



## **Introduction & Supplemental Guidance for Section 18** **COVID-19 Related Deaths**

National Fatality Review-Case Reporting System



# Introduction

On April 20, 2021, the National Center for Fatality Review and Prevention (National Center) will release a new section, I8, *COVID-19 Related Deaths*, in the National Fatality Review-Case Reporting System (NFR-CRS). Section I8, *COVID-19 Related Deaths*, focuses on the ways in which fetal, infant, and child deaths that occurred during the COVID-19 pandemic may have been impacted by the pandemic. This guidance is intended to help fatality review programs understand the ways in which COVID-19 and systems changes may have impacted the deaths they review, as well as the review process itself. ***This guidance will introduce the new questions; introduce the process of creating a COVID-19 timeline for use in case reviews; and explain how deaths should be categorized as either directly or indirectly related to COVID-19, or unrelated to the pandemic.*** The following information is meant to be used with deaths that occur during the COVID-19 pandemic. Below is the new Section I8, *COVID-19 Related Deaths*, as it will appear in NFR-CRS for both fetal and infant mortality review (FIMR) and child death review (CDR) data collection.

I8. COVID-19-RELATED DEATHS	
<p>a. For the 12 months before the child's death, did the family experience any disruptions or significant changes to the following?</p> <p>Check all that apply:</p> <p><input type="checkbox"/> None listed below</p> <p><input type="checkbox"/> School</p> <p><input type="checkbox"/> Daycare</p> <p><input type="checkbox"/> Employment</p> <p><input type="checkbox"/> Social services (such as unemployment assistance, TANF, WIC)</p> <p><input type="checkbox"/> Living environment</p> <p><input type="checkbox"/> Medical care</p> <p><input type="checkbox"/> Mental health or substance use/abuse care</p> <p><input type="checkbox"/> Home-based services (non-child welfare)</p> <p><input type="checkbox"/> Child welfare services</p> <p><input type="checkbox"/> Legal proceedings within criminal, civil, or family courts</p> <p><input type="checkbox"/> Other</p> <p><input type="checkbox"/> U/K</p> <p>Describe:</p>	<p>c. Was the child exposed to COVID-19 within 14 days of death?</p> <p><input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> U/K</p> <p>If yes, describe:</p>
<p>b. For the 12 months before the child's death, did the child's family live in an area with an official stay at home order?</p> <p><input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> U/K</p> <p>If yes, was the stay at home order in place at the time of the child's death?</p> <p><input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> U/K</p>	<p>d. Select the one option that best describes the impact of COVID-19 on this child's death:</p> <p><input type="radio"/> COVID-19 was the immediate or underlying cause of death</p> <p><input type="radio"/> COVID-19 was diagnosed at autopsy or the child was suspected to have COVID-19</p> <p><input type="radio"/> COVID-19 indirectly contributed to the death but was not the immediate or underlying cause of death</p> <p><input type="radio"/> The birthing parent contracted COVID-19 during pregnancy</p> <p><input type="radio"/> Other, specify:</p> <p><input type="radio"/> COVID-19 had no impact on this child's death</p> <p><input type="radio"/> U/K</p> <p>e. Did COVID-19 impact the team's ability to conduct this fatality review?</p> <p><input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> U/K</p> <p>If yes, check all that apply:</p> <p><input type="checkbox"/> Unable to obtain records</p> <p><input type="checkbox"/> Team members unable to attend review</p> <p><input type="checkbox"/> Remote reviews negatively impacted review process</p> <p><input type="checkbox"/> Team leaders redirected to COVID-19 response</p>

## Timeline for questions I8a and I8b

The National Center recommends that fatality review teams compile relevant information to create a timeline of COVID-19's impact. Timelines should include business or service closures, school closures or transitions, and other shifts that might have impacted service delivery, access, or community support. A readily available timeline will assist programs in answering questions in I8, *COVID-19 Related Deaths*, in the NFR-CRS.

Understanding if the family was impacted by changes to courts, schools, or daycares, or other services in the team's jurisdiction will help them understand how changes to these services may have increased risk. Further, the timeline will equip teams to answer whether their jurisdiction was under a stay-at-home order at the time of the death. These orders varied significantly by state and local jurisdiction.

To create an effective timeline, teams should consider a variety of information sources. While some teams may readily know when schools closed and reopened, for instance, it will likely require some research to compile a comprehensive community-level timeline. Once a timeline is constructed, it can be used for multiple cases.

