

*Special  
Edition*

Vaccine-Preventable Disease  
**Coronavirus Disease 2019  
(COVID-19)**

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*By Rachel M. Cunningham, M.P.H., and Julie A. Boom, M.D.  
Photography by Cody Duty*



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Vaccine-Preventable Disease: COVID-19  
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“Children are our future,  
they are our best hope,  
their suffering our worst fear.  
Our actions can help or hinder  
their development...

Starting with immunization,  
we can reduce the inequities of  
our world and tackle today’s major  
epidemics... **so that the next  
generation has an equal chance  
of life and health.”**

NELSON MANDELA

## Introduction

In 2020, the World Health Organization declared COVID-19, the disease caused by SARS-CoV-2, a global pandemic and the world irrevocably changed. Since then, more than 6 million lives across the globe have been lost to the virus. In the U.S., more than 1 million individuals have died and nearly 5 million hospitalized due to COVID-19. The losses are simply staggering. To date, more than 200,000 children in the U.S. lost a parent or caregiver to COVID-19. Grandparents, mothers, fathers, siblings — all abruptly gone. Millions more have suffered severe health effects from COVID-19 including hospitalizations, severe illness and prolonged illness and recovery. In short, the collective impact of COVID-19 on the world so far has been immeasurable and profound. And it's not over.

Early in the pandemic, the global scientific community rigorously pursued the development of the single most effective solution to preventing COVID-19 — a vaccine. Undoubtedly, vaccines are one of the most significant public health achievements of all time and offered the only path to ending the pandemic. The world held its breath as scientists worked to create safe and effective vaccines. Then, in December 2020, we breathed a collective sigh of relief when the first COVID-19 vaccine was administered in the U.S. Since that time, nearly 600 million doses of COVID-19 vaccine have been given across the United States. Importantly, the COVID-19 vaccines have been rigorously monitored and are extremely safe and effective.

Yet, almost two years after the introduction of the COVID-19 vaccines, millions of individuals remain unvaccinated. Sadly, COVID-19 vaccination rates among children are the lowest of all age groups. Many parents falsely believe the risks posed by COVID-19 to children are minimal, possibly even acceptable. Coupled with unfounded fears and misconceptions regarding the COVID-19 vaccines, many parents are choosing not to vaccinate their children. As COVID-19 vaccines are currently approved for all individuals 6 months of age and older, millions of children remain unprotected from the potentially devastating effects of the virus.

The families portrayed herein repeatedly described the traumatic and profound effects COVID-19 had on their lives; these effects often cannot be captured in statistics but in ways that, nonetheless, immeasurably impacted their children and families. We share their stories to demonstrate the importance of preventing COVID-19 through vaccination. With hundreds of millions of doses given, the COVID-19 vaccines are proven to be safe, effective and critical to preventing acute infection as well as severe disease. Simply put, once again, vaccines are proven to be lifesaving.





## Dedication

We dedicate this book to the more than one million Americans lost to COVID-19. The human cost of the pandemic is breathtaking. We hope to honor their lives and offer meaning to our losses through the stories shared within this book. Each story demonstrates the true cost of the suffering associated with each illness, hospitalization and death from COVID-19.

We also dedicate this book to the memory of our beloved colleague and friend, Paul Kuntz. Paul was an accomplished photographer who lost his battle to cancer in 2021. His remarkable photos are featured in our other books.

**"If I could go  
back in time,  
I would vaccinate  
her right away."**



# Lydia Castro

Rosalinda, her 16-year-old daughter, Lydia, and 9-year-old son, Nathan, are a tight knit family. So, in August 2021, when Lydia became severely ill from COVID-19, the experience profoundly impacted them all. Initially, Lydia developed a fever, persistent headache, fatigue and weakness. Her symptoms soon became more serious. Lydia's temperature spiked to 105°F and she had difficulty breathing. "When her fever rose, I went to check on her but she was gasping for air," Rosalinda described. She rushed Lydia to the emergency center at Texas Children's Hospital. By then, Lydia was critically ill and admitted to the pediatric intensive care unit. She was diagnosed with severe COVID pneumonia, a potentially life-threatening complication of COVID-19. The next day, Lydia's medical team told Rosalinda they needed to sedate Lydia so that her body could heal. Lydia spent 10 days under sedation. "She looked like she was sleeping. I would wash her face and touch her hands just to feel her," Rosalinda said. "She was fighting for her life." On day ten, they began weaning Lydia off the medication. Upon waking up,



