




IMPACT OF FOOD INSECURITY SCREENING ON HEALTH

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Disclosure

- I have no relevant financial or material interests related to information discussed in this presentation.

Objectives

- Define food insecurity
- Understand food insecurity's impact on health
- Relate how food insecurity effects special populations
- Know how to screen for food insecurity using the Hunger Vital Sign tool
- Understand how current events can effect food insecurity rates
- Develop a plan to implement screening for food insecurity into your own practice

A Little About Me

- Arizona Native
- Pediatric Intensive Care Unit Nurse
- Pediatric Nurse Practitioner student
- Occupational Health Nurse: COVID 19 Response
- Big foodie





What Is Food Insecurity?

- USDA defines **food insecurity** as a "lack of consistent access to enough **food** for an active, healthy life."

Food Insecurity in America

1 in 9 people



struggles with hunger.

1 in 7
children

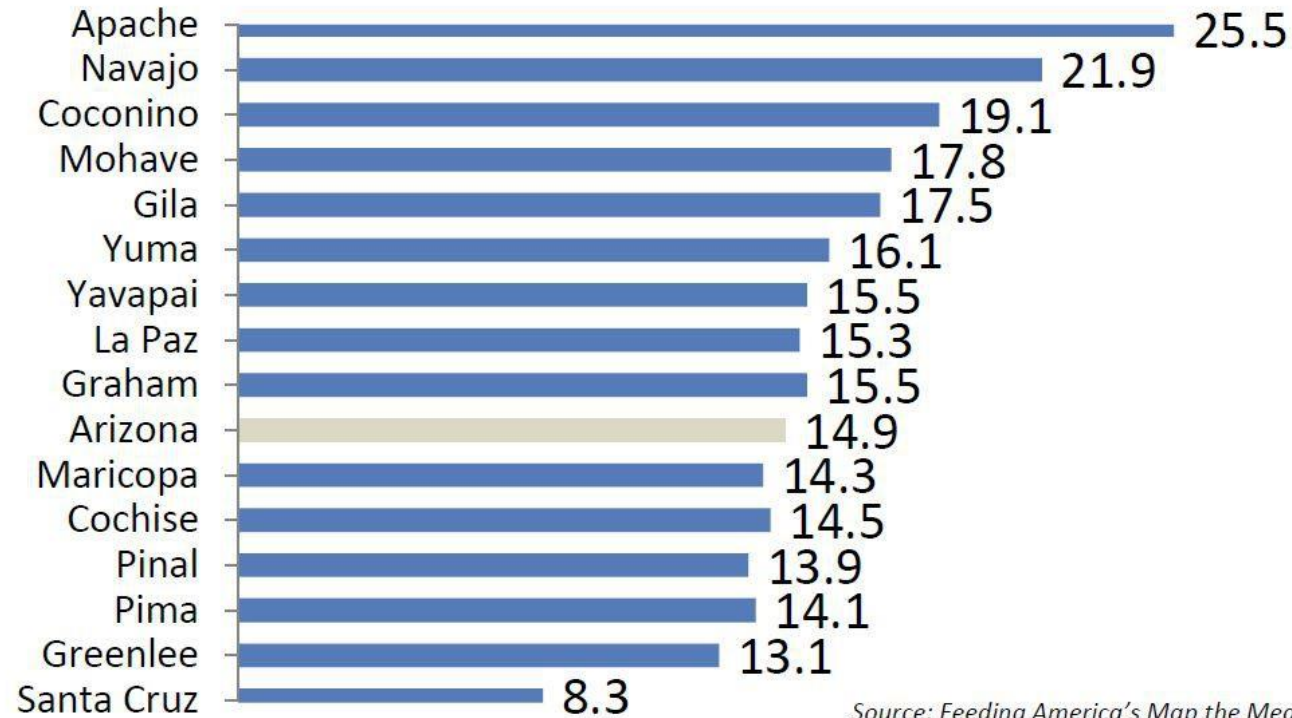
struggles with hunger.

Food Insecurity in Arizona



- 1 in 7 people struggle with hunger
- 1 in 5 children live with food insecurity

Food Insecurity Rate in Arizona by County



Source: Feeding America's Map the Meal Gap 2018

- Arizona's food insecurity rate is higher than the national rate (12.9%).
- Arizona's rate is declining, from 17.1% in 2014.

