



brighterbites®

Supporting Families in Crisis: A rapid assessment methodology to address needs in low-income houses during COVID-19

Michael & Susan Dell Center for Healthy Living – Dec 4, 2020

THE BRIGHTER BITES MISSION

to create

COMMUNITIES OF HEALTH

through

FRESH FOOD



THE BRIGHTER BITES FORMULA: A NEW KIND OF FOOD CO-OP

Produce Distribution
(20-25 lbs/week)



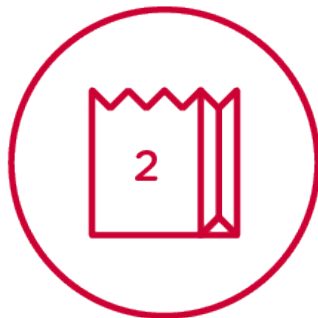
Nutrition Education
(school & home)



Fun Food Experience
(recipe tasting)

*All three done weekly for 16 weeks during academic year in schools where >75% children are enrolled in the F/R lunch program or Title 1; 8 week summer program
Program is free to schools & families*

Fill the Plate



Bring fresh produce to where kids already are.

Educate



Teach kids and families healthy ways to use the food.

Make it Great



Create a fun food experience for everyone involved.

Measure Outcomes to Determine Impact

SINCE 2012, BRIGHTER BITES



has provided over **40 million pounds** of produce and **millions** of nutrition education pieces



to **475,000+ individuals** (representing ~100,000 cumulative families)



at over **275 schools and camps** across Houston, Dallas, Austin, New York City, the Washington D.C. metro area, and Southwest Florida.

THEORETICALLY-GROUNDED AND EVIDENCE-BASED

- **Community-Academic partnership:** UTHealth School of Public Health is an academic/research partners for Brighter Bites.
- **Conduct research** to determine program effectiveness on behavioral and health outcomes
- Brighter Bites **tracks KPIs** to measure the program's dosage, reach, fidelity, and acceptability in real-time across all sites.
- **Program evaluation** to longitudinally track behavioral outcomes (child and parent fruit and vegetable intake, home nutrition environment, school nutrition environment), and qualitative data to determine program impact.

THE DATA

As compared to those in the comparison schools, families participating in Brighter Bites reported:

- two-fold increase in cooking meals from scratch, and a significant increase in eating meals together and serving more produce as part of those meals¹
- two-fold increase in using nutrition labels to guide grocery purchases¹
- and a significant decrease in added sugars consumed among children¹
- 2-year follow up showed sustained consumption of the fruits and vegetables among families. ²
- Consumed more fruits and vegetables served at school lunches, according to a 2017-2018 plate waste study ³

Brighter Bites made me cook things I wouldn't have bought for fear of wasting money if my children didn't like it. ^{4,5}

- Brighter Bites Parent



BRIGHTER BITES COVID-19 RAPID RESPONSE SURVEY

- School closures abruptly ended Brighter Bites traditional programming.
- Important to reach families, identify needs, and provide resources.

COVID-19 RAPID RESPONSE SURVEY – APRIL 2020

COVID-19 RESPONSE MANUSCRIPTS

1. Haidar A*, Khoei A*, Alex SE, Blick C, Lopez E, Sharma SV. Community-academic partnerships to promote health literacy and address social needs among low-income families during COVID-19. *Journal of Nutrition Education and Behavior*. October 15, 2020 DOI: <https://doi.org/10.1016/j.jneb.2020.10.003>
2. Sharma SV, Haidar A*, Noyola J, Tien J, Rushing M*, Naylor B*, Chuang RJ, Markham C. Using a rapid assessment methodology to identify and address immediate needs among low-income households with children during COVID-19. *PLoS One*. October 1, 2020 <https://doi.org/10.1371/journal.pone.0240009>
3. Sharma SV, Chuang RJ, Rushing M*, Naylor B*, Ranjit N, Pomeroy M, Markham C. Social Determinants of Health–Related Needs During COVID-19 Among Low-Income Households With Children. *Preventing Chronic Disease*. Volume 17 — October 1, 2020
4. Haidar A, Markham C, Marshall A, Chuang RJ, Spence M, Boone J, Pomeroy M, Dachman R, Davis J, Sharma SV. Innovative partnerships to address food insecurity during the COVID-19 pandemic: The Brighter Bites produce voucher program. Under review.

