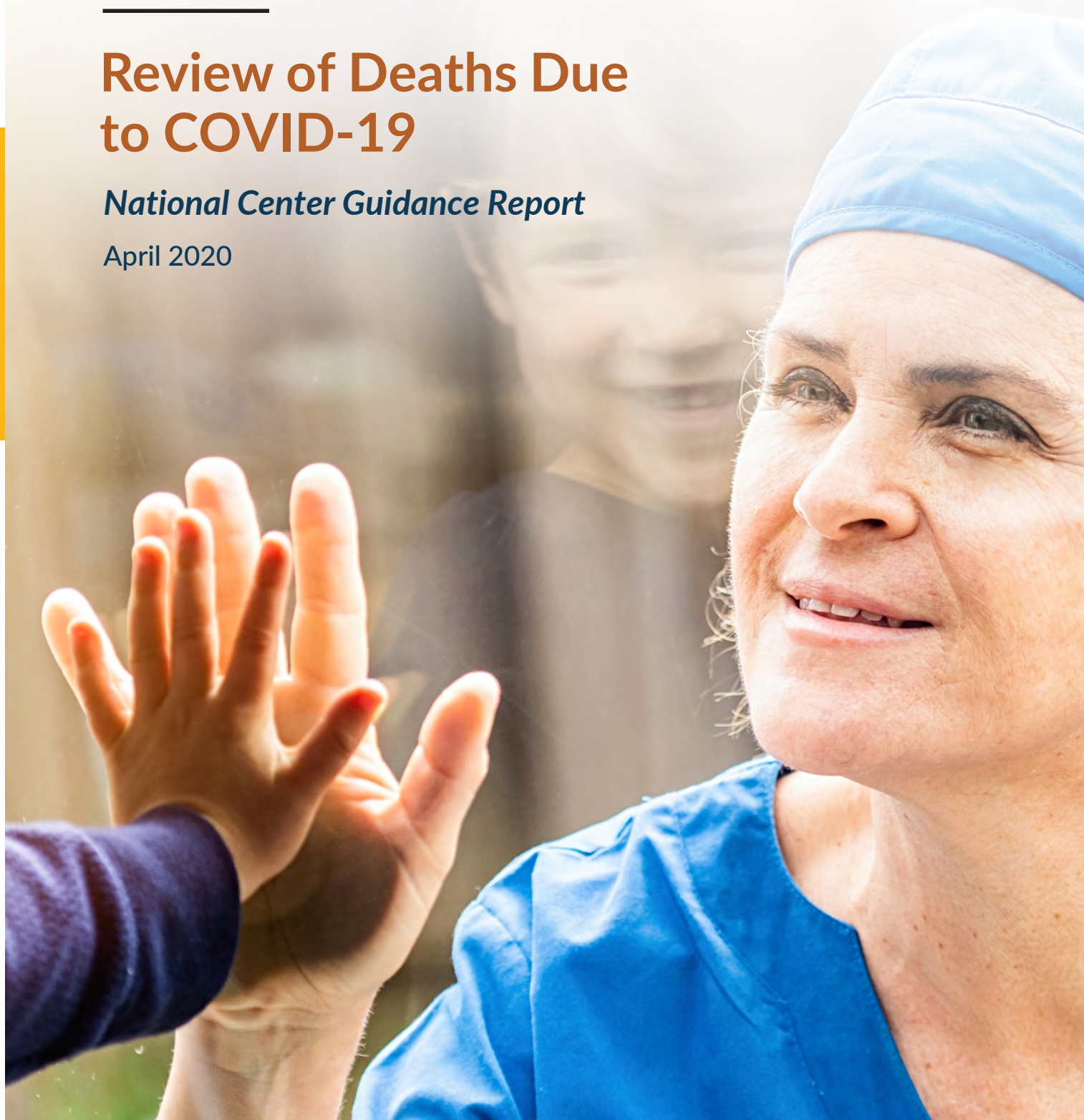




Review of Deaths Due to COVID-19

National Center Guidance Report

April 2020





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2020

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Review of Deaths or Illness Due to COVID-19

Introduction

This document is intended to inform Child Death Review (CDR) and Fetal and Infant Mortality Review (FIMR) teams' reviews of fetal, infant, and child deaths known to be related, directly or indirectly, to the novel Coronavirus (COVID-19). Given the rapidly changing nature of COVID-19, teams should review current information about the disease at:

