65) who reported having had a Pap test in the past three years by year of arrival.

- Just under one-fifth of female refugees arriving in 2012-2014 (19.0%) reported having had a Pap test in the past three years, while just over one-fifth of female refugees arriving in 2015-2017 (22.1%) and 2009-2011 (22.8%) reported the same.
- Female refugees with the longest stay in the United States (arriving in 2008 and earlier) were most likely to report having had a Pap test in the past three years.



## Mammogram

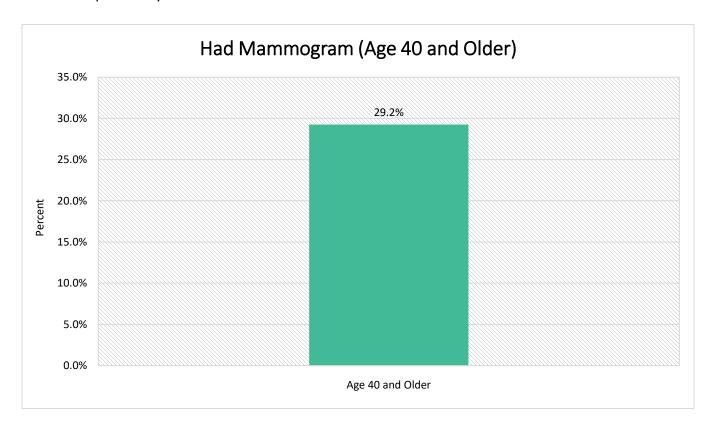
A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram? How long has it been since your last mammogram?

Mammograms are x-ray pictures of the breast used to look for signs of breast cancer. The American Cancer Society recommends that women age 45 and older should get mammograms every one or two years and women ages 40 to 44 should have the choice to start annual mammograms.<sup>72</sup>

The chart below represents the proportion of female refugees surveyed (age 40 and older) who reported having had a mammogram in the past two years.

#### **Findings**

 Approximately 29% of female refugees (age 40 and older) reported having had a mammogram in the past two years.



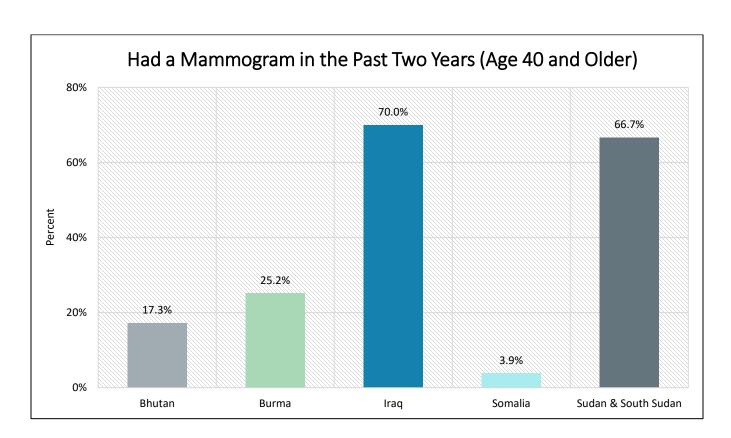
<sup>&</sup>lt;sup>72</sup> American Cancer Society. (2018). American Cancer Society Guidelines for the early detection of cancer. Retrieved from www.cancer.org/healthy/find-cancer-early/cancer-screening-guidelines/american-cancer-society-guidelines-for-the-early-detection-of-cancer.html

## Mammogram

## By Country of Origin

The chart below represents the proportion of female refugees surveyed (age 40 and older) who reported having had a mammogram in the past two years by country of origin.

- Female refugees from Somalia (3.9%) were least likely to report having had a mammogram in the
  past two years. This percentage was over four times lower than that of female refugees from
  Bhutan, who had the second lowest percentage at 17.3%.
- Only one-fourth of female refugees from Burma (25.2%) reported having had a mammogram in the past two years.
- Female refugees from Iraq (70.0%) and from Sudan and South Sudan (66.7%) were most likely refugee to report having had a mammogram in the past two years.

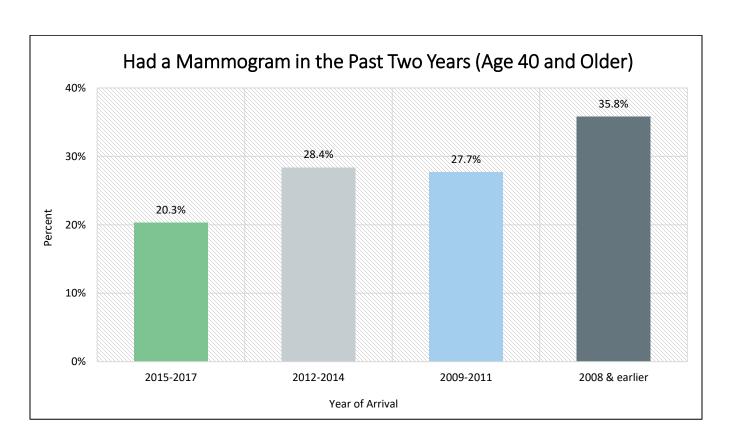


## Mammogram

## By Year of Arrival

The chart below represents the proportion of female refugees surveyed (age 40 and older) who reported having had a mammogram in the past two years by year of arrival.

- Only one-fifth of the female refugees (age 40 and older) arriving in 2015-2017 reported having had a mammogram in the past two years.
- Approximately 28% of female refugees arriving in 2009-2014 reported having had a mammogram
  in the past two years.
- Female refugees with the longest stay in the United States (arriving in 2008 and earlier) were most likely on to report having had a mammogram in the past two years at 35.8%.



### **HIV Test**

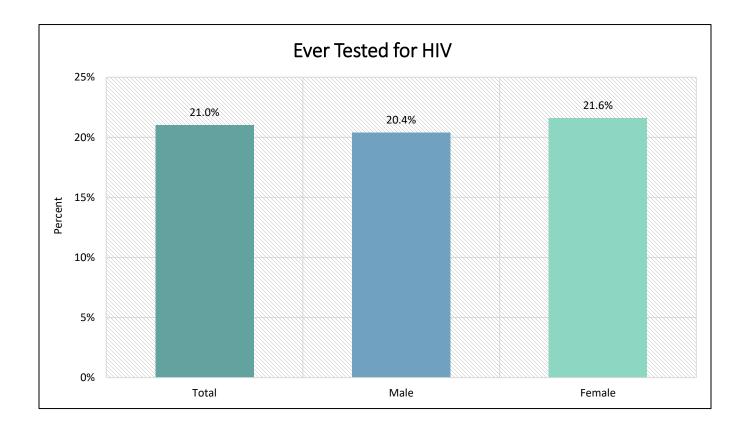
Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation.

