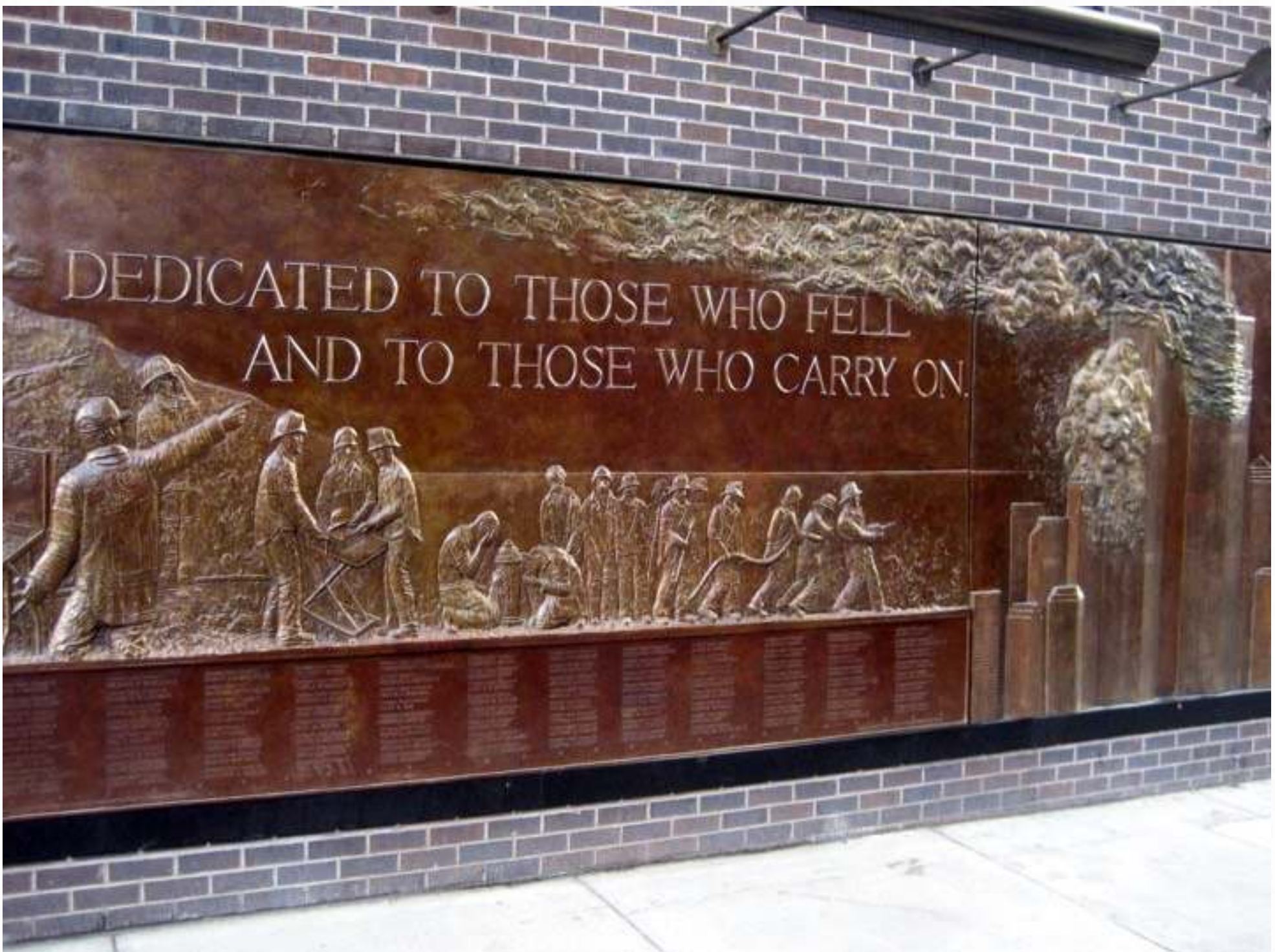


After the towers fell:

9/11 first responders and their families
share their stories



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For Marian, Dave and Aidan.

And for Chris.

Acknowledgements

To the thousands of firefighters, paramedics, emergency medical technicians and police officers who responded to the 9/11 terrorist attacks - I hope that your collective voice has been truly captured within the pages of this book.

To the emergency service dispatchers - through whose headsets poured thousands of pleas for help that morning - you should never be the “forgotten” responders.

To the tens of thousands of recovery workers. You saw things you were never meant to see. You did things that no-one should ever have to do. You are all heroes.

To the individual responders and family members who have shared their 9/11 stories within these pages. Your words are richly descriptive and deeply personal - together, you offer a powerful reminder that the story of 9/11 did not end when the towers fell.

To the 9/11 families. May all who have pain in their heart find peace.

And to my own family - for supporting me always.