- [Centers for Disease Control and Prevention \(CDC\) Coronavirus \(COVID-19\)](https://bit.ly/34QQztS)
(URL: <https://bit.ly/34QQztS>)
- [The American Academy of Pediatrics Critical Updates on COVID-19](https://bit.ly/2XUMuU6)
(URL: <https://bit.ly/2XUMuU6>)
- [The American College of Obstetricians and Gynecologists Novel Coronavirus 2019 \(COVID-19\)](https://bit.ly/2zcp6H8)
(URL: <https://bit.ly/2zcp6H8>)
- [The Health Resources and Services Administration Coronavirus \(COVID-19\) Information](https://bit.ly/34SDqjX)
(URL: <https://bit.ly/34SDqjX>)
- [World Health Organization \(WHO\) Coronavirus disease \(COVID-19\) Pandemic](https://bit.ly/3eGFGzp)
(URL: <https://bit.ly/3eGFGzp>)

It may be helpful for team members to understand basic information about the disease including: symptoms, transmissions, special considerations for pregnant women, infants and children, treatment, and prevention. Team members also may want to review suggested professional best practices for their discipline before the review meeting. This document is intended to provide information helpful to team members before, during and after the review of deaths related, directly or indirectly, to COVID-19.





Preparing for Review of Cases

Given the anticipated prevalence of COVID-19, it is likely that team members participating in fatality reviews will have been personally impacted by the illness, either through the infection/hospitalization/death of an acquaintance, friend, or family member; by virtue of their role in an overwhelmed healthcare system; or by being infected themselves. At minimum, team members will have been impacted through significant shifts in how they lived and worked during the outbreak. It is incredibly rare that a case review will be so closely tied to the experience of every individual on the team, regardless of where in the country the review is taking place. With this in mind, there are unique considerations for coordinators and facilitators as they prepare to review deaths related directly or indirectly to COVID-19.

☐ **EDUCATE CDR/FIMR TEAM MEMBERS ON COVID-19 BASIC INFORMATION OR PROVIDE A BASIC FACT SHEET DURING THE REVIEW**

At the writing of this guidance (May 2020), inaccurate information about the virus, its projected spread, and projected impacts are circulating through media, including social media. Do not assume everyone on the team understands the disease in the same way. When sharing fact sheets, use only information from the most reliable sources: the World Health Organization, Centers for Disease Control and Prevention, or your state and/or local health department. Providing descriptive statistics of state or local prevalence is more helpful than providing national estimates.

☐ **GET THE RIGHT PEOPLE TO THE TABLE**

The outbreak of COVID-19 impacted communities in multiple ways. There were direct impacts of the virus on people, but also increased stress on caregivers, increases in social isolation, economic uncertainty, unemployment, delays in seeking medical treatment, and competition for needed healthcare resources. To examine these cases holistically, consider having the following expertise, in addition to regular team members, depending on whether a fetal, infant, or child death:

Infectious Disease Specialist

Neonatologist

Epidemiologist

Emergency Medical Service Providers

Neurologist/Pediatric Neurologist

Emergency Department Personnel

Health Communication Professional

Clinical Geneticist

Mental Health Professional

Endocrinologist

Obstetrician

Lactation Specialist

*Maternal Fetal Medicine
Specialist (Perinatologist)*

*Advanced Practice Nurses or Nurse
Practitioners in the Above Specialties*

*Expand Local Public Health Officials to
Include Family Planning and Sexually
Transmitted Infections Clinic Staff*

*Emergency Preparedness
and Response Professional*

In order to decrease the burden on ad hoc experts who may be included in COVID-19-related case reviews, consider conducting cluster reviews, and reviewing several COVID-19-related case reviews at the same meeting. Should your team cluster these reviews, it may be helpful to refer to the [National Center's guidance on high-volume case reviews](https://bit.ly/35icL0i) (URL: <https://bit.ly/35icL0i>). Your team could also consider partnering with another jurisdiction to review COVID-19 cases to maximize experts' time. The most effective review team includes practitioners who have had experience treating pregnant women, infants, or children with COVID-19 infection. Effective teams should utilize experts to review cases indirectly linked to COVID-19 which could include professionals working in child abuse and neglect, unintentional injury prevention, interpersonal violence prevention, and suicide prevention. These professionals may be actively treating patients and be unable to participate in the case review. If this is the case, their insights are important enough that it is appropriate to ask them to review the available records and provide a summary of their professional findings to include at the case review meeting.