While Human Immunodeficiency Virus (HIV) is quite similar to other viruses, the immune system cannot completely get rid of HIV. Over time, HIV is able to destroy cells that the body needs to fight off infections.<sup>73</sup> If untreated, HIV can lead to acquired immunodeficiency syndrome (AIDS), which leaves the body extremely vulnerable to certain diseases and cancers.

The chart below represent the proportion of refugees who reported having ever been tested for HIV, excluding blood donations.

#### **Findings**

- Twenty-one percent of refugees surveyed reported having ever been tested for HIV.
- Female refugees (21.6%) were slightly more likely to have ever been tested for HIV than male refugees (20.4%) were.



<sup>73</sup> AIDS.gov. (2016). What is HIV/AIDS. Retrieved from www.aids.gov/hiv-aids-basics/hiv-aids-101/what-is-hiv-aids

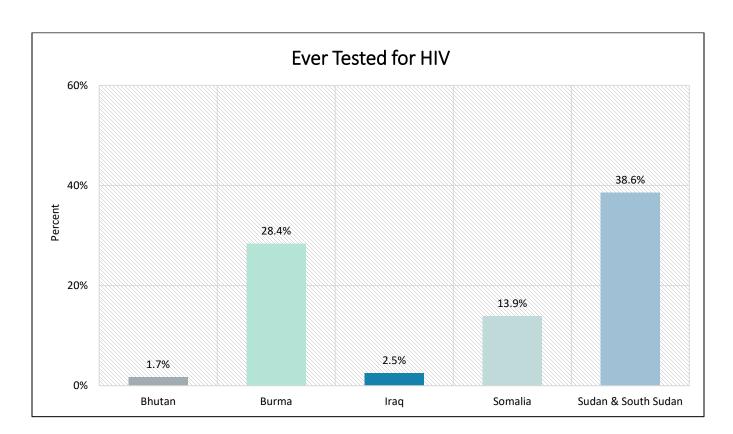
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## **HIV Test**

### By Country of Origin

The chart below represent the proportion of refugees who reported having ever been tested for HIV, excluding blood donations, by country of origin.

- Refugees from Sudan and South Sudan were most likely to report having ever been tested for HIV. Approximately two-fifths of the refugee population from Sudan and South Sudan (38.6%) reported having ever been tested for HIV.
- Refugees from Burma (28.4%) had the second highest percentage of individuals who reported having ever been tested for HIV, followed by refugees from Somalia (13.9%).
- Refugees from Iraq (2.5%) and Bhutan (1.7%) were less likely to report having ever been tested for HIV than other refugee populations.

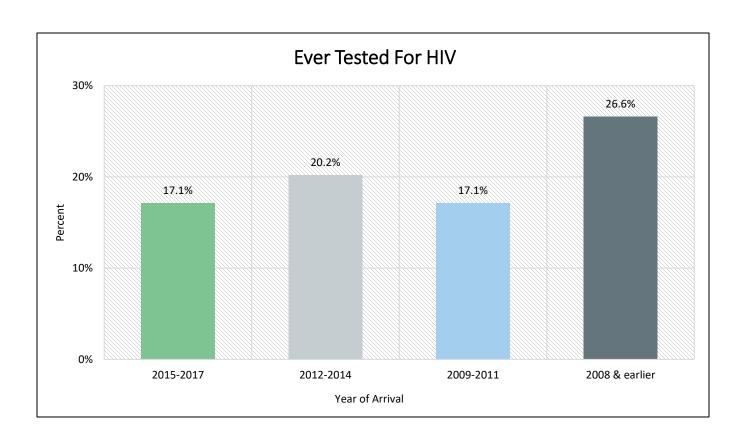


## **HIV Test**

### By Year of Arrival

The chart below represent the proportion of refugees who reported having ever been tested for HIV, excluding blood donations, by year of arrival.

- Approximately 17% of refugees arriving in 2009-2011 and 2015-2017 reported having ever been tested for HIV. A slightly higher proportion of refugees arriving in 2012-2014 (20.2%) reported the same.
- Just over one-fourth of refugees arriving in 2008 and earlier (26.6%) reported having ever been tested for HIV.



### Dentist

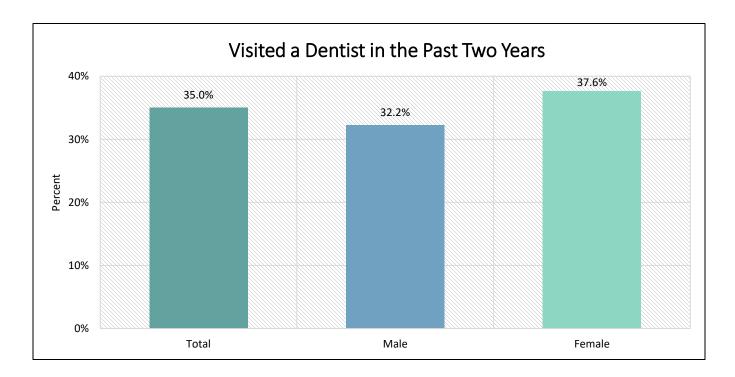
How long has it been since you last visited a dentist or a dental clinic for any reason? Include visits to dental specialists, such as orthodontists.

Regular visits to the dentist are an important part of maintaining good oral health. Several of the most common oral health problems include untreated tooth decay (cavities) and gum disease. In fact, it has been reported that more than one in four adults in the United States have untreated tooth decay. While factors such as aging and chronic disease can increase the chance of poor oral health, visiting a dentist on a regular basis can help to decrease and prevent the likelihood of oral health problems in the future.

The chart below represents the proportion of refugees surveyed who reported having visited a dentist in the past two years.

### **Key Findings**

- Of all refugees surveyed, 35.0% reported having visited a dentist in the past two years.
- Female refugees (37.6%) were approximately five percentage points more likely to report having visited a dentist in the past two years than male refugees (32.2%) were.



<sup>&</sup>lt;sup>74</sup> Centers for Disease Control and Prevention. (2015). Dental Caries and Tooth Loss in Adults in the United States, 2011-2012. Retrieved from www.cdc.gov/nchs/data/databriefs/db197.htm

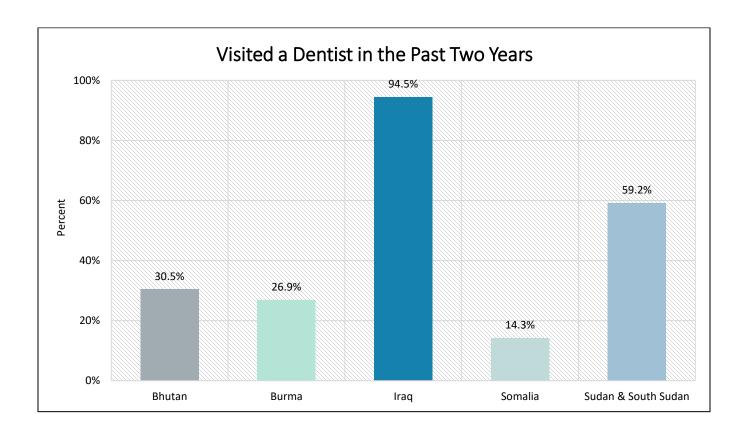
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## Dentist

### By Country of Origin

The chart below represents the proportion of refugees surveyed who reported having visited a dentist in the past two years by country of origin.