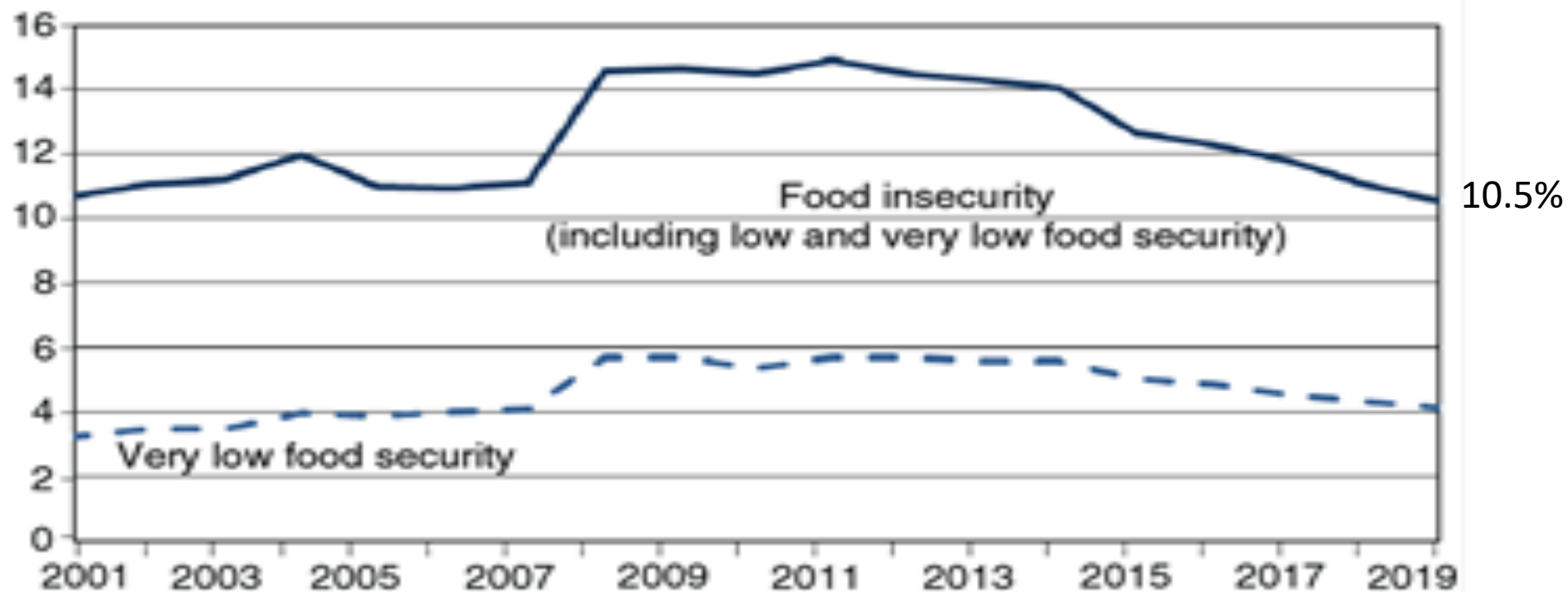
*students or post-doc fellows



PREVALENCE OF FOOD INSECURITY

Prevalence of food insecurity and very low food security, 2001–2019

Percent of U.S. households