CONSIDER ALL THE WAYS THE OUTBREAK INCREASED RISK, DIRECTLY AND INDIRECTLY

Consider the entire timeline of the outbreak. It is important to evaluate how the outbreak may have increased risk, regardless of the cause of death. Infants may have died because of lack of available resources for mothers in the pregnancy/pre-pregnancy period. Children may have been at increased risk for child abuse and neglect due to the stresses associated with being out of school or quarantined. Teens may have been at higher risk for suicide because of increased social isolation.



Consider constructing a timeline of the outbreak's effect on the local area, what public health guidance was given, what precautions or restrictions were implemented when, how systems changed their delivery of services, and how the family/child was directly impacted at each juncture.

CHANGES IN COMMUNITIES

Due to the sweeping nature of the changes COVID-19 brought to communities, it is appropriate to consider how the virus may have been a factor, either directly or indirectly, regardless of the cause or manner of death.



A directly-related death is defined as a death directly attributable to the virus. In these cases, COVID-19 should be listed on the death certificate. Indirectly-related deaths are less clearly connected to the incident, but ultimately result from it. An indirectly-related death occurs when unsafe or unhealthy conditions are present during any phase of a crisis. Indirect deaths may occur immediately following the acute infection rates or may occur at a later time.



**BECOME FAMILIAR WITH INFORMATION THAT MAY BE AVAILABLE
FROM EMERGENCY PREPAREDNESS AND RESPONSE PROFESSIONALS**



Emergency management programs often publish after-action reports that may help teams put the death into a contextual timeline and highlight what went well and areas for improvement from an emergency response perspective.



Coroners and/or medical examiners should review [guidance from the CDC website](https://bit.ly/2VRYC5u) on collection and submission of postmortem specimens from deceased persons with known or suspected COVID-19 (URL: <https://bit.ly/2VRYC5u>).



The Department of Health and Human Services (HHS), Assistant Secretary for Preparedness and Response (ASPR) supports health care system preparedness and promotes a sustained national focus to improve patient outcomes. Learn more about the [Hospital Preparedness Program](http://bit.ly/2MBHoFZ) (URL: <http://bit.ly/2MBHoFZ>).



This [ASPR Technical Resources, Assistance Center, & Information Exchange \(TRACIE\) Express](https://conta.cc/3bACvHt) (URL: <https://conta.cc/3bACvHt>) highlights their [COVID-19 Resources Page](https://bit.ly/350k4cC) (URL: <https://bit.ly/350k4cC>).

Additional resources include:

[COVID-19 Healthcare Planning Resources](#)

Includes alternate care sites and crisis standards of care (URL: <https://bit.ly/2VyXZ1J>).

[Federal COVID-19 Websites](#) (URL: <https://bit.ly/3bDLszU>).

[ASPR TRACIE COVID-19 Technical Assistance Responses](#)

Select technical assistance requests, including drive-through testing, fatality management, staff absenteeism, and telehealth (URL: <https://bit.ly/3cLJUUA>).

[ASPR TRACIE-Developed Related Infectious Disease Resources](#)

Includes self-care modules for healthcare providers, the hospital pharmacy disaster calculator, and a personal protective equipment planning tool (URL: <https://bit.ly/2Vxx2M0>).


[ASPR TRACIE Topic Collections](#)

Select comprehensive topic collections related to pandemic planning and response (URL: <https://bit.ly/3axNKza>).



[The American College of Obstetricians and Gynecologists \(ACOG\) website](#) has recommendations for hospital preparedness in the face of disasters. Providing these to your team as reference to create recommendations may help your team consider what types of safeguards can be put in place to address the needs of pregnant people during an outbreak (URL: <https://bit.ly/2S20N5y>).