- Refugees from Iraq (94.5%) were by far most likely to report having visited a dentist in the past two years. This percentage was 1.6 times greater than that of refugees from Sudan and South Sudan (59.2%) who had the second highest percentage of individuals who reported the same.
- Refugees from Burma (26.9%) and refugees from Bhutan (30.5%) were somewhat less likely to report having visited the dentist in the past two years.
- Refugees from Somalia (14.3%) were least likely to report having visited the dentist in the past two years.

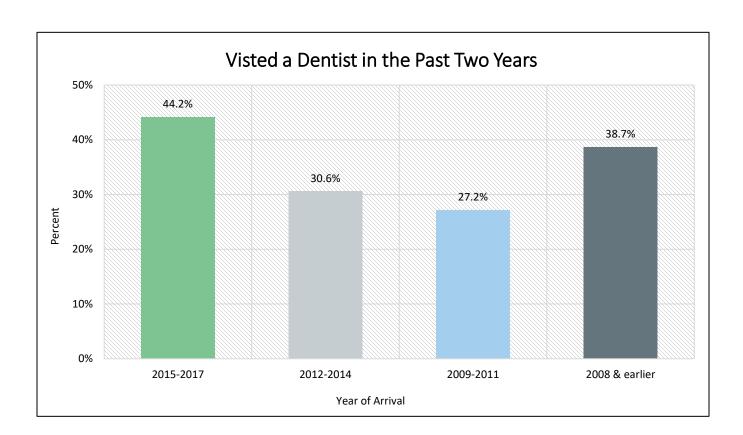


## Dentist

### By Year of Arrival

The chart below represents the proportion of refugees surveyed who reported having visited a dentist in the past two years by year of arrival.

- The most recently arrived population of refugees (2015-2017) was most likely to report having visited a dentist in the past two years at 44.2%, followed by refugees with the longest stay in the United States (arriving in 2008 and earlier) at 38.7%.
- Refugees arriving in 2009-2011 and 2012-2014 were somewhat less likely to report having visited a dentist in the past two years at 27.2% and 30.6%, respectively.



# **Insufficient Sleep**

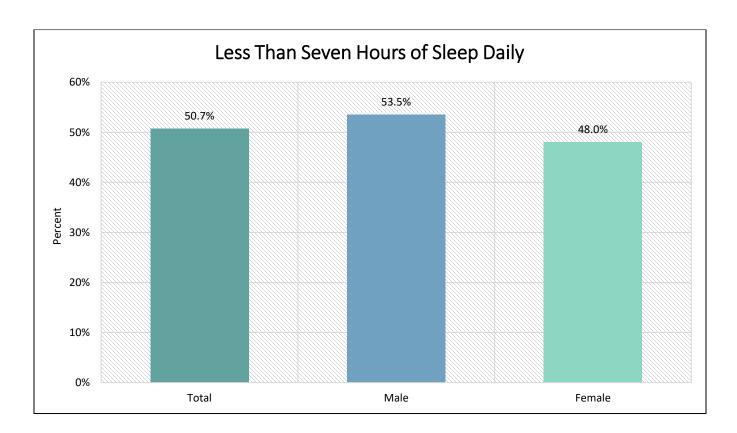
On average, how many hours of sleep do you get in a 24-hour period?

Insufficient sleep has been linked to numerous chronic diseases, including diabetes, obesity, depression, and cardiovascular disease. <sup>75</sup> Additionally, insufficient sleep can be responsible for motor vehicle crashes, causing considerable injury each year.

The chart below represents the proportion of refugees surveyed who reported sleeping less than seven hours daily.

### **Key Findings**

- Just over half of all refugees surveyed (50.7%) reported sleeping less than seven hours daily.
- Male refugees (53.5%) were somewhat more likely to report sleeping less than seven hours daily than female refugees (48.0%).



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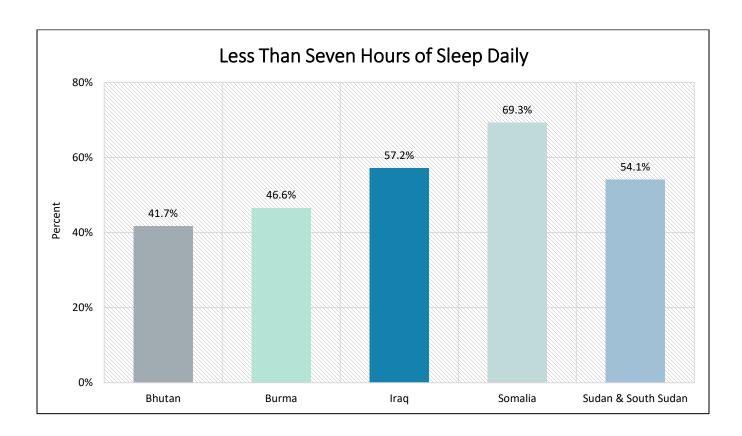
<sup>75</sup> Centers for Disease Control and Prevention. (2016). Sleep and sleep disorders. Retrieved from www.cdc.gov/sleep/index.html

# **Insufficient Sleep**

## By Country of Origin

The chart below represents the proportion of refugees surveyed who reported sleeping less than seven hours daily by country of origin.

- Approximately 70% of refugees from Somalia (69.3%) reported sleeping for less than seven hours daily.
- Over half of refugees from Iraq (57.2%) and refugees from Sudan and South Sudan (54.1%) reported sleeping for less than seven hours daily. Just under half of refugees from Burma (46.6%) reported the same.
- Approximately two-fifths of refugees from Bhutan (41.7%) reported sleeping for less than seven hours daily.

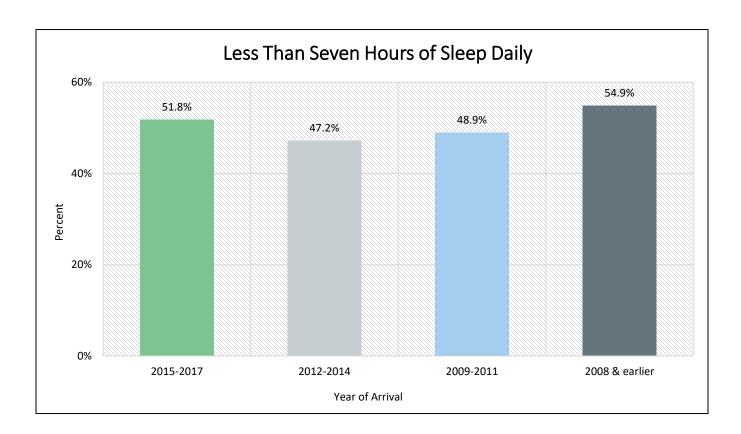


# **Insufficient Sleep**

## By Year of Arrival

The chart below represents the proportion of refugees surveyed who reported sleeping less than seven hours daily by year of arrival.