Lydia could barely move. "I couldn't walk or sit up. I couldn't even put my hair in a ponytail," Lydia said. Lydia was hospitalized for 22 days, after which she spent two months undergoing physical therapy to regain her strength so she could talk, walk and perform basic movements on her own. In total, she missed six weeks of school. COVID-19 was devastating for the Castro family, and many months later, they are still recovering. "Lydia was between life and death. It was a nightmare and an indescribable experience," said Rosalinda. While COVID-19 vaccines were available at the time Lydia became ill, she was unvaccinated. "I was vaccinated but I hesitated to get Lydia vaccinated and I deeply regret it," Rosalinda said. "If I could go back in time, I would vaccinate her right away." Lydia was vaccinated soon after she was released from the hospital. Rosalinda encourages parents to not miss the opportunity to vaccinate their children. "There is a reason why it's so important. I wish I'd understood that sooner."





**"It was a  
traumatizing  
experience."**

# Brittany Wochese

In December 2020, Peggy Ngemoh contracted COVID-19 while pregnant. Peggy isolated herself from her husband, Emmanuel, and their two children, and the family thought they were in the clear when no one else became ill. Just one month later, however, their energetic and healthy two-year-old daughter, Brittany, became very sick.

What began as a high fever soon progressed to severe abdominal pain, vomiting, diarrhea and lethargy, along with facial and abdominal swelling. As Peggy recalls, her daughter changed in front of her eyes. “It was scary watching her get so sick so fast,” she said. Brittany was admitted to Texas Children’s Hospital, where she was

diagnosed with multisystem inflammatory syndrome in children (MIS-C), a serious and sometimes deadly condition in which organs and body systems such as the heart, lungs, kidneys, digestive system and skin become severely inflamed. The condition can occur weeks after a child is infected with COVID-19, even in children who have no symptoms. Brittany spent 10 days in the pediatric