Effects of Food Insecurity on Health



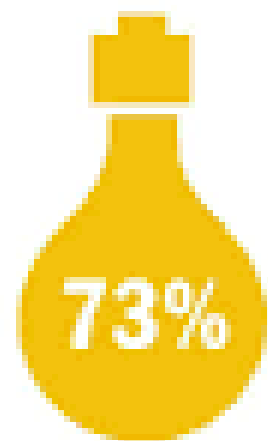
- Intricately linked
- Lack of nutritious food impacts physical & mental health
- Food insecurity linked to development of chronic health problems such as diabetes & hypertension
- Exacerbates chronic disease & makes it harder to manage

A Conceptual Framework: Cycle of Food Insecurity & Chronic Disease

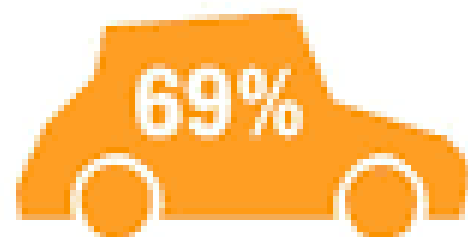


Adapted: Seligman HK, Schillinger D. N Engl J Med. 2010;363:6-9.

MAKING TOUGH CHOICES: HOUSEHOLD SPENDING TRADEOFFS IN THE PAST YEAR



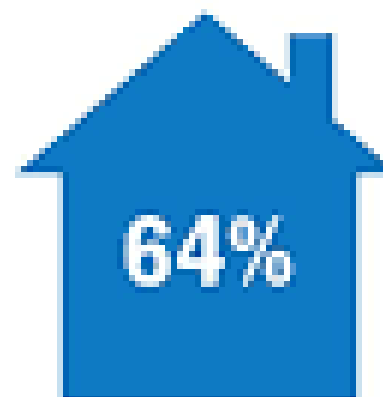
HAD TO CHOOSE
BETWEEN FOOD
AND UTILITIES



HAD TO CHOOSE
BETWEEN FOOD AND
TRANSPORTATION



HAD TO CHOOSE
BETWEEN FOOD
AND MEDICINE OR
MEDICAL CARE



HAD TO CHOOSE
BETWEEN FOOD AND
HOUSING



HAD TO CHOOSE
BETWEEN FOOD
AND EDUCATION

SPECIAL POPULATIONS & FOOD INSECURITY



Seniors

- 63% of senior households are forced to choose between food and medical care.
- Increased risk for depression, heart disease, diabetes, limited activities of daily living.
- Estimated annual healthcare costs for conditions related to food insecurity: \$130.5 billion
- Only 45% are enrolled in assistance programs



Children

- More likely to repeat a grade
- Developmental impairments in language & motor skills
- Have more social & behavioral problems
- More likely to be hospitalized for common childhood illnesses
- Rely solely on school lunch programs, and hunger relief charities



African Americans

- African American households have twice the food insecurity rate of white households
 - Effects 1 in 4 African American children
 - The 10 counties with the highest food insecurity rates in the nation are at least 60% African American
 - 9% of African Americans live in deep poverty (less than 50% of the federal poverty threshold).
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Hispanics

- Experience high rates of food insecurity despite increased numbers in the workforce
- High propensity for obesity, diabetes, & heart disease
- Less likely to apply for SNAP



Hunger & Poverty

- 37 million Americans are food insecure
- In 2019, most families living in poverty earn less than \$25,750 per year
- 72% of households served by Feeding America Network in 2014 lived at or below the federal poverty level with an average annual household income of \$9,175.



Rural Hunger

- 2.3 million households in rural communities face hunger
- Rural communities make up the majority of food insecure counties
- Accounts for over $\frac{3}{4}$ of childhood food insecurity
- 1 in 4 Indigenous Americans are food insecure



HOW CAN
HEALTHCARE
PROVIDERS
ADDRESS
FOOD
INSECURITY?

SCREEN, IDENTIFY, & INTERVENE



Hunger Vital Sign™

A validated tool to screen for food insecurity

Within the past 12 months, we worried whether our food would run out before we got money to buy more.

- Often true
- Sometimes true
- Never true

Within the past 12 months, the food we bought just didn't last and we didn't have money to get more.

- Often true
- Sometimes true
- Never true

A patient or family screens positive for food insecurity if the response is "often true" or "sometimes true" to either or both of these statements.