- Approximately half of all refugee populations reported sleeping less than seven hours daily.
- Refugees arriving in 2008 and earlier (54.9%) were most likely to report sleeping less than seven hours daily, followed by refugees arriving in 2015-2017 (51.8%).



# **Fruit Consumption**

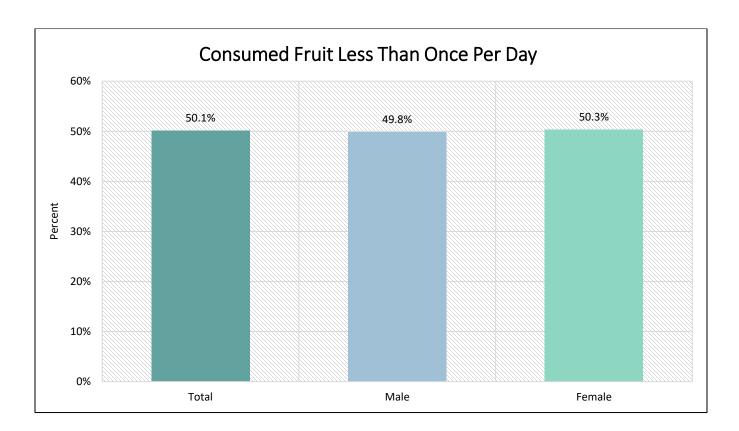
Not including juices, how often did you eat fruit in the past 30 days, including meals and snacks?

Diets high in fruits and vegetables can reduce the risk for cancer and chronic disease.<sup>76</sup> Fruits and vegetables are a good source of essential vitamins and minerals. They also provide fiber, while remaining low in fat and calories. Half of one's dinner plate should consist of fruits and vegetables.

The chart below represents the proportion of refugees surveyed who reported eating fruit less than once daily.

### **Key Findings**

- Half of refugees surveyed (50.1%) reported consuming fruit less than once per day.
- Similar proportions of male (49.8%) and female refugees (50.3%) reported consuming fruit less than once daily.



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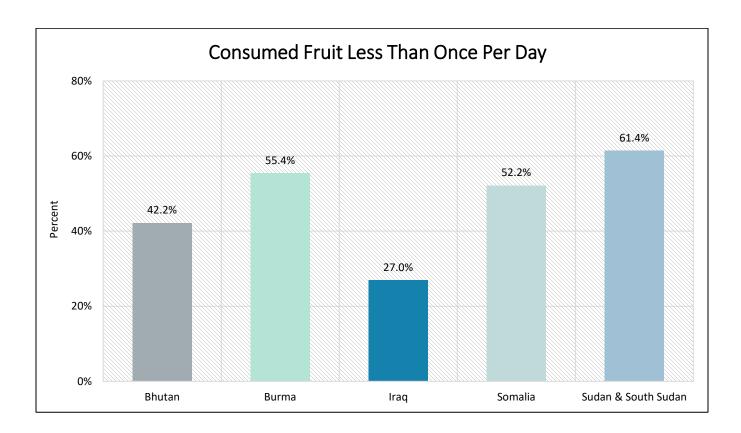
<sup>&</sup>lt;sup>76</sup> Centers for Disease Control and Prevention. (2015). Adults meeting fruit and vegetable intake recommendations. Retrieved from www.cdc.gov/mmwr/preview/mmwrhtml/mm6426a1.htm

# **Fruit Consumption**

### By Country of Origin

The chart below represents the proportion of refugees surveyed who reported eating fruit less than once daily by country of origin.

- Refugees from Sudan and South Sudan (61.4%) were most likely to report eating fruit less than once per day.
- Refugees from Burma (55.4%) and refugees from Somalia (52.2%) had the next highest percentage of individuals who reported consuming fruit less than once per day.
- Approximately two-fifths of refugees from Bhutan (42.2%) reported consuming fruit less than once daily and over one-fourth of refugees from Iraq (27.0%) reported the same.

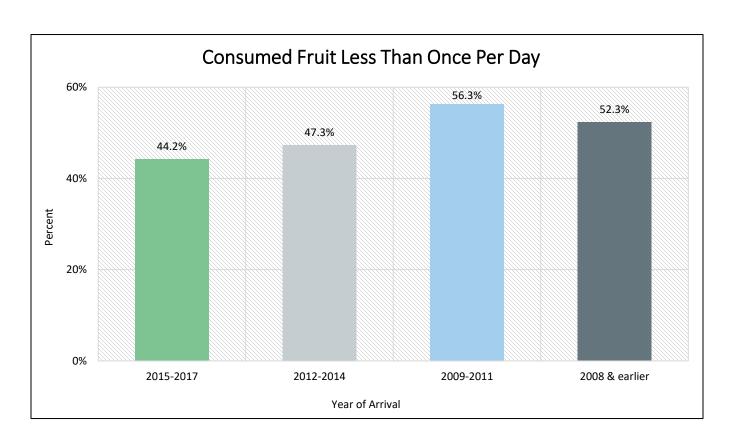


# **Fruit Consumption**

### By Year of Arrival

The chart below represents the proportion of refugees surveyed who reported eating fruit less than once daily by year of arrival.

- Over half of refugees arriving in 2009-2011 (56.3%) and in 2008 and earlier (52.3%) reported consuming fruit less than once daily.
- Just under half of refugees arriving in 2012-2014 (47.3%) reported consuming fruit less than once
  per day and approximately 44% of refugees arriving in 2015-2017 reported consuming fruit less
  than once per day.



# Vegetable Consumption

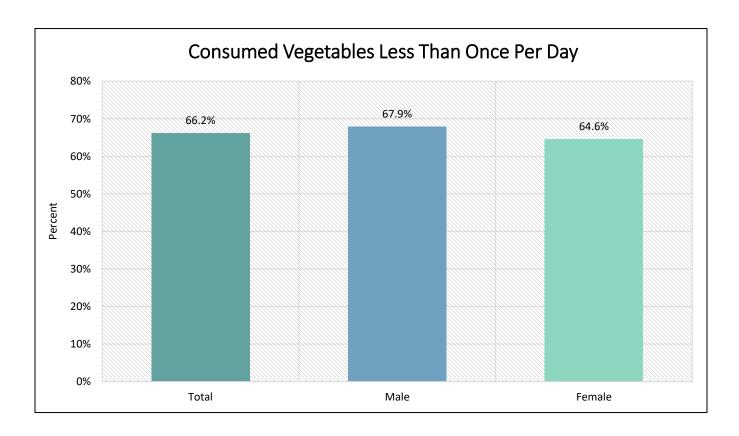
How often did you eat a green leafy or lettuce salad, with or without other vegetables? Not including lettuce salads and potatoes, how often did you eat other vegetables?