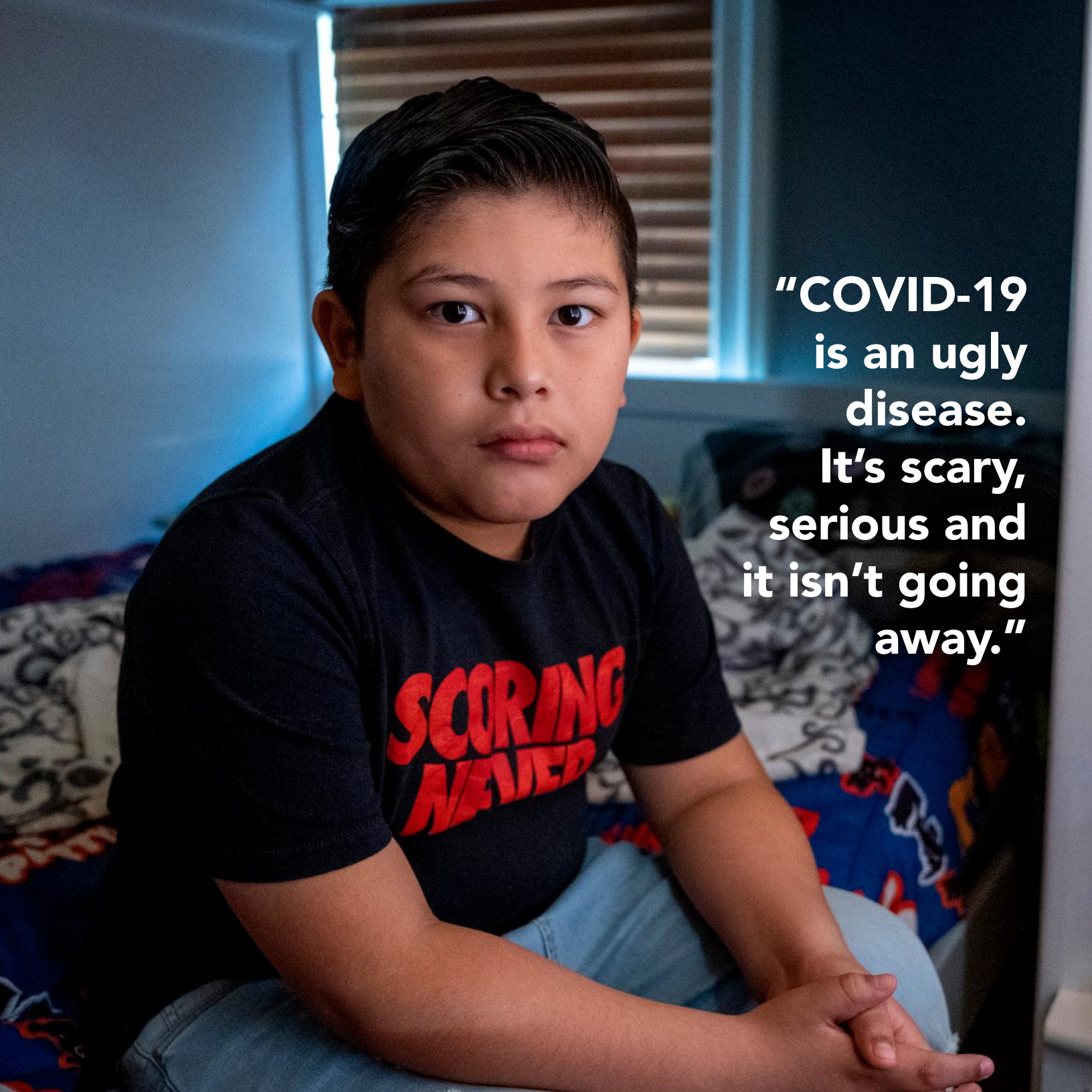


intensive care unit, where she suffered acute respiratory failure and septic shock. “It was a traumatizing experience,” Peggy said. “We could barely sleep and just watched the monitors all night, praying like we’ve never prayed before in our lives.” While Brittany is too young to understand how sick she was,

her parents vividly recall the experience, their fear of losing her and their relief that she fully recovered. “It was a very difficult experience for us as a family, but I remember when Brittany began to recover and that was a beautiful moment,” Emmanuel said. Fortunately, a safe and effective COVID-19 vaccine is now available for children

ages 6 months and older. “I couldn’t protect my child, but you can prevent serious illness by vaccinating yourself and your children,” Peggy said. “We have seen firsthand what it’s like when a child experiences complications from COVID-19 and you feel like you might lose that child. We don’t want anyone else to go through that.”





**"COVID-19  
is an ugly  
disease.  
It's scary,  
serious and  
it isn't going  
away."**

# Jesse Banda

Eight-year-old Jesse Banda's illness from COVID-19 began with a headache. Although his mom, dad and 18-year-old brother were vaccinated, Jesse and his younger sister were too young to be vaccinated at the time. Within a couple of days, Jesse developed body aches, fatigue, fever and congestion. Soon after, Jesse and his mom, Beatriz, tested positive for COVID-19. Then Jesse's condition drastically worsened. He began having trouble breathing, chest pain, shortness of breath and extreme weakness. Scared and concerned, Beatriz called 911, and an ambulance transported Jesse to Texas Children's Hospital with his dad, Isaias.

Jesse was hospitalized and diagnosed with pneumonia, a serious and potentially life-threatening complication of COVID-19. Isaias recalled, "Jesse couldn't breathe or get up on his own. It's very hard and very scary to see your child suffering like that." At home in isolation, Beatriz was also sick from COVID-19, longing to take care of her son but unable to leave the house. "It was horrible.



I couldn't be with my son when he was in the hospital, and I was also very sick myself." Over the next few days, Jesse received respiratory support as he continued to have difficulty breathing and severe weakness. Jesse spent six days at Texas Children's, and it was more than a month before his energy level was back to normal.

While Jesse recovered fully, the fear and stress of the experience continue to haunt his parents and older brother, Cristian. "We don't know what would have happened if we hadn't taken him to the hospital," Isaias said. "We could have lost him." The Bandas want other families to learn from their experience

and prevent COVID-19 through vaccination. "We're lucky to have a vaccine," Beatriz said. "Jesse couldn't get vaccinated, and it would have made a difference. "COVID-19 is an ugly disease. It's scary, serious and it isn't going away. It didn't just affect Jesse; it affected our whole family, and we all suffered seeing him like that."