 *The American Academy of Pediatrics website has regional disaster preparedness contacts and initiatives (URL: <http://bit.ly/2N6jl19>).*

 *The National Center created a guidance, [Reviewing Deaths of Children in Disasters and Mass Fatality Events](#), in October 2019. It has many considerations and resources that may be helpful in preparation for case reviews, including resources for locating your emergency management/response programs (URL: <https://bit.ly/2S20N5y>).*

 *The National Center also conducted a webinar in 2019, [Using Fatality Review to Understand Disasters](#) (URL: <https://bit.ly/3530gFz>).*



☐ **CONSIDER RELEVANT AUDIENCES FOR KEY FINDINGS AND RECOMMENDATIONS**

Since these deaths may be different, the resulting prevention recommendations may need to be directed to new audiences. When inviting new members to the case reviews, such as infectious disease specialists or emergency preparedness and response professionals, inquire if their agency would like to participate in crafting or officially receiving recommendations. If your team publishes annual reports, consider a COVID-19 supplement with specific data about cases directly and indirectly related to the outbreak. These findings will likely be helpful to other professionals, too, including maternal/child public health, prenatal care providers, suicide prevention, and child welfare.



☐ PLAN FOR SELF-CARE

Consider ahead of time how each of your team members may personally have been impacted by the outbreak and create space for a variety of reactions to the cases, including vicarious trauma.



One way teams can make space for the variety of reactions or trauma is simply to acknowledge them. Consider opening or closing the review with a statement such as this: “COVID-19 impacted our community, and by extension, each of us. Facts or findings in this case may bring up personal frustrations or feelings, including anger or grief. Let’s take a quiet moment to reflect on what feelings this case may bring up/brought up inside of us, how we respond to those feelings, and how we can continue to do this important work.”



Take time to acknowledge what went well. Consider providing an opportunity for participants to highlight one strength they saw in the community or in an agency in the face of the pandemic and the associated challenges. If possible, focus on the strengths of the agencies and individuals in the room, acknowledging their important contributions. View the [National Center's Guidance on Findings](https://bit.ly/35icL0i) (URL: <https://bit.ly/35icL0i>).



Allow team members to opt out of reviews if they experienced profound loss of some kind due to COVID-19. This could be the death of a family member, friend, or colleague, permanently diminished health due to COVID-19, the loss of a job, loss of a business, or other extreme economic challenges. Coordinators may provide an opt-out option when they send out the case information for the upcoming COVID-19-related reviews by including a simple statement, like: “COVID-19 affected our community, and by extension, each of us. If your experiences related to the pandemic would cause you to struggle to have a discussion focused on cases related to COVID-19, we understand. We would appreciate if your agency was able to send someone else in your place to the case review meeting, though we understand if this will not be possible.”



The National Center developed the following resources to help fatality review teams address vicarious trauma:

[Guidance for CDR and FIMR Teams on Addressing Vicarious Trauma](http://bit.ly/2PbaJc0) (URL: <http://bit.ly/2PbaJc0>).

Webinar from November 2016, [Recognizing and Responding to Vicarious Trauma in Fatality Review](https://bit.ly/3530gFz) (URL: <https://bit.ly/3530gFz>).



QUESTIONS FOR TEAMS TO CONSIDER:



FOR ALL CASES

- *Would this outcome have been different in absence of the COVID-19 pandemic?*
- *Were there adequate and appropriate resources in place to support this parent/child/family/community?*
- *Were any newly-implemented fatality reporting processes implemented due to the outbreak?*
- *Are there additional records the team needs to gather, discuss, and review?*
- *Did the family avoid medical care, hospitals and/or clinics due to fear of COVID-19?*

- Did the childbearing parent avoid prenatal care, hospitals, or clinics due to fear of COVID-19?
- How did any COVID-19 shelter-in-place/quarantine orders impact this death?
- How did the COVID-19 outbreak exacerbate underlying social determinants of health in this case? [View more information on the social determinants of health](https://bit.ly/2KvqNCb) (URL: <https://bit.ly/2KvqNCb>).
- Was this child impacted more severely by the outbreak than others in his/her community?
- Were there any services the family could not access or receive as a result of it being deemed "non-essential"?
- Were the family's mental health and stress issues identified and addressed?