In the United States, only 9.3% of adults meet the recommendation for daily vegetable intake.<sup>77</sup> This number is much higher among refugees.

The chart below represents the proportion of refugees surveyed who reported eating vegetables less than once daily.

### **Key Findings**

- Approximately two-thirds (66.2%) of refugees surveyed reported consuming vegetables less than once daily.
- Male refugees (67.9%) were more likely to report consuming vegetables less than once per day than female refugees (64.6%) were.



<sup>&</sup>lt;sup>77</sup> Centers for Disease Control and Prevention. (2018). State indicator report on fruits and vegetables. Retrieved from www.cdc.gov/nutrition/downloads/fruits-vegetables/2018/2018-fruit-vegetable-report-508.pdf

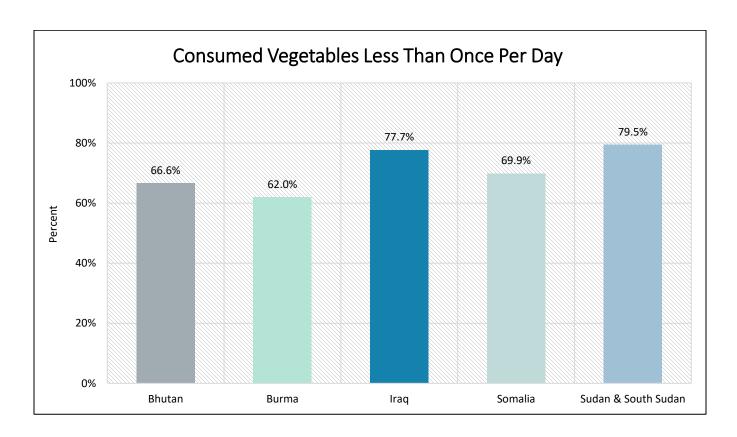
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# Vegetable Consumption

## By Country of Origin

The chart below represents the proportion of refugees surveyed who reported eating vegetables less than once daily by country of origin.

- Approximately 80% of refugees from Sudan and South Sudan (79.5%) reported consuming vegetables less than once per day.
- Refugees from Iraq (77.7%) were second most likely to report consuming vegetables less than once per day.
- Approximately two-thirds of refugees from Bhutan (66.6%) and over two-thirds of refugees from Somalia (69.9%) reported consuming vegetables less than once per day.

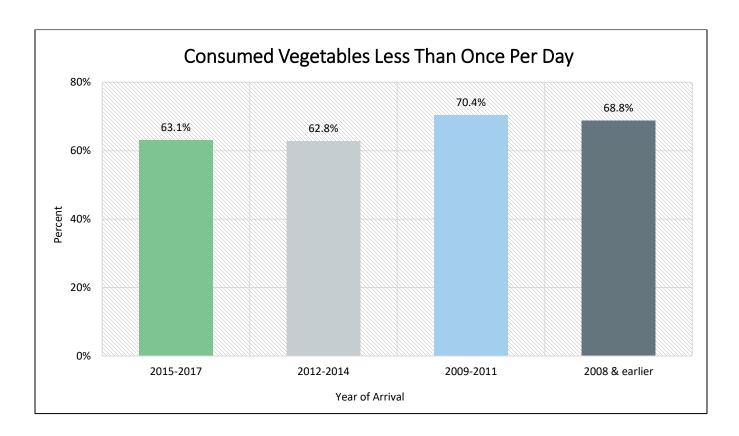


# Vegetable Consumption

## By Year of Arrival

The chart below represents the proportion of refugees surveyed who reported eating vegetables less than once daily by year of arrival.

- Over two-thirds of refugees arriving in 2008 and earlier (68.8%) and arriving in 2009-2011 (70.4%) reported consuming vegetables less than once per day.
- Approximately 63% of refugees arriving in 2012-2017 reported consuming vegetables less than once per day.



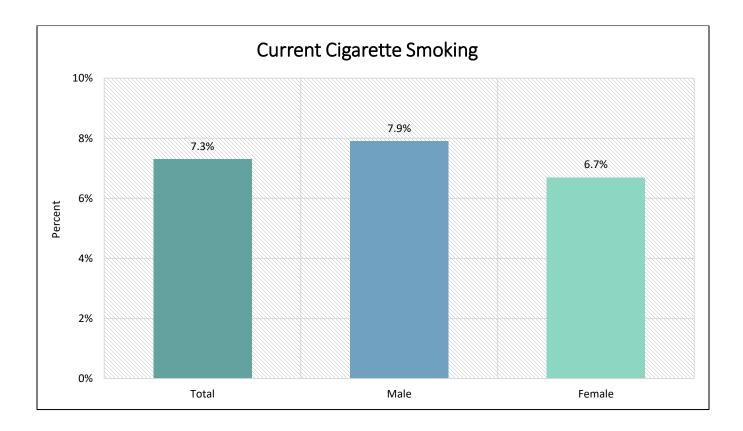
## **Current Cigarette Smoking**

Do you smoke cigarettes every day, some days, or not at all?

Tobacco is the leading cause of preventable death and disease in the United States. Smoking increases the risk of chronic diseases like lung disease, coronary heart disease, stroke, and various cancers.<sup>78</sup> Cigarette smoking causes nearly one in five deaths each year in the United States.<sup>79</sup>

The chart below represents the proportion of refugees surveyed who reported currently smoking cigarettes every day or some days.

- Approximately 7% of refugees surveyed reported being current cigarette smokers.
- Male refugees (7.9%) were more likely to report being current cigarette smokers than female refugees (6.7%).



<sup>78</sup> Centers for Disease Control and Prevention. (2016). Health effects of cigarette smoking. Retrieved from www.cdc.gov/tobacco/data\_statistics/fact\_sheets/health\_effects/effects\_cig\_smoking/

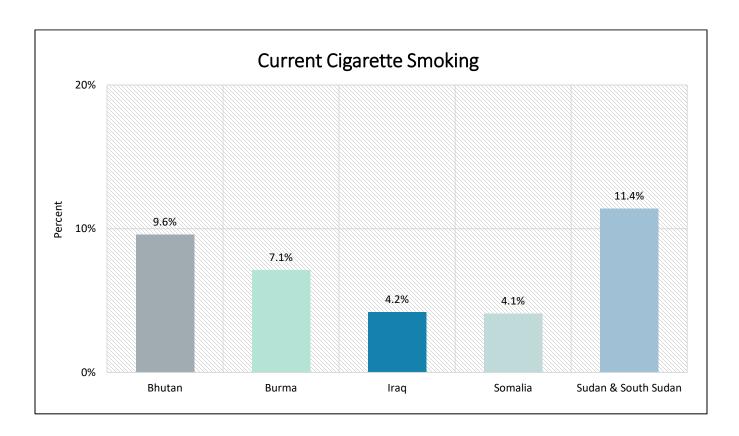
<sup>&</sup>lt;sup>79</sup> Centers for Disease Control and Prevention. (2013). QuickStats: number of deaths from 10 leading causes. Retrieved from www.cdc.gov/mmwr/preview/mmwrhtml/mm6208a8.htm?s\_cid=mm6208a8\_w

# **Current Cigarette Smoking**

## By Country of Origin

The chart below represents the proportion of refugees surveyed who reported currently smoking cigarettes every day or some days by country of origin.