**"It affected him a lot  
— emotionally,  
physically and  
mentally.  
That doesn't just  
go away."**



# Declan Melchor

Christy, Edgar and their 12-year-old son, Brody, eagerly received a COVID-19 vaccine at their earliest opportunity. By the fall of 2021, however, the couple's 9-year-old son, Declan, was still too young to be vaccinated. When Declan and Brody returned to school, Christy was anxious about the risk of COVID-19 but knew attending school was important for their mental and emotional health.

Unfortunately, a week after school started, the entire family tested positive for COVID-19, including Declan — a previously healthy, active boy with well-controlled asthma. While the rest of the family experienced brief and mild illness, Declan had a different experience. He suffered from a severe cough, intermittent fever for seven

days, chest pain, shortness of breath, multiple asthma attacks, severe lethargy, fatigue and painful headaches. At one point, Declan's headache became so severe that he cried and screamed in agony. Frightened, Christy rushed him to the emergency room at Texas Children's Hospital for evaluation and treatment. Another week passed before Declan recovered. In total, he missed eight days of school. The Melchor



family spent months healing from the stress of the experience. "The worst thing is the helplessness you feel as a parent," said Christy. "I couldn't do anything to make him better or prevent it." Today, Declan and other children his age are eligible to be vaccinated, and the Melchors encourage parents to protect their children by vaccinating them. They want

parents to understand the impact COVID-19 can have on children and their families. "Many people don't think COVID-19 affects kids," Christy said. "But it affected my kid. It affected him a lot — emotionally, physically and mentally. COVID-19 affected all of us. That doesn't just go away. It caused trauma that we had to work through."

The Melchors emphasized the importance of vaccines to prevent severe disease, something they witnessed firsthand. "When comparing our vaccinated child to our unvaccinated child, both of whom had COVID-19, the difference is clear," Edgar said. "Vaccines can make a huge difference. It's an extra measure of protection for your family."

**"We often think  
these things  
won't happen  
to us or to our  
kids, but it  
can happen to  
anyone."**



# Maria Campo

On Christmas Eve 2020, 10-year-old Maria Campo, her 18-year-old brother and their parents tested positive for COVID-19. The family recovered quickly, and Maria remained asymptomatic. Soon after, however, COVID-19 unexpectedly had a more serious impact on the Campo family.

In early February, Maria developed a fever, headache, rash, stomach pain and vomiting. When she experienced difficulty breathing and chest pain after several days of persistent fever, her mom, Alexandra, rushed her to the local hospital. Unsure of her diagnosis but alarmed by her symptoms, Maria was immediately transferred to Texas Children's Hospital and hospitalized. Soon after, Maria was diagnosed with multisystem inflammatory syndrome in children, commonly known as MIS-C, a rare but serious condition in which organs, including the heart, lungs, kidneys and brain, become inflamed. Maria suffered systemic inflammation, including inflammation of her heart. "I was so afraid of losing her,"



Alexandra said. "I had no idea she could get that sick from COVID-19." Over the course of the week, Maria improved. Her fever went away, her inflammation subsided, and she no longer experienced shortness of breath or chest pain. After six days at Texas Children's Hospital, Maria returned home and fully recovered.

While COVID-19 vaccines weren't available to Maria or her family at the time she was hospitalized, safe and effective vaccines are now available to individuals ages 6 months and older. The entire Campo family has now been vaccinated for COVID-19. "We were the first in line to get the vaccine," Alexandra

said. Alexandra frequently shares Maria's story with the hope that others will take the virus seriously. "People don't realize that kids can get really sick from COVID-19," she says. "Before Maria got sick, I didn't know it was possible. We were lucky because other children have died from MIS-C. We often think these things won't happen to us or to our kids, but it can happen to anyone."



**"They could get better.  
They could get worse.  
Or they could not survive."**



# Aayush Singh

Anjani Singh's deep appreciation for vaccines is rooted in his childhood in India, where he heard stories of the impact of the 1918 influenza pandemic on his family. "My grandfather told me how he lost 26 members of his family to the 1918 influenza pandemic," Anjani says. "Because of this, I understood how serious viruses like COVID-19 could be and how important it is to prevent it." When COVID-19 vaccines became available, Anjani and his family were vaccinated; however, his 11-year-old son, Aayush, was too young to receive a vaccine.