### *Sources*

It will be helpful to start with the three following sources:

- **State public database of executive orders**
- **Executive orders in the local jurisdiction**
- **News media archives**

More topic-specific source recommendations are outlined on the following page.

### **Business closures:**

These closures could have impacted employment, access to medical care, or childcare.

Consider these sources:

- *State and/or local chamber of commerce*
- *Unions*
- *Restaurant association*

### **Medical care:**

Many jurisdictions experienced impacts to medical care, including suspension of elective procedures or transitions to telehealth visits instead of in-person.

Consider these sources:

- *Clinics and Federally Qualified Health Centers (FQHCs)*
- *Local hospital system*
- *State hospital association*
- *State licensing body*

### **Child welfare services:**

Social service agencies may have changed how they interacted with families and delivered services.

Consider these sources:

- *State and/or county-level child welfare agency*
- *Fatality review team member or partner from these agencies*

### **Schools**

Children and families receive various services through school systems, including needed therapies. Children's mental health may have been impacted by increased isolation or increased exposure to child abuse or neglect.

Consider these sources:

- *State department of education*
- *Local school district*

- *Fatality review team member or partner from local schools*

### **Social services (e.g., unemployment, TANF, WIC)**

Families may have experienced disruptions in services that help provide them sustenance or housing. Consider these sources:

- *State and/or local health department*
- *Fatality review team member from the health department*

### **Mental health care**

Families may have had limited access to vital mental health services, service delivery methods could have changed to a virtual environment, or services deemed non-essential may have been delayed in a time of increased trauma and isolation.

Consider these sources:

- *Community Mental Health*
- *Hospital systems*
- *Fatality review team member or partner working in mental health services*

### **Courts**

Hearings related to custody and other important matters of child welfare and safety may have been delayed during the pandemic.

Consider these sources:

- *State department of justice*
- *District Attorney's office*
- *Fatality review team member or partner working in the justice system*

### **Daycare**

Childcare options may have been limited during the pandemic. Some daycares may have had to close or limit capacity.

Consider these sources:

- *State licensing agency*
- *Child welfare agency*

- *Fatality review team member or partner working in childcare or child welfare*

### **Home-based services**

Services that were typically delivered at home, including home visiting programs, Early Head Start programs, or in-home therapies, may have been suspended or moved to a virtual delivery system during the pandemic.

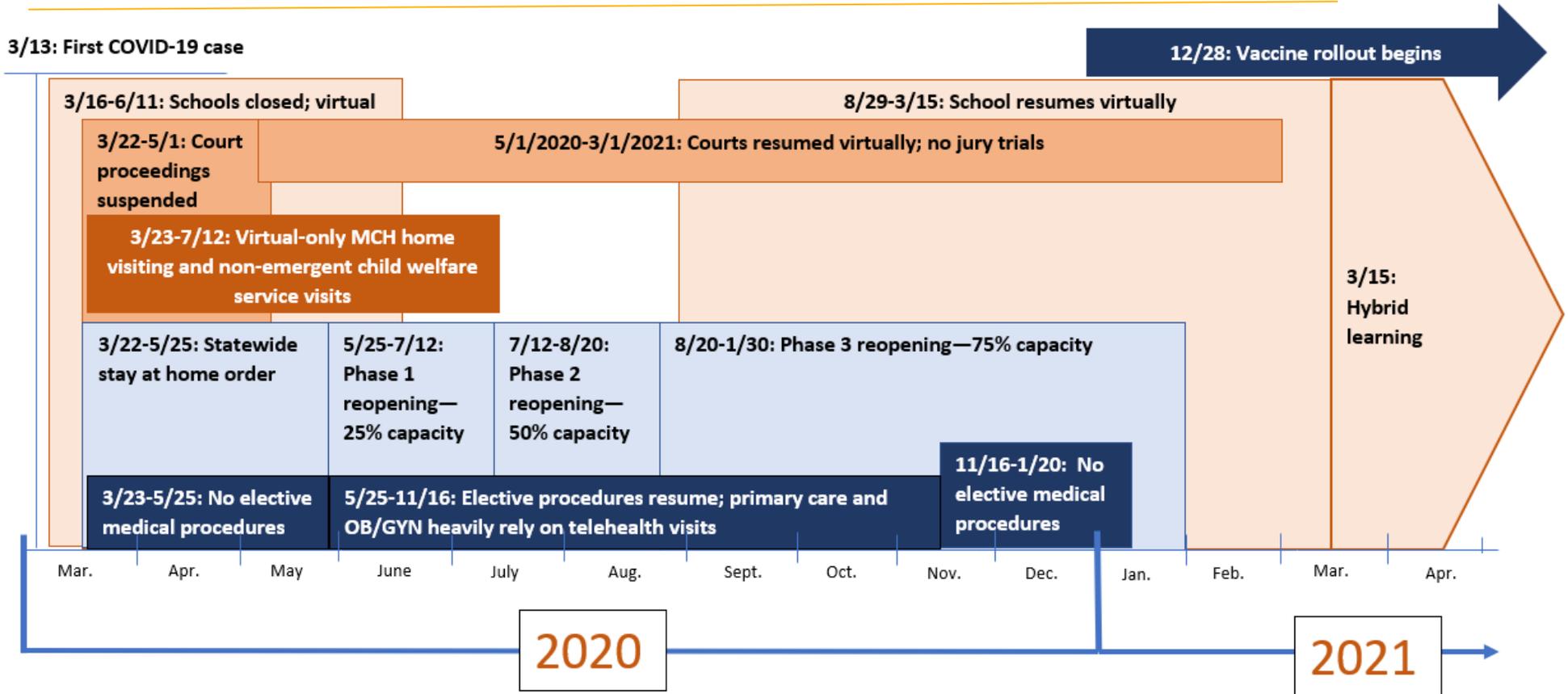
Consider these sources:

- *State and/or local health department, specifically home visiting programs*
- *Children with Special Healthcare Needs programs*
- *Child welfare agencies*

## Example Community COVID-19 Timelines

There are multiple ways to create and present a community timeline. The most important consideration is having access to the information. Two examples are provided here—a visual and a list-based timeline. If a fatality review team uses a presentation software like PowerPoint, it may be helpful to keep a slide available to use during reviews of deaths that took place during the pandemic.

### Visual timeline



## **List-based Timeline**

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**3/13/2020:** First case of COVID-19 in the state

**3/16/2020-6/11/2020:** Schools closed; virtual learning only

**3/22/2020-5/25/2020:** Statewide stay at home order

**3/23/2020-7/12/2020:** Virtual-only MCH home visiting and non-emergent child welfare service visits

**3/23/2020-5/25/2020:** No elective medical procedures

**5/25/2020-7/23/2020:** Phase 1 reopening statewide--25% capacity

**5/25/2020-11/16/2020:** Elective medical procedures resume; primary care and OB/GYN heavily rely on telehealth visits

**7/12/2020-8/20/2020:** Phase 2 reopening--50% capacity

**8/20/2020-1/30/2021:** Phase 3 reopening--75% capacity

**8/29/2020-3/15/2021:** School resumes virtually

**11/16/2020-1/20/2021:** No elective medical procedures

**12/28/2020:** Vaccine rollout begins

**3/15/2021:** Hybrid learning for public schools

# Algorithm for Question I8d

The following algorithm can be used by teams to decide how to respond to question I8d, **Select the one option that best describes the impact of COVID-19 on this child's death.**

In order to use the algorithm, fatality review teams will need to consider the following information in case review:

- *Cause of death on the death certificate*
- *Indication of postmortem identification of COVID-19*
- *Indication of suspected COVID-19 in the decedent*
- *Whether the child or family experienced disruptions or challenges related to COVID-19 in the 12 months prior to the death*
- *Whether the birthing parent contracted COVID-19 during pregnancy*

## Instructions

This section summarizes the different response options provided for question I8b, what types of cases should be selected each response option, and how to use the algorithm to determine the most appropriate answer. There will be cases in which more than one response options to this question may be true. The intention of this question is for the team to identify the **most significant and direct relationship between COVID-19 and the death.**

### **Option 1: COVID-19 was the immediate or underlying cause of death**

In cases where COVID-19 was the primary cause of death on the death certificate, this question will be straightforward. The team should also consider if COVID-19 was listed in the chain of events leading to the death, as an underlying or contributing cause. It may also appear as a significant condition contributing to the death. This will be indicated by **ICD-10-CM Code: U07.1, COVID-19** in any of the causes of death on the death certificate. The child may have died of COVID-19-associated Multi-System Inflammatory Syndrome in Children (MIS-C), which will be indicated by **ICD-10-CM Code: M35.81, MIS-C**. If MIS-C is listed in absence of COVID-19, the team should examine additional records to determine if the syndrome was secondary to COVID-19 infection. In these cases, the relevant data collection process will look like this:

1. For question E7, ***Was the death attributed (either directly or indirectly) to an extreme weather event, emergency medical situation, natural disaster or mass shooting?***, the team should select **Yes**. For type of event, they should select **Pandemic**, and for name of event, write in **COVID-19**.
2. In section G6, for ***Primary cause of death***, the team should choose **Medical** for the cause of death and select **COVID-19**.
3. For question H8f, ***Was the medical condition associated with outbreak?***, the team should select **Yes**, and specify **COVID-19**.
4. For question I8d, the team should select option 1, ***COVID-19 was the immediate or underlying cause of death***.