- More than one in ten refugees from Sudan and South Sudan (11.4%) reported being current cigarette smokers and just under one in ten refugees from Bhutan (9.6%) reported the same.
- Approximately 7% of refugees from Burma (7.1%) reported being current cigarette smokers.
- Refugees from Iraq (4.2%) and refugees from Somalia (4.1%) were least likely to report being current cigarette smokers.

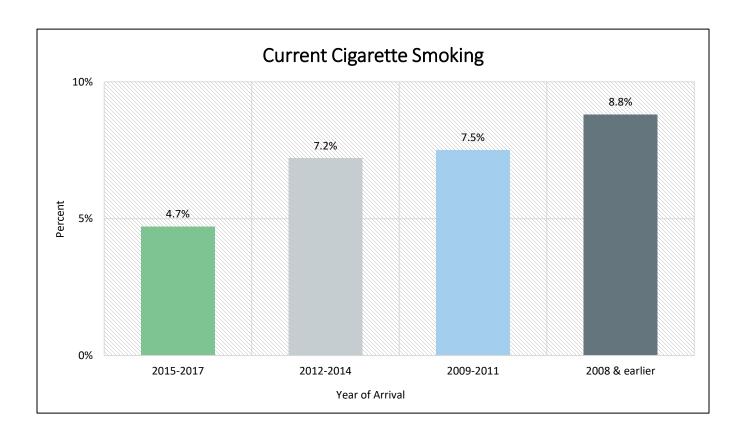


# **Current Cigarette Smoking**

### By Year of Arrival

The chart below represents the proportion of refugees surveyed who reported currently smoking cigarettes every day or some days by year of arrival.

- The percentage of refugees who reported currently smoking cigarettes increased with the length of stay in the United States.
- Refugees arriving in 2008 and earlier (8.8%) were most likely to report currently smoking cigarettes, while refugees arriving in 2015-2017 (4.7%) were least like to report the same.



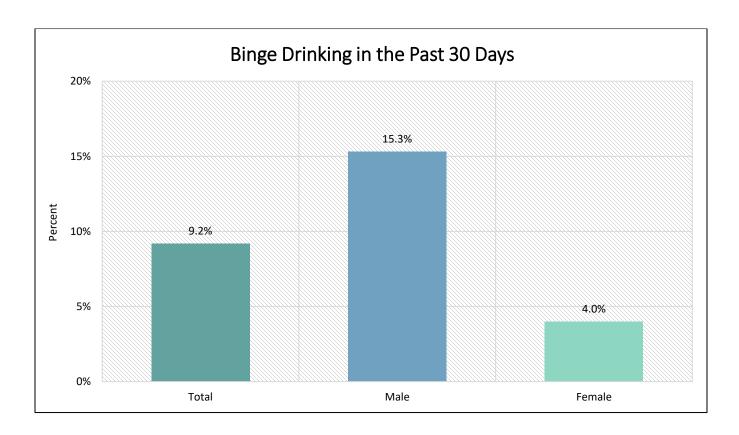
# Binge Drinking

During the past 30 days, what is the largest number of drinks you had on any one occasion?

The Substance Abuse and Mental Health Services Administration (SAMHSA) defines binge drinking as drinking five or more alcoholic beverages on any one occasion for men and drinking four or more alcoholic beverages on any one occasion for women.<sup>80</sup>

The chart below represents the proportion of refugees surveyed who reported having four or more drinks (for women) or five or more drinks (for men) on any one occasion in the past month.

- Approximately 9% of refugees surveyed reported binge drinking in the past 30 days.
- Male refugees (15.3%) were almost four times more likely to report binge drinking in the past 30 days than female refugees (4.0%).



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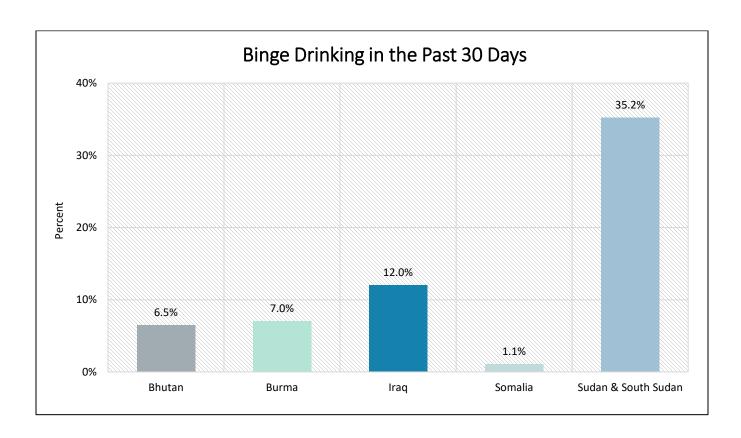
<sup>80</sup> National Institutes of Health. (2016). Drinking levels defined. Retrieved from www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

# Binge Drinking

### By Country of Origin

The chart below represents the proportion of refugees surveyed who reported having four or more drinks (for women) or five or more drinks (for men) on any one occasion in the past month by country of origin.

- Refugees from Sudan and South Sudan (35.2%) were most likely to report binge drinking in the
  past 30 days with a percentage almost three times higher than the refugee population with the
  second highest percentage of individuals who reported the same.
- Refugees from Iraq (12.0%) had the second highest percentage of individuals who reported binge drinking, followed by refugees from Burma (7.0%) and Bhutan (6.5%).
- Refugees from Somalia (1.1%) were least likely to report binge drinking in the past 30 days.

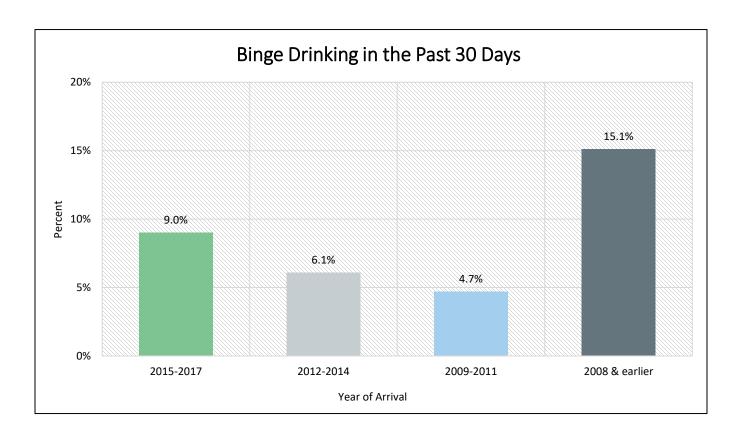


# Binge Drinking

### By Year of Arrival

The chart below represents the proportion of refugees surveyed who reported having four or more drinks (for women) or five or more drinks (for men) on any one occasion in the past month by year of arrival.