Aayush tested positive for COVID-19 soon after he returned to school in the fall of 2021. He developed fever, loss of smell, sore throat, body aches, congestion and coughing. Within a few days, Aayush began to have trouble breathing so Anjani took him to Texas Children's Hospital. He was admitted for acute respiratory failure caused by pneumonia, a complication from COVID-19 that can become severe and even life-threatening. "He deteriorated so quickly




and was struggling to breathe," Anjani recalls. "It was much worse than I imagined." Aayush spent four days in the hospital and, for weeks after, was weak and easily fatigued. Thankfully, he has since fully recovered.

The Singhs count themselves lucky, given how severe COVID-19 can be in children.

"As a parent, it's a scary situation when your child is hospitalized with COVID-19, because you worry about all the possible scenarios," Anjani says. "They could get better. They could get worse. Or they could not survive."

Fortunately, COVID-19 vaccines are highly effective at preventing severe disease including pneumonia, one of the most common complications of COVID-19. When the vaccine became available to Aayush, his parents were eager to protect him, and Anjani encourages other parents to do the same. "Trust us, you don't want to face this situation," he says. "You or your child may not survive without the vaccine. It is the safest choice for your family."





**“We must take care of each other. Getting vaccinated for COVID-19 is one way for us to do that.”**

# Tim Benally

When the COVID-19 pandemic began in the U.S. in March 2020, Tim Benally, a Pennsylvania State University student, abruptly returned to his home in the Navajo Nation in Arizona. Over the next year, Tim and his family experienced devastating losses from COVID-19.

Soon after Tim's return, his cousin, an Iraq war veteran, respected community leader and father of three, died from COVID-19. "His death was a huge shock and loss to the community," Tim said. "From that point on, it seemed to just get worse. Every text, every phone call was about someone else with COVID-19. It was scary." In August, Tim's grandmother also died from COVID-19. "When my grandmother died, it just took the air out of our lungs and we began to lose hope," Tim recalled. "It was heartbreaking." The pain of these losses was magnified by the devastating impact COVID-19 had on many American Indian reservations, including the Navajo Nation.

In November 2020, Tim contracted COVID-19. He experienced loss of taste and smell,

headaches and severe fatigue. "After losing my cousin and grandma and seeing the effect on my family and community members who had contracted the virus, my heart sank," Tim recalled. To protect his family, Tim isolated himself in a hotel off the reservation. A healthy and athletic college student, Tim was surprised by how weak and fatigued he became. "I could barely get out of bed and would sleep for 12 to

14 hours," he said. "COVID-19 exhausted me in every single way." More than a year later, Tim still hasn't fully regained his sense of smell and energy level.

When COVID-19 vaccines became available, Tim recalled his immense relief as his family and members of his community were vaccinated. "It was such

a joyous time. I felt like I could hope again," he said. "I wasn't going to take any chances with COVID-19. We suffered so many losses. You never know who in your life has medical conditions that would make them more vulnerable. We must take care of each other, and getting vaccinated is one way for us to do that."





**“Traumatic is not a strong enough word to describe how difficult it was. Please, get vaccinated for yourself and others.”**





# Will Grogan

When 14-year-old Will Grogan, an avid tennis player, contracted COVID-19, he never imagined how profoundly his life would be affected. In October 2020, Will developed lightheadedness, tightness in his chest, shortness of breath, body aches, loss of taste and smell and fever. Weeks passed and his symptoms persisted. Twice, his mom, Whitney, took him to the emergency room. For 35 days, he had a relentless fever and was isolated, including the weeks through his 15th birthday and Thanksgiving. By the time Will recovered, he'd missed more than six weeks of school, sunk into a mild depression and developed a dull pain in his left leg. "I had zero energy and could barely walk to the bathroom without feeling short of breath," he said.