Foreword

Dr Erin Smith

On a hot August day in 2005, I met with Marian Fontana in a little cafe across the road from her firefighter husband Dave's firehouse in Park Slope, Brooklyn.

Marian and Dave should have been celebrating their eighth wedding anniversary on the afternoon of September 11, 2001 - the day of the 9/11 terrorist attacks. Dave had just completed a 24-hour shift at his Brooklyn firehouse with Squad 1 when Marian phoned him that morning to confirm their plans for the day. Aidan, five years old, had his first day at school and Marian and Dave had been looking forward to spending the day together, wandering around New York City. He was done he told her, and they organised to meet at a local cafe. "That was it" she said. "No profound discussions". She can't even remember if she told him she loved him. "We always did" she says, "but ingrained habits are forgotten sometimes".

As she waited at the cafe, Marian noticed people taking animatedly around her, some staring up at the sky. "I heard the

words 'airplane' and 'twin towers'" and then a friend approached her at the cafe and told her "a plane just crashed into the twin towers." As Marian looked up, she saw a thick black cloud of smoke stretching across the perfectly blue sky from downtown Manhattan. She knew it was a big job, and she knew Dave would have gone.

She got home in time to turn on the television and witness the devastation - both towers of the World Trade Center were on fire. Marian watched as a man in a green shirt tucked his knees up, like a kid doing a cannonball into a pool, and jumped from one of the towers. "What's happening?" she asked the television.

And then she heard it. A low, guttural rumbling sound coming from her television. The South Tower fell. She knew, she said, in an instant that Dave was dead.

She couldn't avert her eyes from the television - searching the ash-covered faces of those trying to flee the carnage, looking for the familiar features of Dave.

The waiting for news was torturous. Grabbing the phone each time it rang, desperately hoping that it was Dave calling to say he was OK. Friends and neighbours called, some arrived with food. Although she hadn't smoked in thirteen years, she lit a cigarette. Around lunch time, crying and pacing around the apartment she shared with Dave, Marian and her friends started to call the emergency departments of hospitals surrounding the World Trade Center. There are busy signals and confused nurses. They check their lists for Dave's name.

Doctors and nurses in the hospitals near the towers were waiting, but the emergency rooms are virtually empty.

Around 1130pm, Firefighter Tony Edwards and Lieutenant Dennis Farrell from Squad 1 arrived, looking tired yet official. Marian had imagined this day, she says, ever since Dave started working as a firefighter. "I pictured myself perplexed as to why the fire company has arrived. A Captain steps forward and it suddenly dawns on me why they are there. I cry out, collapsing in the hall, my chest hurting and my stomach dropping". "None of it comes close" she tells me "to the sonic blast" she feels when it happens in real life.

"We didn't find any of the guys" Tony tells Marian. "The whole company is missing".

David Fontana, a member of Park Slope's elite Squad 1, died with his team as they climbed the stairs of the South Tower to rescue thousands of trapped civilians. Squad 1 lost half of its men at the World Trade Center - 12 brave "brothers" among the 413 first responders that died that day, desperately trying to help others.

As I sat across from Marian, I asked her how she was coping, especially with the fourth anniversary looming at the time. She seemed surprisingly resilient, although I am sure moments of pure, raw grief are dealt with in private. But today, instead of talking about her own devastation, she is more worried about the plight of the surviving responders. She tells me that she often thinks about how Dave would have coped with 9/11 if he had survived - how traumatised he would have been by what he witnessed at Ground Zero, by losing so many of his friends and colleagues. She wonders if their marriage would have survived 9/11.

"So there is nothing you can do for me" she tells me, sipping her coffee. "But it's the guys that have been left behind. They are haunted by what they saw, what they

had to do, how many guys were lost. They are the ones we need to be worried about.”

And as it turns out, she was right.

Now, sixteen years after 9/11, the impact on the surviving responders is ongoing. Traumatized by 9/11 - because what they experienced has not ended. New cases of 9/11-related illness are diagnosed regularly amongst the surviving responders. Cancer rates are around 15% higher in those who were exposed to Ground Zero compared to those who were not. More than 1000 responders have died in the years following 9/11 of causes directly related to the time they spent on “the pile” and over 7000 are currently being treated for 9/11-related illnesses.

The reality is that the death toll from the terrorist attacks grows larger each year, and while the physical wounds may have healed, the emotional scars remain for many responders, even now, sixteen years on. In many cases, the ongoing impact of 9/11 has shattered families and destroyed lives in a never-ending reverberation of pain and suffering.

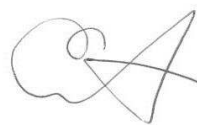
The stories of these responders and their families need to be told. Their voices need to be heard.

So this book is for Marian and Dave.

And for Aidan, who has grown up without his Dad.

And it is for all of the 9/11 responders - both fallen and surviving.

I hope it captures, in some small way, your collective voices.



