Between 2013 and 2015, the Center for the Study of Asian American Health (CSAAH) and Mekong NYC collected 100 surveys in the Cambodian community in NYC. The NYC Cambodian community is focused in the Bronx (46%), with smaller populations in Brooklyn (29%) and Queens (12%)\(^1\). The 2010 Census counted 3,488 Cambodians in the New York Metro Area and the population has grown 13% from 2000 to 2010. CHRNA survey findings indicate that the majority (71%) of Cambodian respondents were foreign-born, 88% of whom were born in Cambodia. The average number of years lived in the U.S was 28 years.

**DEMOGRAPHIC INFORMATION**

A majority of foreign-born Cambodian CHRNA respondents have lived in U.S. for more than two decades. Conflict or persecution in Cambodia was the top reason for coming to the U.S.

### Years Living in the U.S.

- 62% 5 years or less
- 28% 6-10 years
- 5% 11-15 years
- 5% 16-20 years
- 0% 21-30 years
- 5% Greater than 30 years

**EDUCATION**

- 44% have less than a high school education
- 13% are college graduates or higher

**LOW ENGLISH LANGUAGE PROFICIENCY**

- 40% speak English “not well” or “not at all”
- 96% of CHRNA respondents also speak Khmer at home

**CAMBODIAN CHRNA RESPONDENTS**

- 55% male
- 45% female

**LOW INCOME**

- 30% of Cambodian CHRNA respondents reported less than $25,000 in annual household income
- There is, on average, 3 adults living in the typical household

**LONG WORKING HOURS**

Among Cambodian CHRNA respondents who work:
- 20% work < 34 hours per week
- 37% work 35-40 hours per week
- 44% work ≥ 40 hours per week

**PERCEIVED HEALTH STATUS**

Cambodian CHRNA respondents were asked to rate their health status:
- 57% describe their health status as **GOOD, VERY GOOD, or EXCELLENT**
- 43% rated their health as **FAIR or POOR**

**GENERAL HEALTH**

- Cancer: 38%
- Respiratory: 46%
- CVD: 58%

**TOP HEALTH CONCERNS**

- Mental Health: 40%
- Substance Abuse: 27%
- Orthopedic: 24%
- Cancer: 38%
- Respiratory: 46%
Mental health risk was determined using the PHQ-2 (Patient Health Questionnaire) scale and anxiety risk was determined using the GAD-2 (General Anxiety Disorder) scale; a score of ≥3 is considered at-risk for depression or anxiety.

- 36% of Cambodian CHRNA respondents were considered at risk for depression
  - 8% did not answer the question
- 12% of Cambodian CHRNA respondents were considered at risk for anxiety
  - 20% did not answer the question

Those with a PHQ-2 score ≥3 (at risk for depression) were asked an additional set of questions comprising the PHQ-9 to determine further depression risk:

- 41% of the at-risk group reported moderate depression risk, 6% reported moderately severe risk, and 13% reported severe risk (see table below)

<table>
<thead>
<tr>
<th>Depression Risk from PHQ-9, n (%)</th>
<th>0-4 (Minimal)</th>
<th>5-9 (Mild)</th>
<th>10-14 (Moderate)</th>
<th>15-19 (Moderately severe)</th>
<th>20-27 (Severe)</th>
<th>Missing score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodian</td>
<td>0 (0.0)</td>
<td>13 (40.6)</td>
<td>13 (40.6)</td>
<td>2 (6.3)</td>
<td>4 (12.5)</td>
<td>2</td>
</tr>
</tbody>
</table>

Analysis of depression and anxiety risk by gender revealed that female Cambodian CHRNA respondents are at greater risk for both depression and anxiety (see figures below)

**Depression Risk (PHQ-2 ≥ 3) by gender**

- 26% Men
- 50% Women

**Anxiety Risk (GAD ≥ 3) by gender**

- 10% Men
- 14% Women

**SCREENING**

- 32% of Cambodian CHRNA respondents have never been screened for depression
- 26% have been screened for depression 3 or more years ago
- 24% said they did not know if they have ever been screened for depression
- 8% of Cambodian CHRNA respondents have been diagnosed with depression by a health care provider
SPOTLIGHT ON MENTAL HEALTH: UNMET NEED

Analysis of depression and anxiety risk by place of birth revealed that foreign-born Cambodian CHRNA respondents are at greater risk for depression. Foreign-born and US-born Cambodian CHRNA respondents were at similar risk for anxiety (see figures below).