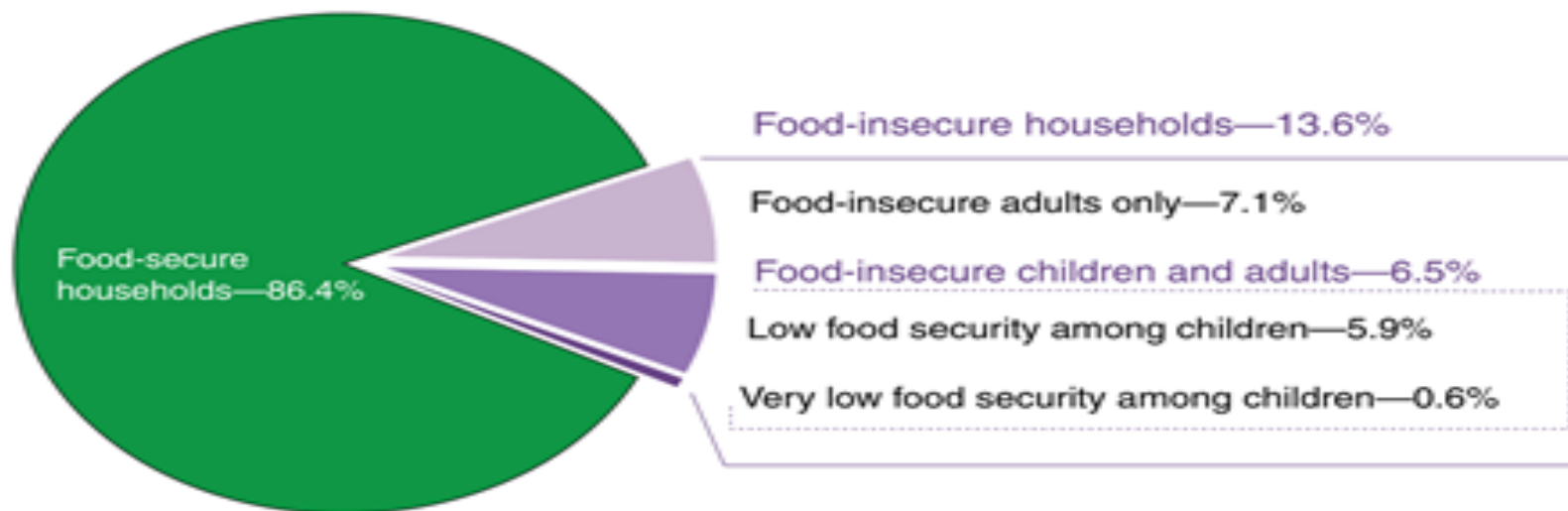


Source: USDA, Economic Research Service using data from Current Population Survey Food Security Supplements, U.S. Census Bureau.