Dr Erin Smith



Marian, Dave, and Aidan Fontana

1

September 11, 2001

The September 11, 2001 terrorist attacks on the World Trade Center (WTC) in New York City - otherwise known as 9/11 - resulted in the largest concentrated emergency service response in United States history.

At least 100 ambulances from around 31 emergency medical services (EMS) raced to the scene, setting up triage centres and beginning to treat and transport people. More than 2,000 New York Police Department (NYPD) and Port Authority Police Department (PAPD) police officers secured the area and began to evacuate survivors. But the response was, first and foremost, a Fire Department New York (FDNY) operation involving 214 FDNY units, 112 engines, 58 ladder trucks, five rescue companies, seven squad companies, four marine units, dozens of chiefs, and numerous command, communication, and support units (1).

Of the 214 FNDY units dispatched, only 117 of them activated a “10-84” status signalling that they had arrived. The details of what many emergency response units did at the scene remain hazy and some may never be known.

The primary EMS provider for New York City is the FDNY-EMS Division. In addition to the FDNY-EMS, there are approximately 30 hospital-based EMS systems contracted by the city to provide emergency medical response. These agencies deliver full-time, professional Basic Life Support (BLS) and Advanced Life Support (ALS) services to New York City. In 2001, approximately 950 daily ambulance tours responded to a city with more than eight million residents and an immeasurable number of tourists. On 9/11, 24 EMS supervisors were involved in the response to the WTC, along with the crews from 29 ALS and 58 BLS units.

Assuming each unit had a minimum two-member crew on board, there were nearly 200 medics present at the WTC precinct when the towers fell. By evening, an estimated 400 additional EMS personnel had made their way to Ground Zero (2).

The first EMS crews began to arrive at the WTC within minutes of American Airlines Flight 11 crashing into the North Tower of the WTC at 08:46am. The first paramedics and emergency medical technicians (EMT's) on the scene began to establish staging areas and were triaging patients who were exiting the North Tower after a massive fire-ball had raced down the elevator-shaft of the building, exploding into the lobby of the tower, killing many instantly and critically injuring many others.

But this summary only partly conveys the true scale and complexity of the emergency response to 9/11. Off-duty firefighters, paramedics, EMT's, and police officers - at times entire companies - self-dispatched to the site without orders. The area around the WTC quickly became a "parking lot," in the words of one police radio report, making it impossible for many units to report to the alarm boxes and staging areas they were assigned to (2).

From the first moments of the 9/11 response, to the last, the efforts of the emergency first responders were plagued by failures of communication, command and control.

A six-month examination by The New York Times found that the ability of the emergency first responders to rescue civilians, and ultimately to evacuate and save themselves, was marred by existing technical difficulties, a history of poor multi-agency collaboration and coordination, and failures in preparing and planning in regards to incident command - many of these issues had been part of the emergency response culture in New York City for years.

When the firefighters needed to communicate, their radio system failed, just as it had in those same buildings eight years earlier during the response to the 1993 WTC bombing. No other agency lost communications on 9/11 as broadly, or to such devastating effect, as the FDNY (3).

Minutes after the South Tower of the WTC collapsing, NYPD police helicopters above the remaining North Tower communicated to police officers on the ground about the condition of the remaining tower: "About 15 floors down from the top, it looks like

it's glowing red," the pilot of one helicopter, Aviation 14, radioed at 10:07am "It's inevitable" - referring to the collapse of the second tower.

Seconds later, another NYPD pilot reported: "I don't think this has too much longer to go. I would evacuate all people within the area of that second building."

Those clear warnings, captured on police radio tapes, were transmitted 21 minutes before the North Tower fell. The warning was relayed to police officers in the building - but unfortunately fire, police and EMS operated on different communication channels and were not routinely sharing information - so while most police officers heard the order to evacuate and escaped the North Tower, most firefighters and EMS responders never heard those warnings.

The FDNY communication system failed frequently that morning and problems escalated once the vital communication infrastructure that was located on the roof of the South Tower of the WTC was destroyed when the tower fell. Even if the radio network had been reliable, it was not linked to the communication systems of other emergency response agencies. This failure was further compounded by the lack of inter-agency communication

between commanders on the ground who were guiding the rescue efforts, yet not communicating with each other.

The FDNY command post located across West Street was destroyed after the South Tower collapsed, making command and control even more difficult and disorganised.

Blindly climbing higher in the remaining tower of the WTC, firefighters were unaware that the South Tower had fallen and had not received the important warning information from the NYPD. This total failure of communication and multi-agency coordination resulted in the deaths of at least 121 firefighters - most of whom would have been able to evacuate the building within the 21 minutes between the NYPD warnings and the North Tower collapsing.