Whitney added, "People don't realize how hard it is to not hug or touch your child for weeks on end. It is gut-wrenching. Combined with the helplessness I felt when he wasn't getting better – it is indescribable." Will returned to school in January and continued to experience weakness, light headedness, loss of taste and smell and leg pain. Soon, he noticed confusion, brain fog



and short-term memory loss as well. A strong student, Will sometimes forgot entire lessons, confused his assignments and occasionally even failed to recall words. These new symptoms alarmed him. "Physically and mentally, I was completely exhausted. Everything was a challenge," he says. Will suffered from a post-COVID condition, long-term effects that can last weeks, months or even years.

Gradually, he improved and by the end of the summer, he'd recovered – more than 10 months after his initial illness. Will wants others to understand the risks of COVID-19 so they can better understand the importance of vaccines. "I don't think people understand the impact this disease can have on your life," Will stated. Whitney

also encourages parents to get their children vaccinated. "Maybe your child won't be the one to get seriously ill, but are you willing to take that chance? Because if your child does become ill, it can change the trajectory of their life. Traumatic is not a strong enough word to describe how difficult it was. Please, get vaccinated for yourself and others."



**"I want parents  
to take it  
seriously so  
that their  
child doesn't  
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did."**

# Shemar Felton

Shemar Felton, a healthy 16-year-old who loves basketball, nearly died from complications related to COVID-19. Today, Shemar and his family continue to cope with the long-term impact of his illness. In November 2020, Shemar and his mom, Loreena, tested positive for COVID-19. Initially, Shemar's symptoms were mild — loss of taste and smell, fever and headaches. He recovered quickly, but one month later, Shemar suddenly became very sick. He developed severe headaches, fever, stomach pain, chills and lethargy. Shemar's condition continued to deteriorate. When he developed chest pain and alarming mental confusion, he was hospitalized in the cardiac intensive care unit at Texas Children's Hospital. Shemar recalled, "I was in a lot of pain. I couldn't breathe. I'd had a headache that lasted for days. I knew I was barely making it." Shemar was diagnosed with heart failure due to multisystem inflammatory syndrome in children, commonly known as MIS-C. This serious inflammatory condition occurs several weeks after the onset of COVID-19 and frequently impacts heart function, with recovery sometimes taking



months. Shemar spent nine days in the hospital fighting for his life. "The experience was scary and traumatizing. He was a healthy kid who nearly died from MIS-C," his parents said. Shemar recalled, "I remember the doctors telling me which parts of my body were inflamed and the list went on and on — my skin, kidneys, liver, heart, even my eyes." Shemar assumed he'd immediately be back to his normal routine, but it took more than a year for his heart to fully recover. During that time, he required frequent cardiology visits, routine heart imaging and daily medication and couldn't return to his previous physical activity levels for months. "All I wanted was to play basketball," he shared. "Slowly, my heart improved but it took much longer than I expected." Shemar and his family want others to understand why vaccines are important in the fight against COVID-19. "We didn't have a vaccine available to us. I want parents to take it seriously so that their child doesn't experience what my son did," Loreena said. "One child dying from COVID-19 is one child too many. To us, vaccines are essential and save lives."





**“We were vaccinated to protect our family and others.”**

# Faith Akinbohun

Faith Akinbohun is a smart, ambitious and soft-spoken 17-year-old. When she contracted COVID-19 in December 2020, she immediately isolated from her mom, Patricia, and older brother, Chancz'e. During her illness, Faith developed extreme fatigue, weakness, shortness of breath, chills, headaches and fever, as well as loss of taste and smell. Just two days before Christmas, Faith was able to leave isolation and rejoin her family. In the months following her illness, Faith experienced ongoing shortness of breath, fatigue and newly diagnosed anxiety. "I would feel myself getting out of breath, and it scared me. It made me anxious which made the shortness of breath worse. I could feel the pressure build in my chest, and I was so scared of catching COVID-19 again," she said. "COVID-19 was terrible the first time and I couldn't imagine having it again." After months of follow-up appointments with Texas Children's Hospital specialists, Faith finally recovered. Medication for her anxiety also helped her manage the long-term effects of COVID-19. The Akinbohun family



has undergone extensive counseling, both individually and as a family, to help them overcome the anxiety, fear and other profound negative mental health effects of the COVID-19 pandemic. The extended isolation periods, the fear of getting sick, the challenge of managing long-term COVID symptoms, and the general stress of living in a pandemic dramatically impacted them all. "It's been really hard. I'm a single parent and it's a lot to deal with. We needed help dealing with the stress of everything," Patricia shared. When the day came for the family to get vaccinated for COVID-19, they breathed a sigh of relief. They were eager for the extra protection the vaccine offers. The Akinbohuns continue to share their experience and encourage others to get vaccinated. "We were vaccinated to protect our family and others," Faith said. "While we know that the vaccine isn't 100% effective and we may still get COVID-19, we feel that it's still worth it. It's something we can do to help ourselves and others. In the end, it could save a life."