PREVALENCE OF FOOD INSECURITY

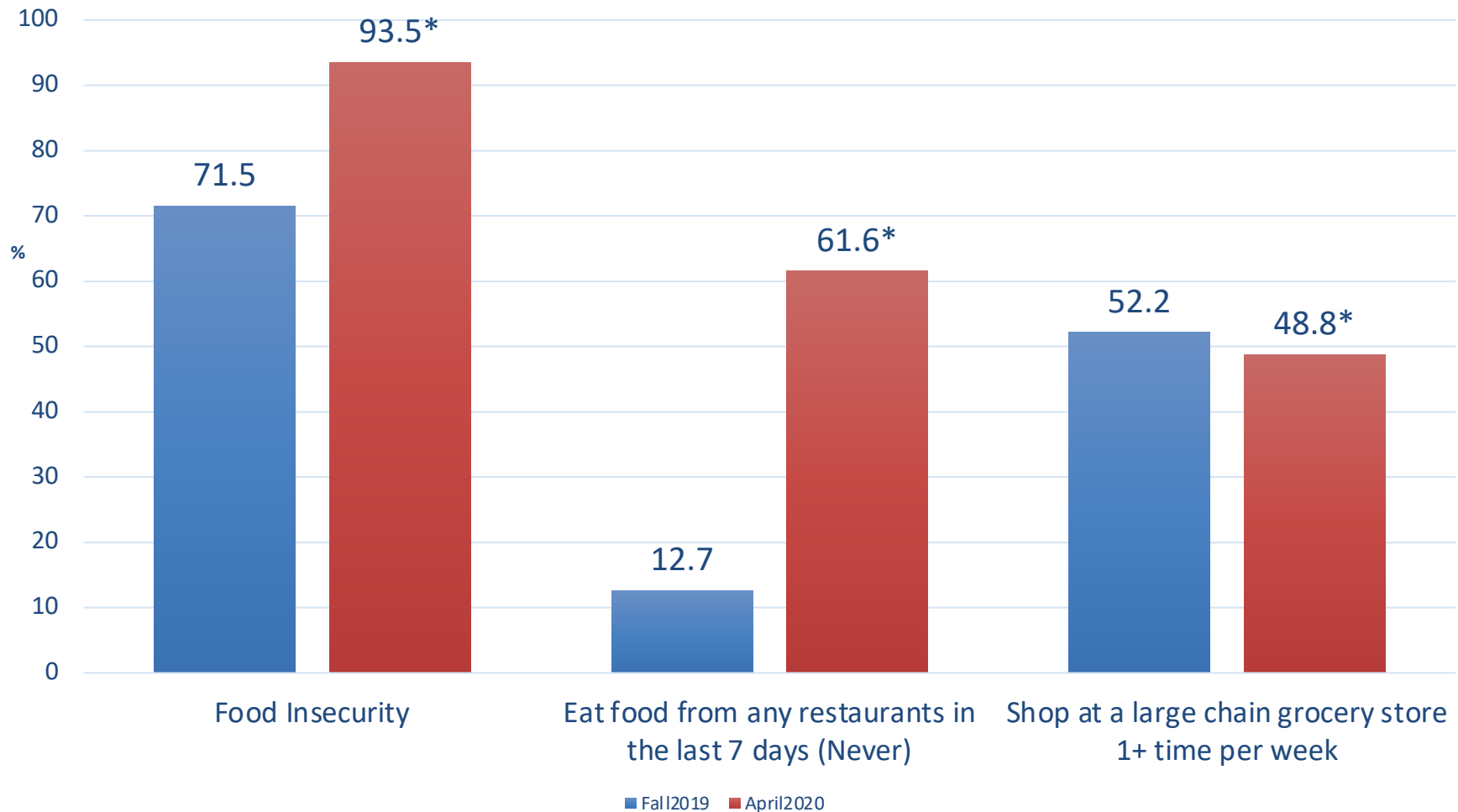
U.S. households with children by food security status of adults and children, 2019



Source: USDA, Economic Research Service using data from the 2019 Current Population Survey Food Security Supplement, U.S. Census Bureau.