Many witnesses reported seeing fatigued firefighters resting on the 19th floor of the tower or assisting civilians in the lobby of the building. Others reported passing firefighters who were helping disabled and distressed civilians slowly make their way down the stairwell between the 19th floor and the lobby. It is feasible that many of these people would have been able to

safely evacuate the building had they heard the warning 20 minutes earlier.

To this day, we don't know how many people - responders and civilians - were minutes away from evacuating. How many could see the daylight outside of the building when they heard that terrible rumble start above them. Ten seconds. That's how long it took for the tower to collapse. Not long enough for many to take those extra few steps to freedom.

We know that the evacuation was slow and orderly for the most part. This slowness perhaps resulted in unnecessary deaths when in the end - seconds mattered. This teaches us that while we certainly don't want to encourage panic in situations like this - we do want to encourage a sense of urgency.

The other problem was that prior to 9/11, it was not mandatory in New York City for high-rise buildings to enforce regular evacuation drills. Many people who safely evacuated that morning later recalled that there was confusion when the evacuation order was given. Many were unfamiliar with where the emergency evacuation stairwells were located, even fewer were aware that not all of the stairwells from the higher levels allowed direct descent to the

ground - some required people to transfer at lobby levels into other stairwells to continue their descent to the ground.

And people didn't listen to evacuation orders. Many wasted precious time, stopping to pack up desks and shut down computers. Some replied to emails. Many of the women in the towers ignored evacuation orders to leave handbags and personal items behind.

Two of the most frequently reported minor injuries amongst the thousands of successful evacuees that day were eye injuries and ankle strains.

And the main cause of the ankle injuries?

Women evacuating in their high heel, designer shoes. This was Manhattan after all!

In a sobering lesson, the escape of nearly everyone below the points of impact in each tower - about 14,000 people - had taken about twice as long as had been projected by the existing engineering standards for tall buildings. The buildings were only half full. If the attack had come at a time when they were filled to occupancy, the evacuation would not have been as successful. Thousands more

people would most likely have died, trapped on the stairs. (4)

The FDNY cannot confirm exactly how many firefighters were sent into the towers - or whereabouts in the towers they died.

Why?

The short answer is that they simply couldn't keep track of what was happening at this rapidly evolving and very unique scene. They had not trained for something like this. There were no plans for a terrorist attack from the air. But it was also due in part to many responding fire companies not checking in with chiefs or signalling arrival at the scene. Individual firefighters jumped on overcrowded trucks, against policy. Others, ordered off the fire trucks, hitched rides in cars or ran to the scene.

This resulted in much confusion in the hours and days following 9/11. Who had actually been there? Who went into the towers? Who was safe? Who was missing?

This subsequently resulted in an emotionally-charged search and rescue mission unlike anything ever witnessed in the United States. In the first hours after the attacks, confusion and misinformation

reigned. As the days passed, the likelihood of finding anyone else alive started to diminish and more news filtered in regarding the number of responders missing. Ultimately, 343 firefighters, 60 police officers and 10 paramedics and EMT's died on the day.

Only 20 people were ever pulled alive from the rubble of the WTC towers - including six FDNY firefighters and five police officers from the NYPD and PAPD.

Search and rescue efforts eventually became debris removal and remains management - a process which would not end until May, 2002 and was hampered by the fires that raged at Ground Zero for around 100 days after the attacks.

In a single day, the 9/11 terrorist attacks on both the WTC in New York City and the Pentagon in Washington D.C killed nearly 3,000 people from 57 countries. It was one of the most-covered media events of all time, and after sixteen years, the images are still difficult to view. These attacks, and the global reaction to them, have profoundly shaped the world we live in. So it remains important to understand the long-term impact on the emergency responders who put their lives at risk to try and save people that day.

It is hoped that this book helps ensure that an important voice is not lost, and that the richly descriptive and personal experiences of the 9/11 first responders and their families are not forgotten.

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2

Ground Zero

It was the noise - of generators, machinery, people, as massive pieces of construction equipment moved among the ruins at “the pile” (as first responders referred to Ground Zero), picking up debris. The noises and shouts of contractors, waving, pointing, directing people out of the oncoming danger that might be a huge skip loader bearing down or a crane lifting debris overhead. A noise of shovels against concrete as tired responders moved rubble, searching, searching for... what?

There were no office desks, no computers, no evidence of what had previously filled these office towers. There was very little evidence of the thousands of people who had perished within these buildings. There was only rubble. And dust.

When responders reflect on their initial response to 9/11 and Ground Zero, the words come slowly. Recollections bring back a range of emotions. Mass atrocity

can overwhelm the ability of language to fully describe the devastation that has been witnessed. Many recall sights, noises, feelings and smells, but often pause, apologising mid-sentence, as memories flood back and they find themselves right back there, in a pile of dust and debris.