QUESTIONS RELATED TO PREGNANCY AND PRENATAL CARE:

- Did the childbearing parent have access to contraceptives, before or after pregnancy? Was this an intended pregnancy?
- Was the childbearing parent able to start prenatal care in a timely way? Did the childbearing parent have the appropriate number of prenatal visits?
- Did the childbearing parent have increased anxiety about pregnancy outcomes?
- Did the childbearing parent have decreased variety or adequacy of nutrition due to supply chain challenges?
- Was COVID-19 screening conducted in the prenatal care setting? Was the childbearing parent tested? When were results made available?
- Did the prenatal care provider provide COVID-19 prevention information in the prenatal care setting? Was it culturally appropriate, in the parent's first language, and at an appropriate literacy level?
- Were there any differences in the hospital's labor and delivery capacity due to COVID-19?
- Was a support person or doula allowed to accompany the laboring parent?
- Was the childbearing parent given special education about breastfeeding and COVID-19?



QUESTIONS RELATED TO INJURY DEATHS:

- *Is this death an indirect result of the outbreak?*
- *Were there limited community resources to respond to this case due to the COVID-19 outbreak?*
- *Did mandated or voluntary closures affect the outcome of this case?*

CONSIDER THE FOLLOWING POSSIBLE CLOSURES WITHIN THE JURISDICTION:



SCHOOLS



PLACES OF BUSINESS/
EMPLOYMENT



COMMUNITY
CENTERS



COURTS



CHILD WELFARE/
SOCIAL SERVICES

- *Was risk increased in this case due to social isolation of the child or the caregiver(s)?*



QUESTIONS RELATED TO THE COVID-19 VIRUS:

- *Was the child/family able to comply with local/state/federal social distancing guidelines? If not, what barriers existed?*
- *Was contact tracing conducted if the death was directly related to the coronavirus? If so, is it clear the circumstances under which the child contracted the virus?*
- *If the child was positive for COVID-19, where was the test conducted? When was the family informed of the results?*
- *What type of information was provided to the family about COVID-19? Was it culturally appropriate, in the language of the family, and at an appropriate literacy level?*