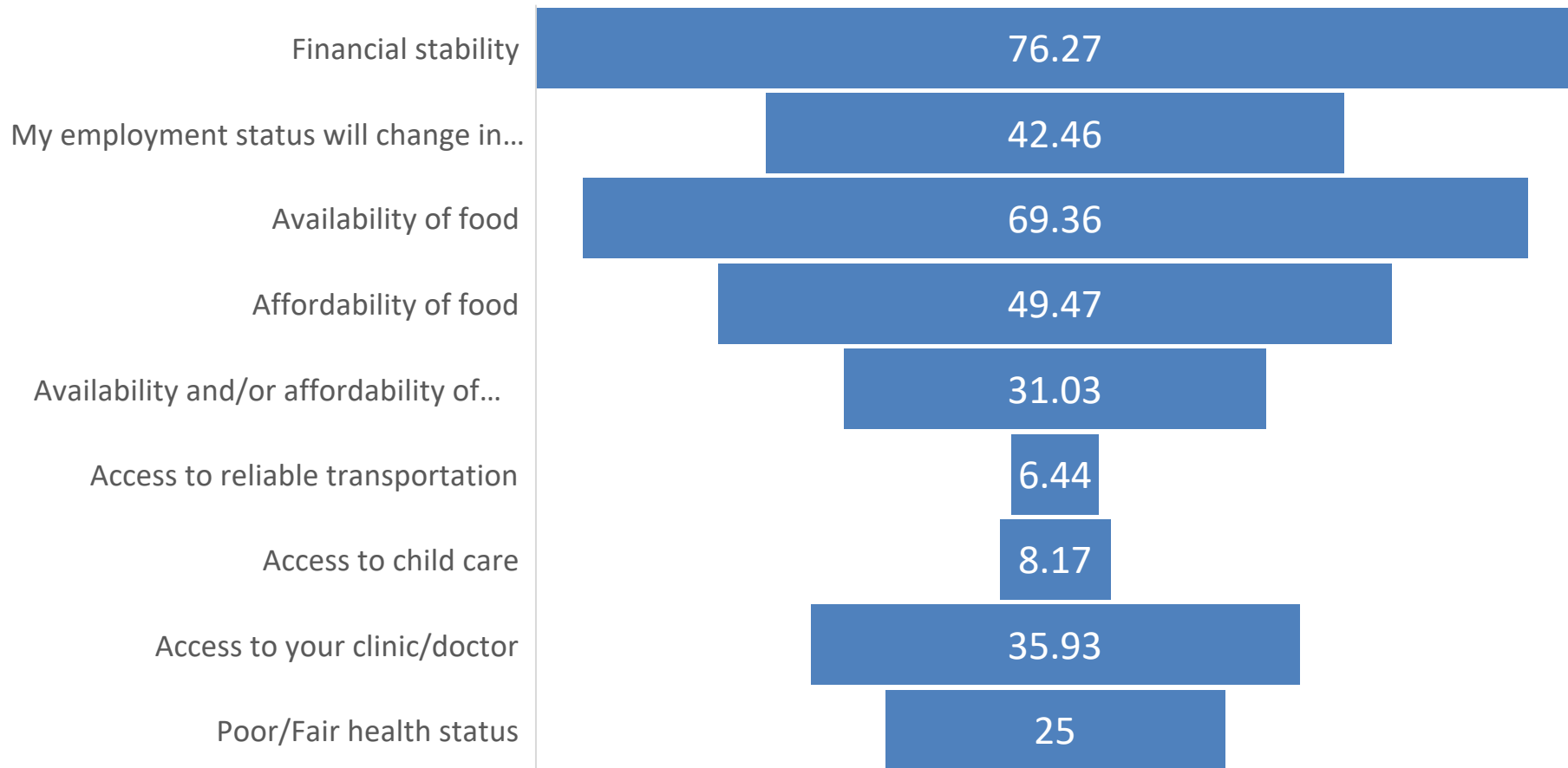
COVID-19 RAPID RESPONSE SURVEY

(April-May 2020; n=1048 Brighter Bites families)



COVID-19 RAPID RESPONSE SURVEY (n=1048, Wave 1)

Due to the coronavirus, are you concerned about any of the following in regards to you and your family? (check all that apply) **% Yes**



Thematic analysis of qualitative data:

Families in crisis (n=132; 13%)

Themes	Example Comments
Fear of contracting COVID19	<p>“My daughter was diagnosed with coronavirus and I am very scared for all the members of my family.”</p> <p>“We are worried that my husband does not have a job and we do not know how we will be able to buy food, pay the mortgage, electricity, water, the internet, what will happen to our future, we are very afraid, regarding the virus, of taking our children to the doctor, to the dentist, etc.”</p>

1. Sharma SV, Haidar A*, Noyola J, Tien J, Rushing M*, Naylor B*, Chuang RJ, Markham C. Using a rapid assessment methodology to identify and address immediate needs among low-income households with children during COVID-19. PLoS One. October 1, 2020 <https://doi.org/10.1371/journal.pone.0240009>

Families in crisis (n=132)

Disruption of employment status

“I was left without work, and I don't have for supplies, or bills, or food.”

“I'm very worried because I haven't had work for three weeks and I don't have money to pay rent, electricity, or water. My work has been reduced by 90%, I'm an assistant housecleaner.”

Families in crisis (n=132)

Financial Hardship

“My biggest worry is not being able to pay next month's rent and not knowing where to go.”

“Not having food for my children and frustration because I don't know what I'm going to do to pay rent. Thanks to you I have had some food. Thank you very much. May God give you more to continue helping. God bless you.”

“I have a water bill of \$ 2141.79 and it will be cut off the 13th of this month. I'm in panic of being left without water.”

“I am worried about not being able to pay my rent next month (May_2020) because we are out of work.”

Families in crisis (n=132)

Exacerbated Food Insecurity

“I don't have enough food for my children.”

“I am worried about how to feed the children because there is no work right now, I am worried about paying my debts”

“My biggest worry at the moment is food for my family.”