- Refugees with the longest stay in the United States (arriving in 2008 and earlier) were notably more likely to report binge drinking in the past 30 days at 15.1% than other populations.
- Refugees arriving in 2015-2017 (9.0%) had the second highest percentage of individuals who reported binge drinking in the past 30 days, followed by refugees arriving in 2012-2014 (6.1%), and refugees arriving in 2009-2011 (4.7%).



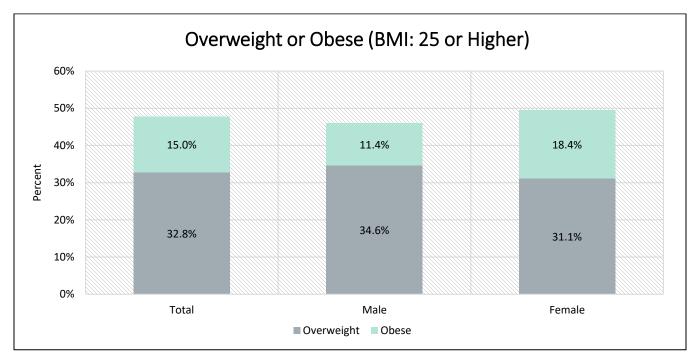
# Overweight or Obese

Overweight: BMI of 25 to 29.9 Obese: BMI of 30 or higher Calculated using height and weight

Body Mass Index (BMI) is an estimated measure of an adult's body fat, which is determined by a ratio of height and weight. Higher BMIs can indicate a higher risk of heart disease, high blood pressure, type 2 diabetes, and certain cancers. <sup>81</sup> Individuals with a BMI of 25-29.9 are considered overweight and individuals with a BMI of over 30 are considered obese.

The chart below represents the proportion of refugees surveyed with a BMI of greater than 25.

- Of the all refugees surveyed, approximately one-third were considered overweight (32.8%) and 15% were considered obese.
- Female refugees (18.4%) were more likely to be considered obese than male refugees (11.4%).
- Male refugees (34.6%) were slightly more likely to be considered overweight than female refugees (31.1%).



<sup>~-</sup>

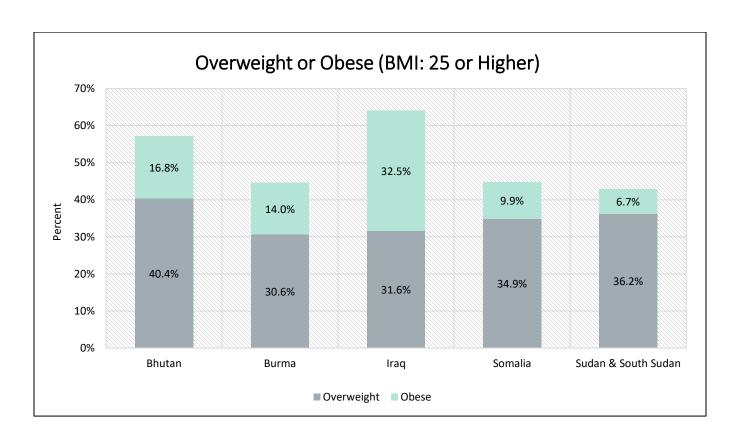
<sup>81</sup> National Institutes of Health. (2016). BMI Tools. Retrieved from www.nhlbi.nih.gov/health/educational/lose\_wt/bmitools.htm

# Overweight or Obese

### By Country of Origin

The chart below represents the proportion of refugees surveyed with a BMI of greater than 25 by country of origin.

- Overall, refugees from Iraq were most likely to be overweight or obese, followed by refugees from Bhutan.
- Refugees from Iraq (32.5%) were most likely population to be obese. This percentage was almost twice that of refugees from Bhutan (16.8%) who had the second highest percentage of individuals who reported being obese.
- Approximately two-fifths of refugees from Bhutan (40.4%) reported being overweight and over one-third of refugees from Somalia (34.9%) and refugees from Sudan and South Sudan (36.2%) reported the same.

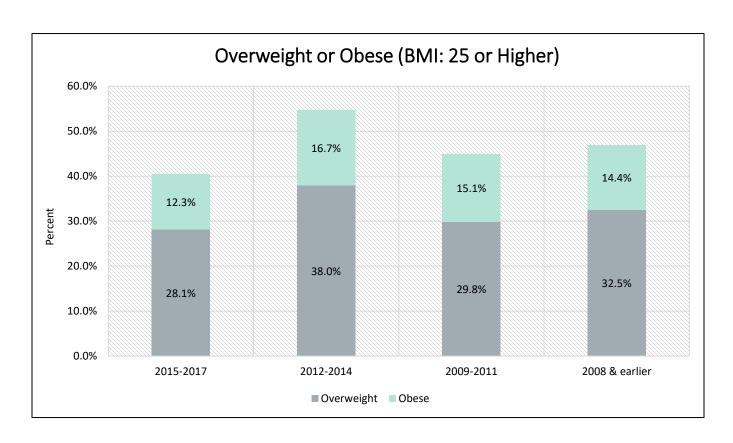


# Overweight or Obese

### By Year of Arrival

The chart below represents the proportion of refugees surveyed with a BMI of greater than 25 by year of arrival.

- Refugees arriving in 2012-2014 were most likely to report being overweight (38.0%) and obese (16.7%).
- Just under one-third of refugees arriving in 2008 and earlier (32.5%) reported being overweight and an additional 14.4% of refugees arriving in the same timeframe reported being obese.
- The most recently arrived refugee group (2015-2017) was least likely to be overweight (28.1%) or obese (12.3%).



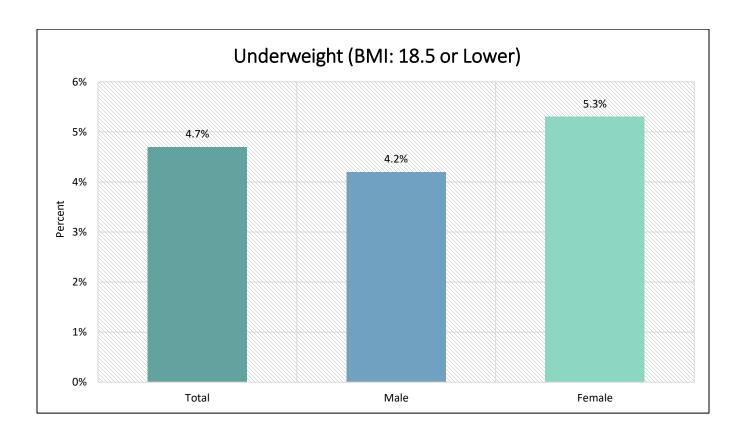
# Underweight

BMI less than 18.5 Calculated using height and weight

Body Mass Index (BMI) is an estimated measure of an adult's body fat, which is determined by a ratio of height and weight. Individuals with a BMI lower than 18.5 are considered underweight. Being underweight can put individuals at a higher risk of not getting the amount of nutrients needed for the immune system to function properly.