“People were frantic, they were running everywhere. A man came running up to me, screaming that a woman had come out of Tower 1 and her skin was dripping off...she had been burned by the fireball that came down the elevator shaft after the first plane went into the North Tower” (*Male Firefighter*). (1)

“As I came up to the WTC, all I could see was blood and debris, people were running around panicking, not knowing what to do” (*Male EMT*). (1)

The scene before them resembled a war-zone.

“I mean body-parts, dust, debris – people that were coming out were really badly injured. There were burn injuries, I mean, this guy came out of the building and walked up to me and my partner. His shoulder was...like...totally dislocated and, like facing backwards. And his face was burnt off and as I looked at him I realised that his left ear wasn't there, it was just gone. You can't train or prepare to see that” (*Male EMT*). (1)

“I was concerned about where we were triaging patients, I mean, we were right under the towers...which now we don't do...the ambulance would pull up and we would load like five or six people in, and off they would go. I remember this woman had really bad burns, and we ended up having to put her on the floor of the ambulance, there was nothing we could do for her there, I honestly didn't think she was going to make it. It looked like she had burns to about 90% of her body...you know, I heard she made it...I think. It's hard to remember the individual patients I saw that morning you know, they all have kind of merged into one, horrible bloody mess” (*Male Paramedic*). (1)

At 09:03am, United Airlines Flight 175 crashed into the WTC's South Tower, killing everyone on board and hundreds

inside the building instantly. Both towers were now on fire and first responders were attempting to triage, treat and transport burned and traumatised patients to nearby hospitals.

They dodge the falling bodies of people who had jumped more than 100 stories to their deaths rather than die in the raging inferno that had engulfed the upper floors of the North and South Towers.

First responders hear bodies crashing to the ground, the loud explosions that signalled that another person had just died - a sound that will haunt them for many years to come.

Then the towers fell.

First responders took cover wherever they could and after the intense rumbling ended and the dust clouds started to dissipate, many were surprised to realise that they were still alive. Crawling out from under debris responders assessed their own injuries after feeling trapped in a suffocating environment. The surviving responders made their way through mountains of debris, devastation and death, and entered a new reality – a post-9/11 world.

“It was like the world had ended...it was a deafening silence. It was like I was the last man left on earth. There was nothing moving, and there’s all this stuff just floating through the air...and then I realised...everyone is gone, they’ve just been pulverised, and I remember thinking, the dust...the dust is people. And I started vomiting” (*Male Paramedic*). (1)

When the buildings came down, the rescuers needed rescuing.

“I remember seeing firefighters and other cops, just wandering around covered in dust, trying to find partners and friends. I just needed to find water to wash my face, each time I breathed in my throat burned real bad and when I rubbed my eyes I could feel the grit scratching at my face” (*Male Police Officer*). (1)

As first responders emerged following the collapse of both WTC towers, a thick blanket of dust hung in the air and covered everything as far as the eye could see. The piercing blue skies that had been visible above Manhattan just over an hour earlier could no longer be seen. There was an eerie silence, pierced by a single sound, the PASS alarms of hundreds of firefighters. The PASS alarm is an audible signal that a firefighter is no longer moving.

It was a sound that many first responders had never heard before—and was an audible reminder that many colleagues were lost, somewhere below the rubble.

“I remember thinking, no one survived this, there won’t be anyone to find in there, they’re all gone” (*Male Paramedic*). (1)

And then there was the smell - the smell of smoke, of... death.

“The smell of the bodies, not the smell of someone who has been dead for a long time, but the smell of someone that has just died, and the blood. I can still remember that smell. And the fires, there were fires all around us, so that’s what I remember, the smell of death and smoke – that is my sensory memory of 9/11” (*Female Paramedic*). (1)

The responders called it “death dust.”

It was an odour that many responders had never experienced before; yet they all knew what it was as they approached the pile in the days to come. The face masks helped to a degree, but it still seeped through. It got in their hair. In their clothes. Under their nails. Some of the rescuers used oil of wintergreen or Vicks or Tiger Balm on their moustaches and smeared under their noses to cut down the odour,

but yet it still came. The odour dug deep down into their psyches. Many responders developed sinus infections; “I could hardly speak on the first day home and our throats grew sore as we constantly tried to clear them” (*Male USAR*). (2)

In addition to the noises and the smells, was the “expression of 9/11”. The look that so many responders, volunteers and family members of victims had. It was a mixture of sadness and love. Hope and despair. “The looks of the family members of the victims who held up signs to us each night as we went to work on the pile. A young woman asked, “have you seen my brother? He worked on the 92nd floor of Tower Two...” She held up a well-worn picture of a handsome young man in a soccer uniform. I smiled weakly and replied that we would look for him. I had seen the young woman last night. And the night before” (*Male USAR*). (2)

Later in the evening first responders started to make their way home. Many stopped to change out of their uniforms and shower. Water would run black with soot and debris, and as the water washed away the physical evidence of the day, it often revealed the injuries inflicted. Many responders placed their uniform, boots and helmets in bags and left them in the

garage or basement - unable to wash the clothes, but unable to throw them away. For many responders, these uniforms remain stored away, even sixteen years after the attacks.