**"So now, out of my five senses, I've basically lost two. I don't know if they will ever come back and if they do, if they'll be the same."**



# Erica Russell

Erica Russell is a healthy and athletic 24-year-old who has suffered from the long-term effects of COVID-19 since her initial illness in February 2021. When Erica abruptly lost her taste and smell, she was not surprised by her positive COVID-19 test. As Erica isolated in her apartment, she experienced mild cold-like symptoms and severe fatigue.

As Erica's illness subsided, she was surprised when her taste and smell didn't return. More than a year later, Erica continues to suffer from the long-term effects of COVID-19. She has only partially regained her taste and smell, and what she has regained was greatly impacted. "My taste buds have completely changed," she said. "Things taste like chemicals. I can't drink coffee anymore because it just tastes awful to me. And if I'm being generous, maybe 15 to 20 percent of my sense of smell is back. I can barely smell things. So now, out of my five senses, I've basically lost two. I don't know if they will ever come back and if they do, if they'll be the same." While most people recover from COVID-19 within a few weeks,




others can experience long-term health effects including individuals who experienced mild illness or did not have any symptoms initially. These post-COVID conditions can include different combinations of symptoms such as shortness of breath, fatigue, brain fog, headache, heart palpitations and joint pain. Learning to cope with a long-term illness is challenging and the impact of these long-term effects can be distressing.

"I would not wish this on anyone," Erica said. "While I have hope that my taste and smell will come back fully one day, it is hard and frustrating in the meantime." While the vaccine was not available to Erica at the time of her illness, she was vaccinated as soon as possible. She shared

her story to help others understand the best way to prevent the long-term effects of COVID-19 is to prevent COVID-19 illness through vaccination. "While getting vaccinated is an individual choice, it's also the smart choice," Erica said. "COVID-19 can happen to anyone. Getting vaccinated is the best way to protect yourself."



A close-up photograph of a person's hands holding a circular piece of light brown cardboard. The cardboard has two dark, ink-like handprints on it, one on the left and one on the right. The person's fingernails are painted with a dark, shimmering polish. The background is a dark red fabric with a floral pattern of white and red flowers and green leaves. A portion of a black and white photograph is visible in the upper right corner. The text is overlaid in white, bold font at the bottom of the image.

**"As a nurse, I knew COVID-19 was serious and how vulnerable pregnant women are, but I still never could have fathomed that I would lose a son to this virus."**



# Vanessa Alfermann

Ryan and Vanessa Alfermann were elated they were expecting another baby. They named their son Axel and were eager for him to join their growing family. Sadly, the Alfermann family was impacted by COVID-19 in a way they never could have imagined—the devastating loss of their son. In November 2020, Ryan and Vanessa, 22 weeks pregnant, tested positive for COVID-19. She experienced fatigue, body aches, nausea, congestion and loss of taste and smell. Vanessa recalled, “I was exhausted and couldn’t move. I felt terrible.” As a nurse, she understood the risk the virus posed to her and Axel; however, after ten days, Vanessa was optimistic as her symptoms subsided. Just as Vanessa thought she was in the clear, she suddenly developed persistent back spasms. Labor contractions soon followed. Alarmed, Vanessa went to the hospital. The doctors checked Axel, confirmed he was fine and gave her medication for the back spasms. Within an hour of returning home, however, Vanessa began bleeding, and the back spasms and contractions worsened. By the time Vanessa arrived at the hospital again, she was in labor.