Sociodemographics of families in crisis:

Cities		
• Houston	54	76.06
• Dallas	6	8.45
• Washington DC	7	9.86
• SW Florida	4	5.63
Does your family use the following?		
• WIC	21	30.00
• SNAP	19	27.14
• Double Dollars	0	0.00
• Medicaid/Texas Health Steps	35	50.00
• Medicare	5	7.14
• Free/Reduced meals	57	80.28
• CHIP	9	12.86
Child Race		
• Black or African American	5	7.14
• Mexican-American, Latino or Hispanic	59	84.29
• White	2	2.86
• Other	4	5.71
Health Status and Social needs		
	N	%
Food insecurity due to coronavirus		
• Food secure	0	0.00
• Food insecure	71	100.00
Due to the coronavirus, are you concerned about any of the following in regards to you and your family? (check all that apply)		
• Financial stability	60	84.51
• My employment status will change in the near future	32	45.07
• Availability of food	58	81.69
• Affordability of food	46	64.79
• Availability and/or affordability of housing	36	50.70
• Access to reliable transportation	8	11.27
• Access to child care	9	12.68
• Access to your clinic/doctor	25	35.21
How would you rate your current health status?		
• Poor	12	16.90
• Fair	23	32.39
• Good	20	28.17
• Very good	8	11.27
• Excellent	8	11.27

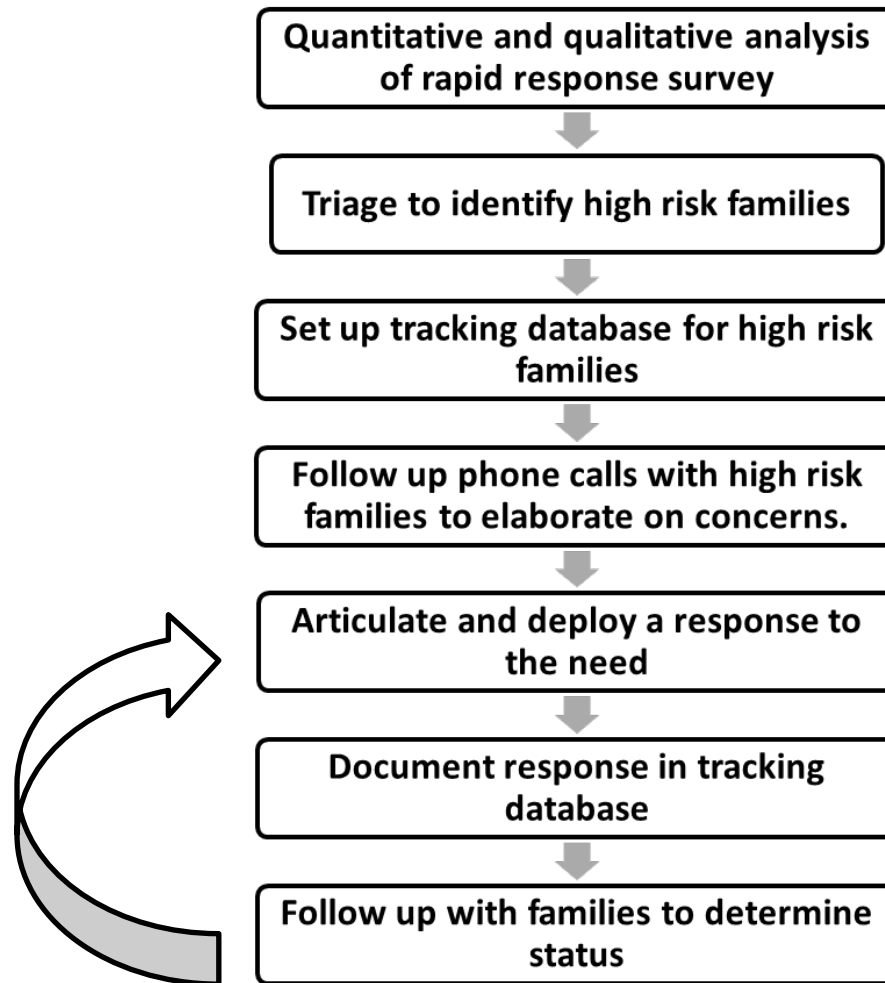
Using Rapid Epidemiological Assessment for food insecurity