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3

First responder stories

Paramedics and EMT's

It's Wednesday morning - just 24 hours since the terrorist attacks of 9/11. Stunned and angry, the world watches the drama unfold on TV, as thousands of emergency personnel from around the United States converge on Manhattan. Among them, several hundred EMS crews, who stage along the West River Drive, are waiting their turn to work the scene.

At the outer perimeter, a convoy of emergency personnel make their way into Ground Zero - a place that first responders now refer to as "the pile". Onboard one ambulance, a trauma doctor describes the types of injuries that he expects to encounter. Though they don't know it yet, sadly, there will be no injuries for him to treat. (1)

Hundreds of emergency vehicles litter the surrounding streets of the WTC site. They are mostly charred, crushed skeletons. An abandoned FDNY engine - whose crew is

among the missing - continues to pump water from the nearby Hudson River. (1)

As the days turn into weeks, hundreds of paramedics and emergency medical technicians (EMT's) spend twelve-hour shifts on the pile. As they approach the scene there is debris everywhere. Sidewalks are covered with concrete and steel - evidence that this was once the site of a thriving business precinct.

The toll from the search and rescue is evident. "It was horrible. The smells...and what we had to do. I remember the first day, we were finding whole bodies. Then as the days went on, the stench started to tell us where to look. Soon, we were only finding pieces. Every day you'd be down there digging and if we found a bone, well that was good day" (*Male Paramedic*). (2)

Sixteen years after 9/11, paramedics and EMT's remain haunted by quirks of fate that day and have ongoing issues with

survivor guilt. “I remember seeing John* and we just hugged. He told me to be careful, and then ran off in the other direction. I never saw him again” (*Male Paramedic*). (2)

Many of the paramedics and EMT’s who survived 9/11 didn't feel worthy of seeking care in the years after the attacks. The fact that they had survived, they felt, should have been enough.

There are certain historical events that take place in a persons lifetime that leave a permanent imprint on them. 9/11 was that event for many of the paramedics and EMT’s. The deaths of colleagues and friends were so violent and so unexpected, they left the medics stunned and overwhelmed by cumulative and ongoing grief. Many suffer residual psychological effects from their ordeal and most live with survivor's guilt. They reflect on their gratefulness for being alive and how they strive to make the best of their “second chance”.

Feelings of guilt are persistent. “I just, you know...I feel guilty....(pause)....”

Interviewer: “Why do you feel guilty?”

“Because I didn’t find anyone alive... (crying)” (*Male Paramedic*). (3)

This grief manifests itself in three key ways. Firstly, there is the guilt that many medics felt about surviving while so many of their colleagues and thousands of civilians died. Secondly, there is guilt about the things that they had *failed* to do - like not going back into the towers to rescue someone. Those experiencing this type of guilt tend to replay the event over and over again in their minds, trying to find ways they could have done things differently and ended up with a better outcome. Thirdly, there is the guilt about what they *did* do, such as leaving people behind or scrambling over others to escape. Those experiencing this type of guilt are less likely to want to think about the events of 9/11 or to discuss their experiences at Ground Zero in as much detail. (4)

In addition to these feelings of guilt, paramedics and EMT’s continue to be plagued by nightmares, vivid recollections of Ground Zero, anxiety, depression and Post Traumatic Stress Disorder (PTSD). “It’s been quite a long time, but last night I woke up drenched with sweat and shaking. I had a dream of being buried in the rubble. It seemed so real, my heart was pounding out of my chest. The reason I woke up was because my dog was licking my face, he must have sensed I

was having a problem” (*Male Paramedic*).
(3)

Paramedics and EMT’s tend to have an underlying sense of anxiety, stress and insecurity, which are the three major building blocks for nightmares. Many medics dream about their dead colleagues, or something devastating happening to their family - some feel like their dreams are warnings of impending tragedy and doom. In a study investigating dreams following 9/11, the authors found support for the Contemporary Theory of Dreaming. The theory states that dreams are guided by the emotion of the dreamer and that the central imagery of the dream depicts the dreamer’s emotion. This would explain why few of emergency responders dreams depict specific scenes of the terrorist attacks or Ground Zero, but more around the context of their emotions. If they feel guilt, they often dream about the colleagues that were lost. This supports the view that dreams are new, emotional creations rather than a replay of waking events. (5)

Research indicates that 9/11 paramedics and EMT’s have a high prevalence of PTSD. (2,3,4) This high prevalence of PTSD is particularly concerning given that

mental health disorders rarely occur by themselves. A diagnosis of PTSD often brings additional diagnoses along with it. A third of all first responders enrolled in the World Trade Center Health Registry with chronic PTSD symptoms also reported a diagnosis of depression. (6) Responders with probable PTSD had an almost 14 times higher chance of developing depression and nearly 10 times higher chance of developing a panic disorder than those without PTSD; co-morbid responders were 40–86 times more likely to have emotional disruption of function than were those without PTSD. (6)

9/11 paramedics and EMT’s also have ongoing issues with anxiety - they feel jittery and fearful, even all these years after the attacks. On 9/11, terrorists did more than destroy buildings; they scarred the American psyche. And perhaps no group was quite as scarred as the emergency first responders. Some medics have difficulty grappling sudden changes in their life and feel like their sense of safety and security has been shaken. Over time, the general level of anxiety should ease. But some long-lasting effects will remain.