Less than half an hour after Vanessa arrived at the hospital, Axel was born. A blood clot in her placenta caused a placental abruption and premature birth. Vanessa watched Axel take a single breath before quietly passing away. Heartbroken, Vanessa and Ryan held their son as waves of anger, shock, sadness and disbelief washed over them. “It was

overwhelming and didn’t feel real,” Vanessa says. “One moment I was pregnant and getting his room ready. The next moment he was gone. As a nurse, I knew COVID-19 was serious and how vulnerable pregnant women are, but I still never could have fathomed that I would lose a son to this virus.” A month after the Alfermanns lost Axel, COVID-19 vaccines

became available in the U.S. and Vanessa was vaccinated. “I was eager to be vaccinated but it was bittersweet. I couldn’t help but wonder if Axel would still be here if I’d been vaccinated earlier,” Vanessa said. “I encourage pregnant women to get vaccinated because I don’t want anyone else to lose their baby to COVID-19. I don’t want anyone to wonder what they could have done differently for their child.”

## COVID-19 Disease Facts

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- Nearly 14 million children have contracted COVID-19 and this number increases each week. Pediatric COVID-19 has resulted in hundreds of thousands of emergency room visits, more than 100,000 hospitalizations and more than 1,700 deaths.<sup>1-2</sup>
- 20-25% of children hospitalized due to COVID-19 require ICU (intensive care unit) admission.<sup>3-4</sup>
- 30% of children hospitalized due to COVID-19 have no underlying medical conditions.<sup>3</sup>
- Children with certain medical conditions, including diabetes and obesity, are at higher risk of developing severe COVID-19.<sup>3</sup>
- Multisystem inflammatory syndrome in children (MIS-C) is a serious complication that occurs weeks after symptomatic or asymptomatic COVID-19. MIS-C causes organs and body systems such as the heart, lungs, and kidneys to become severely inflamed.<sup>5</sup>
- While most children recover from mild or moderate COVID-19 within a few weeks, some suffer long-term effects, known as post-COVID conditions or long COVID. These conditions may include breathing problems, fatigue, depression, brain fog, anxiety, body aches and more.<sup>6</sup>
- While most COVID-19 deaths occur in adults, the toll on children is devastating. More than 200,000 children in the U.S. have lost a parent or primary caregiver to COVID-19.<sup>7</sup>
- Racial and ethnic minority children are more than 4 times as likely to have experienced the death of a parent or primary caregiver.<sup>7-8</sup>
- One of the most common complications of COVID-19 is pneumonia, a lung infection that can become severe and even life-threatening. COVID pneumonia recovery can be lengthy, taking up to several months.<sup>9</sup>
- Pregnant women are at increased risk of severe COVID-19 disease, ICU admission and death, as well as complications that include pregnancy loss.<sup>10</sup>

## COVID-19 Vaccine Facts

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- COVID-19 vaccines are available for individuals 6 months of age and older. The best way to prevent severe illness, hospitalization and death is to vaccinate at the earliest opportunity.<sup>11</sup>
- COVID-19 vaccines are safe and effective in children. Tens of millions of doses of COVID-19 vaccine have been administered to children across the U.S. and the most commonly reported side effects are mild, temporary and similar to those experienced after routine vaccination.<sup>12</sup>
- Unvaccinated children are much more likely to be hospitalized and require ICU admission than vaccinated children.<sup>3</sup>
- The most common side effects include pain or redness at the injection site, tiredness, headache and fever. While there are many myths about COVID-19 vaccines, serious reactions after COVID-19 vaccination are very rare.<sup>13</sup>
- Children who have already had COVID-19 or might have had COVID-19 should still get vaccinated to achieve the highest level of protection against COVID-19.<sup>11</sup>
- COVID-19 vaccine can be given at the same time as other vaccines, including the flu vaccine. <sup>11</sup>
- Dosing for the COVID-19 vaccine is based on your child's age, and not their weight or height.<sup>11</sup>
- It is critical to vaccinate as many people as possible for COVID-19 to prevent COVID-19 as well as the emergence of future variants that may be more dangerous.<sup>14</sup>
- In 2022, unvaccinated individuals 5 years of age and older were nearly 3 times more likely to test positive for COVID-19 compared to those fully vaccinated.<sup>15</sup>
- In 2022, unvaccinated individuals 12 years of age and older were 9 times more likely to die from COVID-19 compared to those who are fully vaccinated and have received a booster dose.<sup>15</sup>

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