- Rapid epidemiological assessment (REA) refers to post-disaster assessment methods that attempt to accurately assess a population by using the fewest resources in the shortest time.
- These measures have included surveys, door-to-door assessments, surveillance methods, and screening and individual risk assessment using qualitative and quantitative methods.
- The application of a rapid assessment could extend to identifying social determinants of health needs during a disaster such as food insecurity.
- This is particularly important to COVID-19, given that reducing risk of COVID-19 complications is related to maintaining optimal immune function and health, all of which are linked to these social determinants of health

Bradt DA, Drummond CM. Rapid epidemiological assessment of health status in displaced populations—“an evolution toward standardized minimum essential data sets. *Prehosp Disaster Med* 2003;18(1):178-185.

Smith GS. Development of Rapid Epidemiologic Assessment Methods to Evaluate Health Status and Delivery of Health Service. *Int J Epidemiol* 1989;18(Supplement_2):S2-S15.

BRIGHTER BITES COVID-19 EMERGENCY ASSISTANCE PROTOCOL



COVID-19 PIVOT – EMERGENCY ASSISTANCE TRIAGE

- Criteria for triage of “high risk” families:
 - responded as being of “poor” health status on the rapid response survey; or
 - indicated in the open-ended question “Please share your greatest concern at this time, or any other thoughts you would like to share with us” the following:
 - a) Running out of food
 - b) diagnosed with COVID-19 and/or living with someone who has been diagnosed with COVID-19, experiencing challenges,
 - c) is ill and needs assistance,
 - d) is about to lose their place of living,
 - e) is about to lose their utilities, or
 - f) no one at home is making an income.
- If they met any of these categories, they were classified as “high risk.”

COVID-19 PIVOT – EMERGENCY ASSISTANCE RESPONSE

- Framework for addressing the urgent needs of “high risk” families:
 - Following the triage, a centralized group of Brighter Bites staff and a student volunteer were trained to make follow up phone calls to each high-risk family and obtain more details regarding their immediate concerns and assistance needed.
 - Materials and resources used:
 - a) Set-up of Google Voice for every caller.
 - b) English/Spanish call and text scripts
 - c) Email template for delivery of gift card and additional local family resources

COVID-19 PIVOT – EMERGENCY ASSISTANCE RESPONSE

- Tracking database was created, in which all phone calls and family responses were tracked for each family.
 - This information was then relayed back to the Brighter Bites leadership where a tailored response was generated for each family.
 - Responses ranged from:
 - a) Providing immediate financial relief in the form of gift cards to local retail stores.
 - b) Grocery drop off to families unable to leave home.
 - c) Providing area-specific resources via text, email and phone regarding Brighter Bites community food distributions; financial assistance; accurate information regarding eviction freezes; COVID-19 testing sites near their homes; participation in government assistance programs and other requested information.

COVID-19 PIVOT – EMERGENCY ASSISTANCE RESPONSE



- 132 families have been supported through this grocery assistance initiative since the start of the COVID-19 pandemic.

“Thank you very much I am about to be evicted from my apartment and I am very stressed this help is a great relief for me”

COVID-19 PIVOT – PRODUCE VOUCHERS

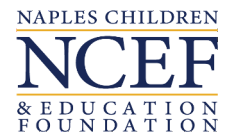
- \$25 produce vouchers were sent bi-weekly to more than 15,000 Brighter Bites households for fruit and vegetable purchases at partner grocery chains over 2-3 months.
 - Austin and Houston - Partnership with H-E-B stores, including H-E-B, Joe V's, Mi Tienda, and Central Market.
 - Southwest Florida (Collier County) – Partnership with Winn Dixie in Immokalee and Naples
 - Dallas – Partnership with 99 Cent stores
 - Washington D.C. and Houston – Walmart partnership

COVID-19 PIVOT – PRODUCE VOUCHERS



69% redemption rate of vouchers among participating families

PROGRAM PARTNERS



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