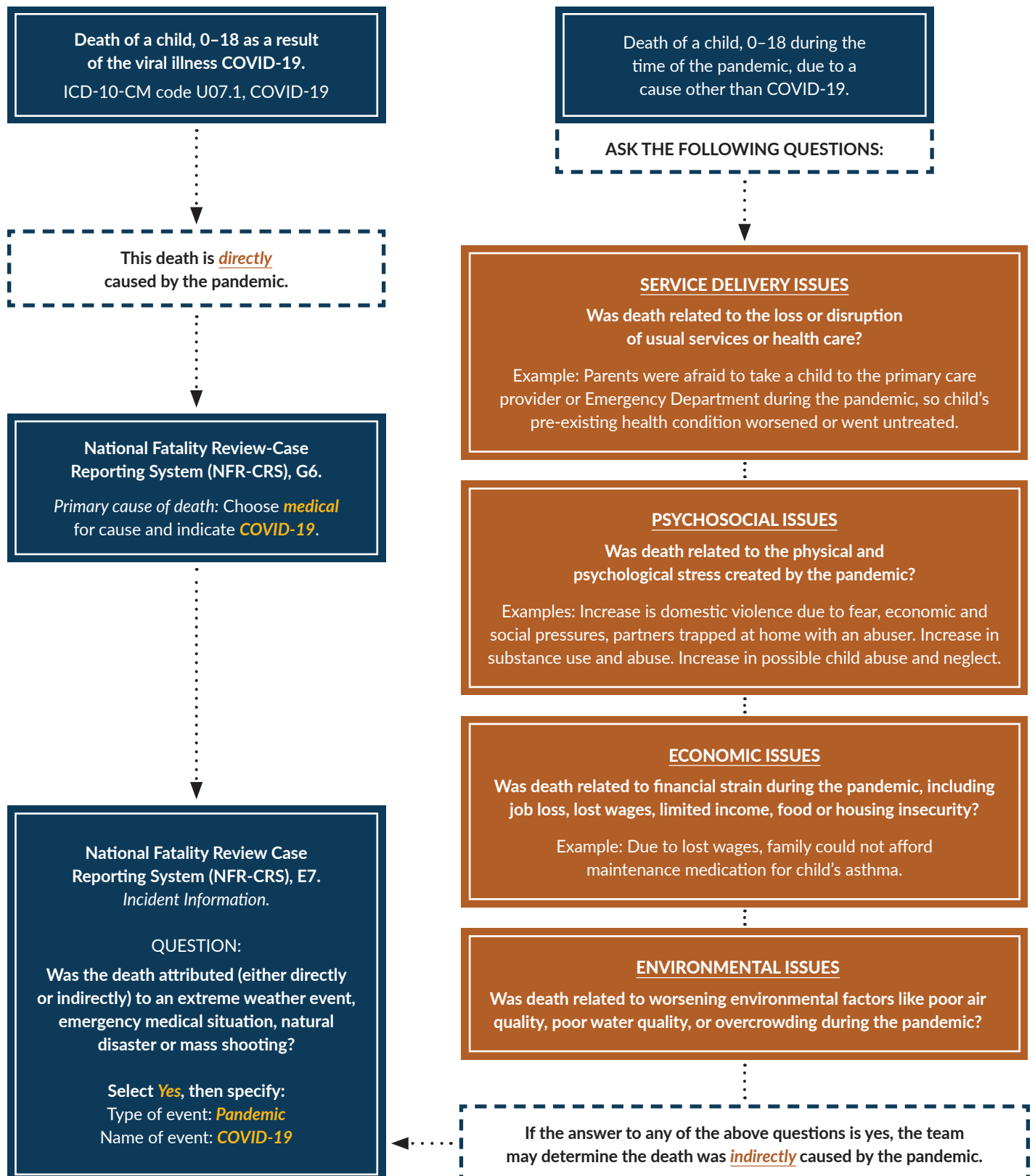


A NOTE ON DATA COLLECTION:

In the National Fatality Review-Case Reporting System, Version 5.1 – released April 27, 2020 – there is an addition to question G6b, with COVID-19 now being a response option under medical cause of death. The National Center is also recommending that teams capture cases related to COVID-19 in question E7: “Was the death attributed (either directly or indirectly) to an extreme weather event, emergency medical situation, natural disaster or mass shooting.”

Please note COVID-19 as the type and name of the event.

Collecting Data on Child Deaths During the COVID-19 Pandemic







Conclusion

Fatality review teams in the United States face their first pandemic in the COVID-19 outbreak of 2020. The National Center created this guidance midstream to equip the field of fatality review professionals to effectively review any case it encounters that was caused, either directly or indirectly, by the outbreak. With careful planning, the right partners, and asking the right questions, fatality review teams can identify key points of preparation and intervention. The findings and recommendations compiled by fatality review teams can provide meaningful insights to inform emergency preparedness and response planning, infectious disease, maternal/child public health, suicide prevention, and child welfare professionals. As teams face these stories with courage and an eye toward prevention, they will make their communities safer places for infants, children, and families.

REFERENCES:

- US Centers for Disease Control and Prevention, [Coronavirus Disease 2019 \(COVID-19 Situation Summary\)](https://bit.ly/3ay2Sws) (URL: <https://bit.ly/3ay2Sws>).
- World Health Organization, [Coronavirus Information – Overview, Prevention, Symptoms](https://bit.ly/2xVxFWD) (URL: <https://bit.ly/2xVxFWD>).
- [COVID-19 Dashboard](https://bit.ly/2zsYORe) by the Center for Systems Science and Engineering at Johns Hopkins University (URL: <https://bit.ly/2zsYORe>).
- National Perinatal Association, [Essential COVID-19 Information and Resources for our Perinatal Community](https://bit.ly/2yKDPJ2) (URL: <https://bit.ly/2yKDPJ2>).
- American College of Obstetrics and Gynecology, [Novel Coronavirus 2019 \(COVID-19\)](https://bit.ly/2zcp6H8) (URL: <https://bit.ly/2zcp6H8>).
- American Academy of Pediatrics, [Experts Discuss COVID-19 Impact on Children, Pregnant Women](https://bit.ly/350hh3k) (URL: <https://bit.ly/350hh3k>).
- Department of Health and Human Services (HHS), Assistant Secretary for Preparedness and Response Technical Resources, Assistance Center, & Information Exchange (TRACIE) | 1-844-5-TRACIE (587-2243) | Email: askasprtracie@hhs.gov | URL: <https://asprtracie.hhs.gov/assistance-center>.