Learn more about screening for and addressing

The Hunger Vital Sign



My Project in Flagstaff

- Screen using The Hunger Vital Sign
- Identify families at risk for or suffering from food insecurity
- Referred to resources & offered emergency food boxes
- **Special thanks to Northern Arizona Healthcare & Flagstaff Family Food Center**

Coding For Providers

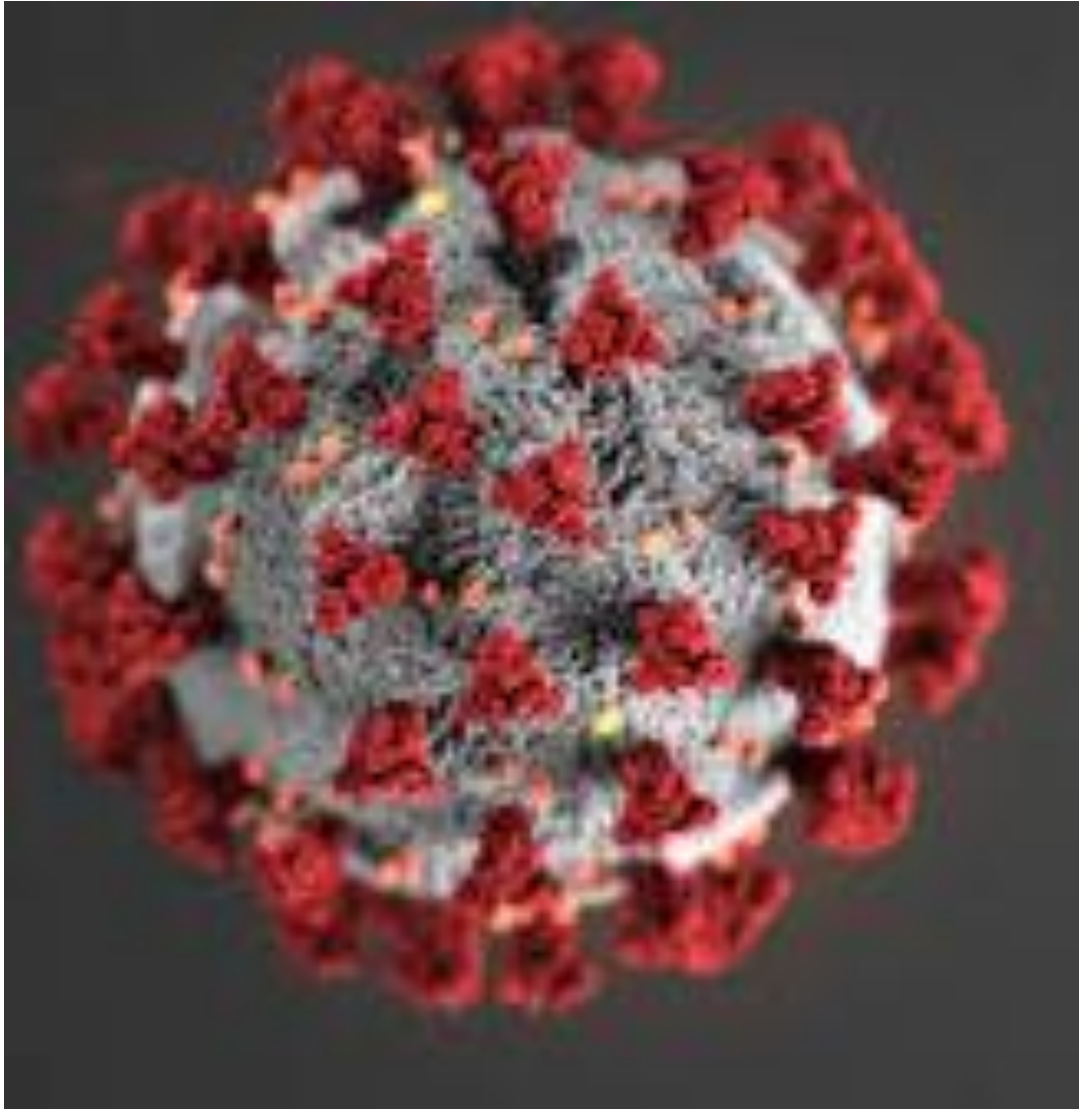
- ICD-10- CM, health providers can use code **Z59.4** — “Lack of adequate food and safe drinking water.”
- Use the time-based preventative medicine counseling codes **CPT 99401-99406**
- Use codes with caution
- Excellent resource:
- https://frac.org/wp-content/uploads/Overview_of_Food_Insecurity_Coding_Report_Final-1.pdf

CURRENT EVENTS
IMPACTING FOOD
INSECURE FAMILIES

Changes to SNAP



- Proposed change could kick 700,000 people off SNAP assistance
- Impacts individual state's abilities
- "Able bodied adults without dependents"
- 500,000+ children stand to lose school breakfast & lunch
- Injunction issued on March 13th blocks the rule change: For now