Some paramedics and EMT’s are starting to show signs of cognitive impairment. Cognitive impairment refers to poor

memory and concentration - an inability to learn new information. Many people with cognitive impairment have difficulty performing the routine activities of daily living. A research study from the Stony Brook WTC Wellness Program identified that the average age of first responders with cognitive impairment was only 53. (7) The Stony Brook team found the impairment to be most evident among responders who suffered PTSD. Of note, all of the responders involved in this research who had been diagnosed with cognitive disorders had also previously been diagnosed with PTSD. However, PTSD is not the only risk factor for cognitive impairment, responders who had a history of major depressive disorder were also at risk of being cognitively impaired. (7)

Medics have trepidation and feelings of anxiety regarding the anniversary of 9/11 each year. And this doesn't seem to get any easier as the years pass. "I can feel the anniversary looming and I start getting really anxious. Just the other day, I started crying because I broke a glass - you know, like ridiculous, sobbing. And I just kind of remembered, oh yeah, the anniversary is coming up" (*Female Paramedic*). (3) Many feel frustrated with how major anniversaries were managed. There is a

growing need to find more appropriate and sensitive ways to reflect and remember on the anniversary and it is time to start commemorating and remembering without replaying graphic images of the planes flying into the WTC and the towers collapsing. Each time media replay these, the families of the 2753 victims at the WTC site see their loved ones murdered over and over.

Many 9/11 medics no longer work in EMS sixteen years post 9/11. While some would have retired regardless of their role during 9/11, some have retired from work due to 9/11-related disability. Indeed, around 2,500 first responders have retired post-9/11 due to disabilities that are directly related to their exposure to Ground Zero. Others have moved into other roles within emergency response agencies, educational institutions and training agencies, while others have moved into entirely different lines of work.

Another important impact on the 9/11 medics is the ongoing significant strain on key relationships. Marriages and family cohesiveness have been strained and sometimes broken in the aftermath of 9/11. While there is no official record, anecdotal reports suggest that the divorce rate is high among 9/11 medics. Spouses

felt left out of the counselling loop and neglected by their spouses who were busy caring for the widows of their fallen colleagues. Counselling was offered to first responders through their employers and from a range of free peer-support services and many children impacted by 9/11 had access to support through their school. However, there was no organised effort to assist the wives, husbands and significant others who inherited the emotional impact of their spouses who suddenly became quiet, silent or different inside. (8)

In addition to the psychosocial toll that 9/11 has had on the responding paramedics and EMT's, it has also had a devastating physical impact.

When the WTC twin towers collapsed on 9/11 they converted much of the towers structure and contents into dense dust clouds of particles that settled on the streets and within buildings throughout Lower Manhattan. About 90% of the settled WTC dust was a highly alkaline mixture of toxins that was readily re-suspendable by physical disturbance and low-velocity air currents. High concentrations of this toxic WTC dust were inhaled and deposited in the conductive airways in the head and lungs,

and subsequently swallowed, causing both physical and chemical irritation to the respiratory and gastro-oesophageal epithelia of the thousands of emergency and non-emergency responders and to tens of thousands of people living and working in downtown Manhattan. Exposure to this dust caused both acute and chronic adverse health effects, especially in those lacking effective personal respiratory protective equipment. (9)

WTC-related health effects have been reported in a number of research studies and highlight an increased incidence of health effects in the respiratory and gastro-oesophageal tracts, low birth weight and birth defects in children exposed in-utero, (10,11) post-traumatic stress disorders (12,13,14,15,16,17) , as well as a growing concern about excess cancer incidence that may become further evident in future years.

Medics involved in Australian research (2,3,4,) reported a number of physical health impacts, which echo the results of these previous research studies. All report persistent respiratory and breathing problems and 82% of participants also have new allergies following 9/11. Medics in this research also reported long-term

health effects in the gastro-oesophageal tract (24%) and with their eyes (44%). All medics interviewed in 2016 identified that they were taking new medications following 9/11. Of note, just over half (55%) reported that they were taking more than five medications per day that were directly related to 9/11-illnesses. Medics also reported new diagnoses of illnesses including sinusitis, asthma, and sleep apnea.