### ***Option 2: COVID-19 was diagnosed at autopsy or the child was suspected to have COVID-19***

In some cases, a child will be diagnosed as having had COVID-19 after their death. In others, records may indicate that it was suspected based on symptoms, known exposures, or other factors. The autopsy report will be a good source for this information, but other records may also prove helpful, including records from emergency response professionals, healthcare, public health, or child welfare. If there is any clear indication that the child was diagnosed with COVID-19 postmortem, or if there is a suspicion of COVID-19 in any relevant record, the relevant data collection will look like this:

1. For question E7, ***Was the death attributed (either directly or indirectly) to an extreme weather event, emergency medical situation, natural disaster or mass shooting?***, the team should select **Yes**. For type of event, they should select **Pandemic**, and for name of event, write in **COVID-19**.
2. In section G6, for ***Primary cause of death***, teams should use the primary cause of death listed on the death certificate.
3. For question H8f, ***Was the medical condition associated with outbreak?***, the team should select **Yes** if the child died of a **medical** cause, and specify **COVID-19**. The skip pattern in the NFR-CRS will only allow this question to appear if the cause of death was answered as **medical**.
4. For question I8d, the team should select option 2, ***COVID-19 was diagnosed at autopsy or the child was suspected to have COVID-19***.

### ***Option 3: COVID-19 indirectly or directly contributed to the death but was not the immediate or underlying cause of death***

This response option is intended to identify if risk was increased due to COVID-19 or the community response. Identifying if a COVID-19 death was directly or indirectly related to COVID-19 will require teams to consider the full scope of the available records and case review, including team deliberation.

Examples of the types of cases that would fall into this category include:

- *A birthing parent had prenatal appointments postponed or canceled due to the clinic's response to COVID-19, an intrauterine infection developed, and the baby died shortly after birth.*
- *A family was unable to fill a child's inhaler prescription after their parent lost medical insurance due to pandemic-related unemployment.*
- *Risk was increased for a child when they spent significantly more time at home with an abusive caregiver due to virtual school.*
- *A teenager experienced a mental health crisis exacerbated by increased isolation during a COVID-19 quarantine and pandemic-related interruptions in ongoing therapy, and they died by suicide.*

A helpful place to start in answering I8d is to determine if any items were selected for question I8a, ***For the 12 months before the child's death, did the family experience any disruptions or significant changes to the following.*** The response options include things like school, daycare, employment, and access to social services. ***COVID-19 indirectly or directly contributed to the death if any of these items are checked, and the interruption or change was caused by COVID-19 or the state or community response to it.*** Both of these things must be true. There will be cases in which there was an interruption in one of the items listed in I8a in the 12 months before the death, but COVID-19 did not cause it. Unless the team identifies a different type of issue precipitated by the pandemic or pandemic response, this would not indicate that COVID-19 directly or indirectly contributed to the death.

There may be some instances in which the team identifies a pandemic-related issue that increased risk for the child, but it is not captured in the response options for I8a. The algorithm highlights several other examples where risk may have been increased due to COVID-19, including psychological issues for the child, economic issues for the family, and service delivery issues. These examples are not exhaustive. The team may also observe relationships between the items in Section I7, ***Life Stressors***, and the pandemic, where COVID-19 caused or precipitated a relevant life stressor. ***Ultimately, it is up to the team to decide if they believe that there were pandemic-related issues in the 12 months before the death that increased risk for the child, contributing to the death.***

If the team determines that COVID-19 was not a cause of death, but it contributed to it either directly or indirectly, relevant data entry will look like this:

1. For question E7, ***Was the death attributed (either directly or indirectly) to an extreme weather event, emergency medical situation, natural disaster or mass shooting?***, the team should select **Yes**. For type of event, they should select **Pandemic**, and for name of event, write in **COVID-19**.
2. In section G6, for ***Primary cause of death***, the team should use the primary cause of death listed on the death certificate.
3. For question I8d, the team should select option 3, ***COVID-19 indirectly or directly contributed to the death but was not the immediate or underlying cause of death***.