**Depression Risk (PHQ-2 ≥ 3) by immigrant status**

- Foreign-born: 47%
- US-born: 22%

**Anxiety Risk (GAD ≥ 3) by immigrant status**

- Foreign-born: 15%
- US-born: 12%

Analysis of depression and anxiety risk by age revealed that Cambodian CHRNA respondents over the age of 45 are at greater risk for depression. Cambodian CHRNA respondents between the ages of 18-30 and over 50 years of age had similar risk for anxiety (see below).

**Depression Risk (PHQ-2 ≥ 3) by age**

- 18-30 years: 29%
- 31-40 years: 8%
- 41-50 years: 56%
- 50+ years: 52%

**Anxiety Risk (GAD ≥ 3) by age**

- 18-30 years: 19%
- 31-40 years: 0%
- 41-50 years: 6%
- 50+ years: 18%

**CONCLUSION:**

CHRNA findings underscore the need for better linkages to mental health-related resources concerning mental health, including screening and treatment of depression in the NYC Cambodian community, with a particular focus on women, individuals over 45, and individuals born outside the U.S. Linguistically- and culturally-relevant screening tools and treatment options are needed to appropriately address this issue in the Cambodian community.
HEALTH PROFILE

Body mass index (BMI) is a measure of body fat based on height and weight that applies to adult men and women. According to standard BMI measurements, about 34% of Cambodian CHRNA respondents are overweight, with 18% registering as obese. In comparison, 33% of New Yorkers are overweight and 23% are obese. When using Asian BMI standards, the proportions of overweight and obese Cambodian CHRNA respondents shift to 44% and 29%, respectively.

OVERWEIGHT/OBESITY

DID YOU KNOW?

35% of Cambodian CHRNA respondents reported difficulty obtaining necessary medical care, tests, or treatments in the last year. Reasons given were because of cost (53%), problems with insurance (44%), or problems getting to the doctor’s office (27%).

BARRIERS TO HEALTH CARE

PHYSICAL ACTIVITY

Sedentary lifestyle is related to many chronic diseases such as obesity, diabetes, heart diseases, and depression.

• 20% of Cambodian CHRNA respondents DO NOT engage in any weekly physical activity, compared to 26% of New Yorkers overall.

About 61% engage in sufficient weekly physical activity, compared to 67% of New Yorkers. Suffcient physical activity means spending >150 minutes per week engaging in moderate physical activity, > 75 minutes a week engaging in vigorous physical activity, or a combination of both

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HEALTH INSURANCE COVERAGE

29% have private or employer coverage
14% do not have health insurance
53% are enrolled in public or government insurance coverage (Medicaid, Medicare, other)

ROUTINE CHECKUPS

• 69% saw a health care provider for a routine physical checkup in the past year, which is below 88% of New Yorkers overall.

When Cambodian CHRNA respondents feel sick or become injured:

• 37% visit a community health center or public clinic
• 22% take medicine without medical consultation
• 21% go to a hospital emergency room
• 10% see a private doctor or healthcare provider
• 3% do nothing

HEALTH CARE ACCESS

HEALTH INFORMATION

The Cambodian CHRNA respondents get their health information and hear about services primarily from:

<table>
<thead>
<tr>
<th>Family</th>
<th>Friends</th>
<th>Healthcare Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>83%</td>
<td>69%</td>
<td>46%</td>
</tr>
</tbody>
</table>

HEALTH CARE PROVIDERS

• 1 out of 5 do not have a regular health care provider

Among those with a regular provider:

• 17% to some extent feel that their doctor looks down on them and the way they live their life
• 73% did not understand everything their doctor discussed with them during their last visit

ACCESS TO HEALTHY FOOD

• About 13% of Cambodian CHRNA respondents reported “always” or “usually” worrying about having enough money to buy nutritious meals

• 44% reported that their homes are a 10-minute-walk or more away from a place to buy fresh fruits and vegetables
ORAL HEALTH

- Over half (59%) of Cambodian CHRNA respondents rate their oral health as “POOR” or “FAIR”
- Only 11% have received an oral/dental health check-up in the last year

OSTEOPOROSIS

Two risk factors that increase risk of osteoporosis in later life are:
1. Being of Asian descent
2. Being female

Early screenings and intervention help to prevent negative health outcomes such as arthritis and joint injuries.
- 87% of female Cambodian CHRNA respondents 65+ years have received a checkup or screening for bone mineral density in the past 3 years

RISK FOR CARDIOVASCULAR DISEASES

High cholesterol levels and high blood pressure are risk factors of cardiovascular diseases (CVD), which can lead to heart disease and stroke.

