COVID-19 Exposure and Family Impact Survey Adolescent and Young Adult Version (CEFIS-AYA)

The COVID-19 Exposure and Family Impact Survey (CEFIS) was developed using a rapid iterative process in late March/early April 2020.¹ At that time the COVID-19 pandemic was impacting most, if not all, American families to some extent. Communities were coming under "stay at home" orders, schools were closing, and health and financial implications of the COVID-19 pandemic were unfolding. This modification of CEFIS for adolescents and young adults, ages 15-29, was completed in early May 2020.

Various aspects of the COVID epidemic are likely to impact individuals and families and may influence the findings of research in health. CEFIS-AYA was designed to be used in ongoing and new studies where COVID-19 may influence study outcomes. It conceptualizes exposure to potentially traumatic aspects of COVID-19 and assesses the impact of the pandemic on the individual and family. It is available in English and Spanish.

CEFIS-AYA is available for use without charge through the Center for Pediatric Traumatic Stress (CPTS).² It is available as a REDCap survey. We ask that you register with us before using it and provide us with information about your use and share de-identified data with us to that we can refine the measure. We will provide a REDCap data dictionary to facilitate this process. There is no normative data nor clinical cutoffs available at this point. Interested users should contact Gabriela Vega (gabriela.vega@nemours.org).

Scoring

- Part 1 (Exposure) consists of 28 items (Yes/No responses) that measure the participants'
 "exposure" to COVID-19 and related events. Items #17-20 have two parts. If either is marked
 "yes" the item scores as an exposure. The Exposure Score is a count of "yes" responses and may
 range from 0 to 28.
- Part 2 (Impact) consists of 16 items that measure the impact of COVID-19. 15 items use a four-point Likert scale rating impact on the participant's and family's life; 1 item uses a 10-point distress scale. Higher scores denote more negative impact / higher distress. The Impact Score (sum of items 29-44) may range from 15 to 70.
- Part 3 is an open-ended question so that participants can expand upon their experiences and add effects of COVID not covered in the other questions.

¹ The following contributed to the development of CEFIS. Nemours Center for Healthcare Delivery Science (Anne Kazak, Ph.D., ABPP; Kimberly Canter, Ph.D.; Thao-Ly Phan-Vo, M.D., MPH; Glynnis McDonnell, Ph.D., Aimee Hildenbrand, Ph.D., Melissa Alderfer, Ph.D., Corinna Schultz, M.D.); The Children's Hospital of Philadelphia (CHOP: Lamia Barakat, Ph.D.; Nancy Kassam-Adams, Ph.D.); Cincinnati Children's Hospital Medical Center (CCHMC: Ahna Pai, Ph.D.); University of Pennsylvania (Janet Deatrick, Ph.D., FAAN). We appreciate the helpful feedback provided by Darlene Barkman and Kerry Doyle-Shannon. The following contributed to the CEFIS-AYA: Lisa Schwartz, Ph.D., Sara King-Dowling, Ph.D., and Alexandra Psihogios, Ph.D. (CHOP) and Lori Crosby, Ph.D. (CCHMC). General inquires may be sent to Dr. Kazak (anne.kazak@nemours.org).

² CPTS has several COVID-19 related resources for patients, families and healthcare providers at https://www.healthcaretoolbox.org/tools-and-resources/covid19.html

Participant Number	
Age	_
Gender: M F O	
Today's Date	

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Please tell us about your family's experiences during the novel Coronavirus (COVID-19) pandemic. In answering these questions, please think about what has happened from March 2020 to the present, due to COVID-19. By family we mean people you are close with who live in your household, family members who live outside your home, and close friends who you consider "like family."

•	ur household, family members who live outside your home, and close friends who you nsider "like family."
Ple	ase answer Yes or No for each of the following statements.
1.	I had a "stay at home" order □Yes □No
2.	My school physically closed ☐Yes ☐No ☐ NA
3.	My education was disrupted (e.g., put on hold, moved to virtual learning) \square Yes \square No \square No
4.	I was unable to visit or care for a family member \square Yes \square No
5.	I had to start caring for a family member \square Yes \square No
6.	People in our family lived separately for health, safety, or job demands \Box Yes \Box No
7.	Someone moved into our home □Yes □No
8.	I had to move □Yes □No
9.	Someone in the family kept working outside the home (essential personnel) \square Yes \square No
	Who (e.g., me, my sibling, my child, my spouse/partner, my parent, etc)
10.	Someone in the family/household is a healthcare provider/first responder providing direct
	care ☐Yes ☐No Who (e.g., me, my sibling, my child, my spouse/partner, my parent, etc)
11.	I/we had difficulty getting food □Yes □No
12.	I/we had difficulty getting medicine ☐Yes ☐No
13.	I/we had difficulty getting health care when we needed it \square Yes \square No
14.	I/we had difficulty getting other essentials (e.g., cleaning supplies, masks, etc) \Box Yes \Box No
	(if Yes, specify)

15.	I/we self-quarantined due to travel or possible exposure □Yes □No
16.	My/our income decreased \square Yes \square No
17.	I had to cut back hours at work $\ \square$ Yes $\ \square$ No $\ \square$ NA
	A member of the family had to cut back hours at work $\ \square$ Yes $\ \square$ No $\ \square$ NA
	Who (e.g., my sibling, my child, my spouse/partner, my parent, etc)
18.	I was required to stop working (expect to be called back) \square Yes \square No \square NA
	A member of the family was required to stop working (expect to be called back) \square Yes \square No
	Who (e.g., my sibling, my child, my spouse/partner, my parent, etc)
19.	I lost my job permanently □Yes □No □NA
	A member of the family lost their job permanently $\ \square$ Yes $\ \square$ No
	Who (e.g., my sibling, my spouse/partner, my parent, etc)
20.	I lost health insurance/benefits □Yes □No □NA
	A member of the family lost their health insurance/benefits $\ \square$ Yes $\ \square$ No
	Who (e.g., my sibling, my spouse/partner, my parent, etc)
21.	I missed an important milestone event that was canceled or postponed (e.g., my
	graduation, my prom, my wedding) \square Yes \square No
22.	I missed an important family event or it was canceled (e.g., birth, funeral, travel [including
	vacation]) □Yes □No
23.	Someone in the family was exposed to someone with COVID-19 $\;\square$ Yes $\;\square$ No
	Who (e.g., me, my sibling, my child, my spouse/partner, my parent, etc)
24.	Someone in the family had symptoms or was diagnosed with COVID-19 $\ \square$ Yes $\ \square$ No
	Who (e.g., me, my sibling, my child, my spouse/partner, my parent, etc)
25.	Someone in the family tried to get tested for COVID-19, but couldn't □Yes □No Who (e.g., me, my sibling, my child, my spouse/partner, my parent, etc)

26.	Someone in the family was hospitalized for COVID-19 $\ \square$ Yes $\ \square$ No
	Who (e.g., me, my sibling, my child, my spouse/partner, my parent, etc)
27.	Someone in the family was in the Intensive Care Unit (ICU) for COVID-19
28.	Someone in the family died from COVID-19 Yes No Who (e.g., my sibling, my child, my spouse/partner, my parent, etc)

Contains items 1-28 (part 1) from full survey