The chart below represents the proportion of refugees surveyed with a BMI lower than 18.5.

- Approximately 5% of all refugees surveyed were underweight.
- Female refugees (5.3%) were slightly more likely to be underweight than male refugees (4.2%).

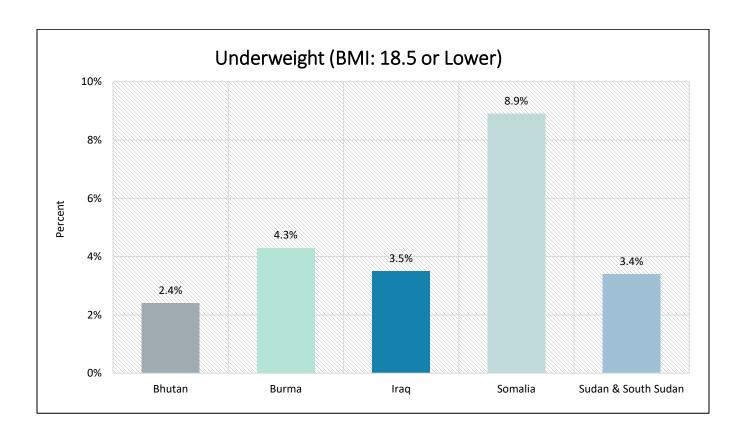


# Underweight

## By Country of Origin

The chart below represents the proportion of refugees surveyed with a BMI lower than 18.5 by country of origin.

- Refugees from Somalia (8.9%) were most likely to be underweight. The proportion of underweight refugees from Somalia was twice that of the population with the second highest percentage of individuals underweight.
- Just over four percent of refugees from Burma (4.3%) were underweight and approximately 3.5% of refugees from Iraq and Sudan and South Sudan reported the same.
- Refugees from Bhutan (2.4%) were least likely to be underweight.

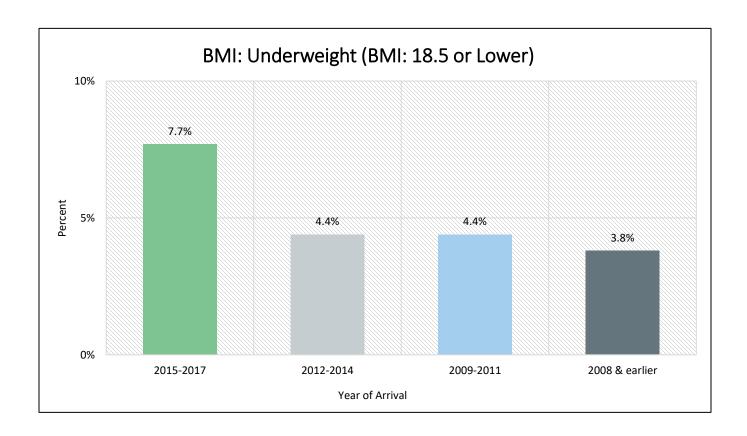


# Underweight

## By Year of Arrival

The chart below represents the proportion of refugees surveyed with a BMI lower than 18.5 by year of arrival.

- The most recently arrived group of refugees (2015-2017) was most likely to be underweight at 7.7%.
- Approximately 4% of refugees arriving in 2009-2014 were considered underweight.
- Refugees with the longest stay in the United States (arriving in 2008 and earlier) were least likely to be underweight at 3.8%.



# Conclusion

Refugees face unique challenges upon arriving in the United States and, as this report shows, these challenges and needs can differ significantly depending on a refugee's country of origin and how long they have resided in the United States. Nevertheless, several important trends exist across all refugee groups surveyed. For example, health care was identified as the top most urgent need across all populations surveyed.

With more than two-fifths of refugees reporting having no health care coverage of any kind and one-fourth of the population reporting being unable to see a doctor due to cost, it is clear that financial barriers are one of the main obstacles to accessing appropriate health services. One out of every ten Nebraska refugees had a household income of \$10,000 or less annually, which can make the decision to seek healthcare a financial choice rather than a medical one.

In addition to financial obstacles, language barriers also play a role in accessing health care. Just under three-fourths of the Nebraska refugee population reported language barriers as their biggest challenge in daily life. Approximately 73% of refugees reported having difficulty understanding verbal information from health care providers and 64% reported having difficulty understanding written health information in English. Even if medical interpretation is provided at an appointment, navigating the health care system, making an appointment, or trying to arrange payment for health services can be exceedingly difficult without English proficiency.

Barriers to accessing health care not only limit an individual's ability to seek treatment for medical issues as they arise, but also deter individuals from scheduling preventative care appointments, such as routine checkups. Approximately one-third of Nebraska refugees had visited the dentist in the past two years and just under 60% had a routine checkup in the past two years.

These routine checkups are essential to support refugees in understanding dietary guidelines and physical activity recommendations in a country where the food and lifestyle may be drastically different from their home countries. Half of Nebraska refugees ate fruit less than once daily and two-thirds of Nebraska refugees ate vegetables less than once daily. Promoting healthy lifestyle choices will be an integral part of developing a strategy to improve refugee health outcomes.

Several indicators in this report show that the rate of chronic disease among Nebraska refugees increased with length of stay in the United States. For example, the rates of high cholesterol, high blood pressure, asthma, COPD and diabetes were significantly higher among refugees arriving in 2008 and earlier than among the most recently arrived group of refugees. Increasing refugee access to preventative care may help to decrease the likelihood of developing chronic disease after arriving in the United States.

In addition to physical health, mental health must also be considered to gain a more complete understanding of refugee health status. Mental health indicators varied considerably depending on gender, country of origin and year of arrival. Female refugees were 1.5 times more likely than were male refugees to have ever had a depressive disorder. Refugees from Iraq were more than three times more likely to have been diagnosed with a depressive disorder than were the next most likely population to report so – refugees from Sudan and South Sudan. Refugees arriving in 2015-2017 were 1.6 times more likely than were refugees arriving in 2008 and earlier to report being in poor mental health on 14 or more of the past 30 days. These variances by stratification demonstrate the complexity of refugee health issues.

All of these indicators confirm the need for integrated support across state and local agencies, refugee communities and the organizations that serve them. It is our hope that this report will allow those invested in refugee health to deepen their understanding of health barriers and needs to serve Nebraska's refugee communities better.



**DEPT. OF HEALTH AND HUMAN SERVICES**