- 36% of Cambodian CHRNA respondents received a checkup or screening for cholesterol, in the last year
- 29% were told they have high cholesterol. Similarly, 30% of New Yorkers were told the same thing by their physicians
  - 53% of respondents with high cholesterol are currently taking medications for high cholesterol
- 38% of Cambodian CHRNA respondents received a checkup or screening for blood pressure in the last year
- 35% were told they have high blood pressure, while 29% of New Yorkers were told the same thing by their physicians
  - 71% of respondents with high blood pressure are currently taking medications for high blood pressure

58% of respondents said CVD is a major concern for themselves or for their families

INCORRECTED RISK FOR CARDIOVASCULAR DISEASES

High cholesterol levels and high blood pressure are risk factors of cardiovascular diseases (CVD), which can lead to heart disease and stroke.

- Only 38% have previously received a check-up or screening for blood glucose in the past year
- About 10% were told by a health care provider that they have diabetes, similar to the 11% of New Yorkers told the same thing
- About 83% of respondents with diabetes are currently taking medications prescribed by a health care provider

COMPARISON OF CANCER SCREENING RATES

- Only 24% of Cambodian CHRNA respondents 50+ years old have received a colonoscopy, while 69% of New Yorkers 50+ years old received a colonoscopy in the past 10 years
- Approximately 94% of female Cambodian CHRNA respondents 21+ years have had a clinical breast exam
- 91% of female respondents 40+ years have had a mammogram in the past 2 years, as compared to 75% of New York women
- 74% of female Cambodian CHRNA respondents have had a pap smear in the past 3 years, as compared to 78% of New York women

74% of male Cambodian CHRNA respondents 50+ years have received a prostate exam in their lifetime.
**SOCIAL ENVIRONMENT**

- 28% of Cambodian CHRNA respondents are current smokers, compared to 16% of New Yorkers.
- 46% of men are current smokers; which is more than the 20% of current male smokers in New York.
- 14% of the women surveyed are current smokers; in comparison, 13% of New York women are current smokers.

**SMOKING**

- 47% of Cambodian CHNRA respondents believe people in their neighborhood are trustful.
- 71% believe people in their neighborhood get along well together.
- 47% believe their neighbors look out for each other.
- 42% believe that their neighbors would offer assistance in the event of an emergency.
- 49% have been verbally or physically abused, or have had property damaged specifically because of race or ethnicity.

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CONCLUSION

The Cambodian CHRNA results are aligned with the public health literature which indicates that significant health disparities exist in Asian American subgroups. CHRNA respondents reported high rates of smoking and alcohol use compared to New Yorkers in general. The findings also suggest high rates of depression and a need for better resources concerning mental health, including screening and treatment of depression. In addition, only about a quarter of respondents reporting getting enough sleep, and almost two-thirds reported taking sleeping pills, other drugs, or alcohol to help them sleep.

Health Promotion
Developing community-based health promotion and preventive healthcare in partnerships with Cambodian-serving community-based organizations is essential to improving the health and well-being of the Cambodian community.

Citations:
1. Asian American Federation, “Asian Americans in NYC, April 2013
2. New York City comparison data derived from the New York City Department of Health and Mental Hygiene’s EpiQuery: NYC Interactive Health, 2013 NYC Community Health Survey data at http://on.nyc.gov/1Cf1RA
5 New York City comparison data derived from New York City Department of Health and Mental Hygiene’s EpiQuery: NYC Interactive Health, 2010 Survey Trends data at http://on.nyc.gov/1AnvDsL
6. New York City comparison data derived from New York City Department of Health and Mental Hygiene’s EpiQuery: NYC Interactive Health, 2012 Survey Trends data at http://on.nyc.gov/1AnvDsL

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Mekong aims to improve the quality of life of the Southeast Asian community by achieving equity through community organizing and healing, promoting arts, culture, and language, and creating a safety net by improving access to essential social services.

The mission of the NYU Center for the Study of Asian American Health (CSAAH) is to identify health priorities and reduce health disparities in the Asian American community through research, training and partnership.

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