Again, there may be instances where a team identifies that a child died of viral COVID-19 **and** their death was directly or indirectly related to a service delivery issue caused by the pandemic response. ***In instances like these, always select the answer with the most profound impact on the outcome, in this case—that the cause of death was COVID-19 (option 1).***

#### ***Option 4: The birthing parent contracted COVID-19 during pregnancy***

This response seeks to identify fetal and infant deaths where the birthing parent contracted COVID-19. ***In order for this answer to be appropriate, there must be documentation that the parent received a positive lab-confirmed test result.*** The team may need to access prenatal records to determine if there was a positive test. There may also be documentation of a positive test in other relevant records, such as child welfare or social service records. If the team identifies that the birthing parent contracted COVID-19 during pregnancy **and** there is not a more profound pandemic-related impact on the child, relevant data entry will look like this:

1. For question E7, ***Was the death attributed (either directly or indirectly) to an extreme weather event, emergency medical situation, natural disaster or mass shooting?***, the team should select **Yes**. For type of event, they should select **Pandemic**, and for name of event, write in **COVID-19**.
2. In section G6, for ***Primary cause of death***, the team should use the primary cause of death listed on the death certificate.
3. For question I8d, the team should select option 4, ***The birthing parent contracted COVID-19 during pregnancy***.

### **Option 5: Other**

After considering viral exposure and the many ways in which the death may have been directly or indirectly related to COVID-19, the team may identify that there was a different type of impact on the death than the types described in the previous response options. Given the intended scope of response option 4, this answer may be rare. Still, in these instances, relevant data entry will look like this:

1. For question E7, ***Was the death attributed (either directly or indirectly) to an extreme weather event, emergency medical situation, natural disaster or mass shooting?***, the team should select **Yes**. For type of event, they should select **Pandemic**, and for name of event, write in **COVID-19**.
2. In section G6, for ***Primary cause of death***, the team should use the primary cause of death listed on the death certificate.
3. For question I8d, the team should select option 5, ***Other, describe***. Then the team should briefly explain the impact COVID-19 had on the outcome.

### **Option 6: COVID-19 had no impact on this child's death**

Despite the far-reaching impact of the pandemic on communities, there will still be deaths where the team will identify no connections between the pandemic or the pandemic response and the outcome. In these cases, relevant data entry will look like this:

1. For question E7, ***Was the death attributed (either directly or indirectly) to an extreme weather event, emergency medical situation, natural disaster or mass shooting?***, the team should select **No**.
2. In section G6, for ***Primary cause of death***, the team should use the primary cause of death listed on the death certificate.
3. For question I8d, the team should select option 6, ***COVID-19 had no impact on this child's death***.

### **Option 7: Unknown**

In instances where the team has limited information on the child and the death, the team may not know if there is a relationship between COVID-19 and the death. In these cases, relevant data entry will look like this:

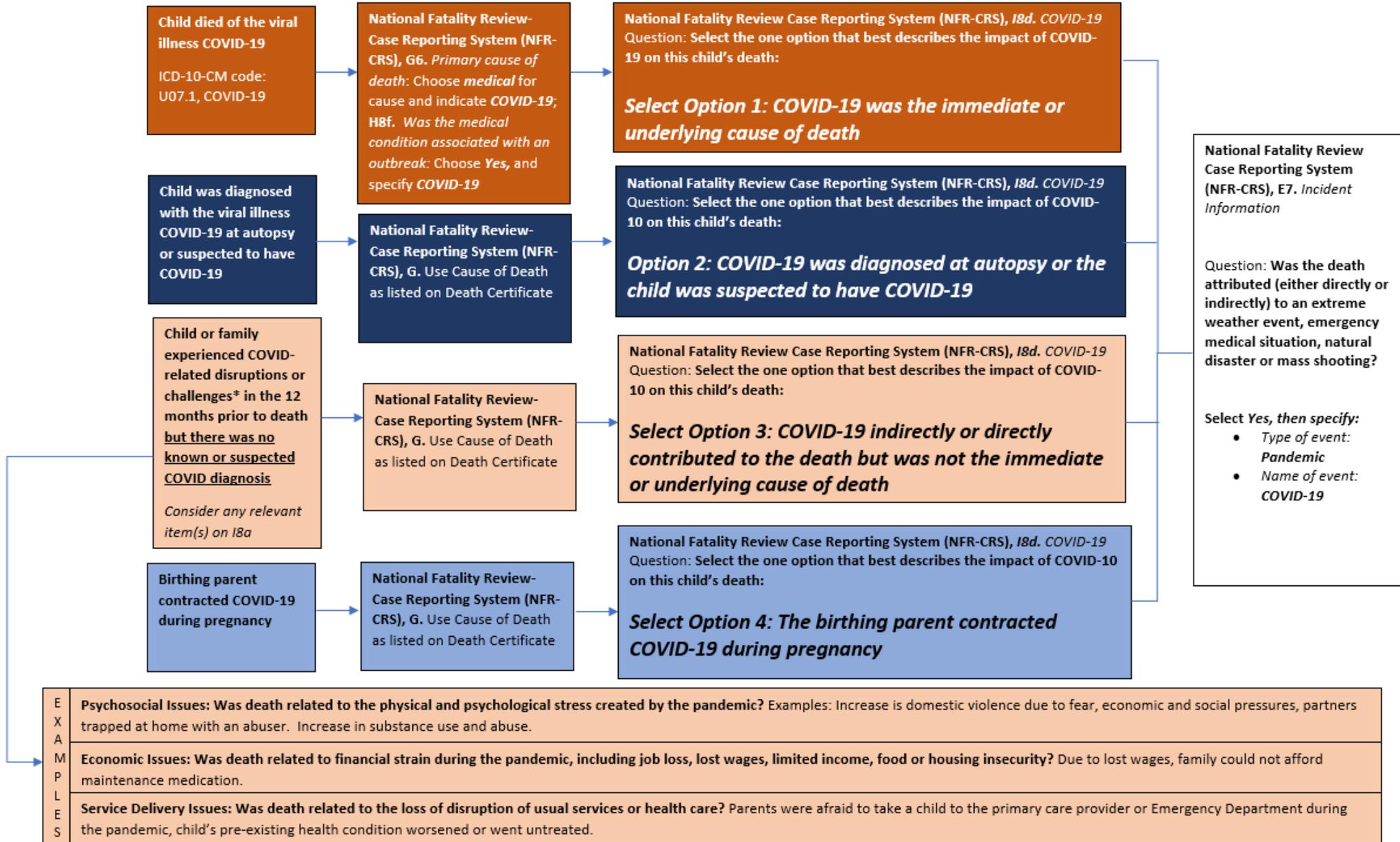
1. For question E7, ***Was the death attributed (either directly or indirectly) to an extreme weather event, emergency medical situation, natural disaster or mass shooting?***, the team should select **No** or **Unknown**.
2. In section G6, for ***Primary cause of death***, the team should use the primary cause of death listed on the death certificate.

3. For question I8d, the team should select option 7, **Unknown**.

The visual algorithm for use in fatality review meetings is provided on the following page. It focuses on the first four response options for question I8d, where COVID-19 had an impact of some kind on the outcome:

- *COVID-19 was the immediate or underlying cause of death*
- *COVID-19 was diagnosed at autopsy or the child was suspected to have COVID-19*
- *COVID-19 indirectly or directly contributed to the death but was not the immediate or underlying cause*
- *The birthing parent contracted COVID-19 during pregnancy*

# The Algorithm



## Conclusion

Fatality review teams have experienced significant shifts in how they conduct case reviews since the COVID-19 pandemic. Many have moved to virtual meetings, and others have had to suspend fatality review efforts for a time. The final question in I8, ***Did COVID-19 impact the team's ability to conduct this fatality review?***, asks teams to share case-specific challenges they may have faced conducting prevention-focused fatality review during the pandemic. This information will help the National Center and state and local jurisdictions summarize the impacts of COVID-19 on fatality review programs.

Families and children also experienced significant shifts and new access barriers because of the pandemic. In addition to the risk associated with the virus itself, these shifts and barriers increased risk in many different ways: changing the ways in which families accessed services; limiting what services were available; increasing stress and economic instability; and increasing isolation, just to name a few.

The new section I8 is being added to the NFR-CRS a little over a year into the pandemic in hopes that teams can use it to examine, understand, and respond to the ways in which their communities, systems, families, and children were impacted by COVID-19. The National Center welcomes inquiries about the relationship between child fatalities and COVID-19 at [info@ncfrp.org](mailto:info@ncfrp.org).

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