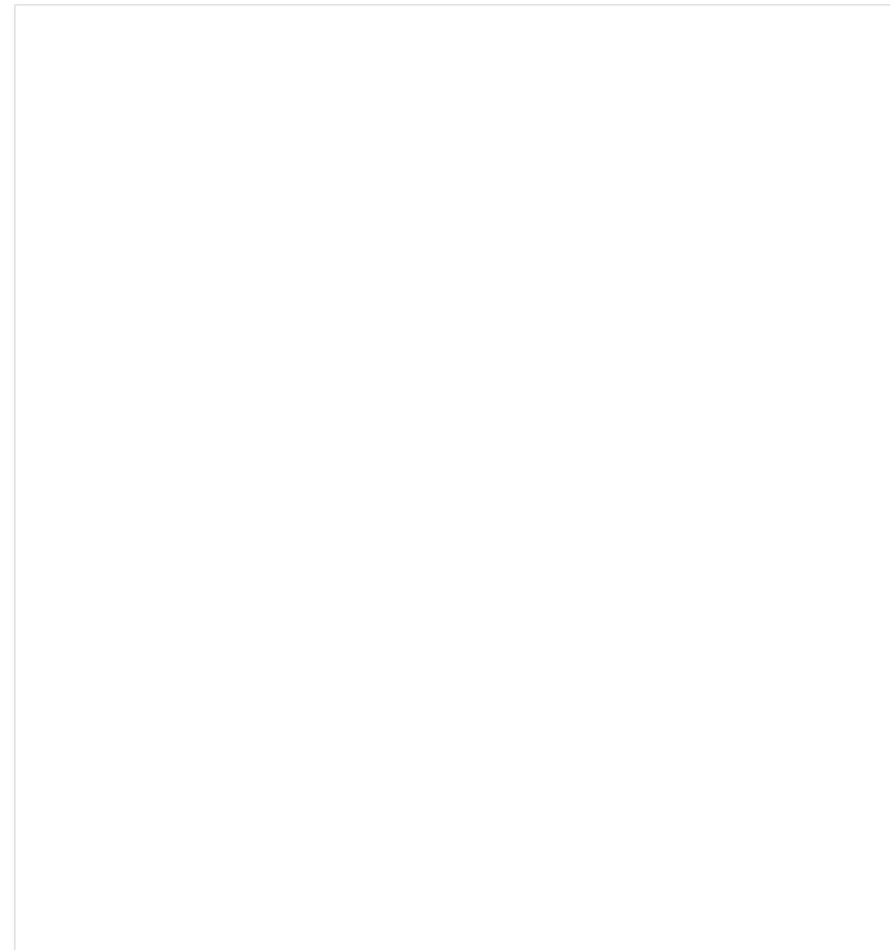


COVID-19 Pandemic

- School closures
- Job losses
- Possible infection & hospitalization
- Panic buying effects grocery store supplies
- Strain on local food banks
- Resources for COVID-19 & Food Insecurity
- <https://frac.org/covid-19-updates>

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- <https://www.feedingamerica.org/>

We CAN Change Lives



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References

- Feeding America. (2019). Facts about child hunger in America. Retrieved from <https://www.feedingamerica.org/>
- Feeding America. (2018). Hunger and poverty in Arizona: Map the meal gap. Retrieved from <http://map.feedingamerica.org/county/2016/overall/arizona>
- Food Research and Action Center. (2019). Covid-19 updates. Retrieved from: <https://frac.org/COVID-19-updates>
- Hager, E.R., Quigg, A.M., Black, M.M., Coleman, S.M., Heeren, T., Rose-Jacobs, R.,...Frank, D.A. (2010). Development and validity of a 2-item screen to identify families at risk for food insecurity. *Pediatrics*, *126*(1), 26-32. doi: 10.1542/peds.2009-3146
- Kimbro, R., & Denny, J. (2015). Transitions into food insecurity associated with behavioral problems and worse overall health among children. *Health Affairs*, *34*(11). doi: 10.1377/hlthaff.2015.0626
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References

- Luhby, T. (2019). Half a million students would lose free lunches under food stamp rule changes, USDA says. Retrieved from: <https://www.cnn.com/2019/10/16/politics/trump-food-stamps-school-lunches/index.html>
- Reifsnider, E., Crawford, D., & Nichols, M. (2019). Community/public health nurses' responsibility to ensure adequate nutrition for hungry families. *Public Health Nursing, 36*, 587-588. doi: 10.1111/phn.12663
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