Medics also have growing concerns about getting cancer. As of June 30, 2016 the Centers for Disease Control (CDC) World Trade Center Health Program enrolled more than 5,400 people who have been diagnosed with cancers linked to the 9/11 attacks. That's triple the number of people enrolled with cancer diagnoses since January 2014, when 1,822 had signed up. (18) When cancer rates for emergency first responders are compared to the general United States population, cancer rates are about 10 percent higher for the 15,700 firefighters and emergency medical services workers whose health is being tracked by World Trade Center Health Program. New research confirms that this toxic cocktail caused heightened rates of cancer. When compared to pre-9/11 data, the cancer rates range from 19 to 30 percent higher for firefighters after the data

are adjusted for age, exposure and other factors. (19) Of the medics involved in our Australian research, 14 out of 54 (26%) have been diagnosed with 9/11-associated cancer. The age range for age of diagnosis was 39 – 52 years. The main cancers reported include: Thyroid (n=3); leukaemia (n= 4); prostate (n=3); melanoma (n=1); multiple myeloma (n=2) and colon cancer (n=1). (2)

The medics who responded to 9/11 are still impacted by ongoing physical and psychosocial consequences of that day. Medics continue to be traumatised by 9/11 – because what they experienced has not ended. The trauma of that day continues to affect the health of many medics, with new cases of 9/11-related illness diagnosed regularly. In many cases, the ongoing impact of 9/11 has shattered families and destroyed lives in a never-ending reverberation of pain and suffering. The reality is that the death toll from the terrorist attacks grows larger each year, and while the physical wounds may have healed, the emotional scars remain for many medics sixteen years after 9/11.

* Names have been changed to protect the identity of research participants and their colleagues.

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4

First responder stories

Firefighters

Whilst New York rebounded strongly following 9/11, one of the painful legacies of the disaster is the lasting effect on the physical and mental health of thousands of individuals who survived the attacks — including the first responders.

The considerable impact that the firefighters would suffer is better known now that it was back in the early days after 9/11. In the days and weeks following 9/11, the primary concern was locating their 343 “brothers” amongst the smouldering pile at Ground Zero. They worked twelve-hour shifts, often with little or no protection for their airways, and rested whenever and wherever they could - often on top of the pile or on cots around the perimeter of the toxic site.

The first weeks post-9/11 at firehouses across New York City resembled an organised chaos of maintaining “normal business” as well as ensuring attendance at almost daily funerals, wakes and

memorials. Many widows sought refuge amongst the familiarity of the firehouse where their husbands had worked, and many advocated on behalf of the firefighters when some firehouses were threatened with closure due to the inability to staff these houses with suitably qualified staff. Dave Fontana’s Squad 1 firehouse in Park Slope, Brooklyn, was among those allegedly marked for closing. His widow Marian, along with so many other widows, pressured the FDNY to ensure that this refuge for so many was kept open - and their efforts were successful - Squad 1 remained open.

But as Marian would later note, while the firehouses became places of calm and reflection for the widows - seeing the widows in the firehouse made it difficult for some of the firefighters. She felt as if some couldn’t look at her, perhaps afraid of what would happen if they did. Others were happy to have the widows there and

would share stories and remember their fallen colleagues.

In addition to the widows, former firefighters appeared at their old houses, offering support. Members of the community would arrive daily with platters of food. Hundreds of cards from all over the United States and the world poured in and tourists turned up at firehouses to give their condolences and share messages of love and solidarity. Celebrities and politicians also made appearances. But as the weeks moved on, managing these visits almost became a burden, with firefighters feeling like that had to take on the role of supporter - when they were the ones that needed supporting.

As months went by, debris removal and remains management was ongoing, and many firefighters were still spending regular shifts on the pile searching for victims while also manning their usual shifts at their firehouses. Many would not actually see their loved ones for days on end - eating and resting wherever they could in the short breaks between duties.

If the death of so many of their colleagues on 9/11 was the initial wound for the FDNY, the inability to retrieve the bodies of all of the 343 firefighters lost at the WTC

was the additional “knife to the heart” - this was the first time that the bodies of fallen firefighters could not be retrieved from the scene. (1)

Approaching the sixteen year anniversary of the attacks on the WTC, the remains of 1,113 victims — 40 percent of the 2,753 who died — still have not been identified. That absence of physical evidence agonises many 9/11 families. (2) In March, 2002, six months after the terrorist attacks, only 147 of the 343 firefighters who died at the WTC had been found. (3) For many families, the remains of their loved ones would never be found.

This inability to retrieve the bodies of all fallen firefighters, or to save all civilians, resulted in a “reservoir of feelings of shame and helplessness, particularly acute for people treated as heroes and lifesavers”. (1)

The range of stresses on firefighters in the months following 9/11 were great - ranging from attendance at a large number of funerals and memorials for fallen firefighters (most firefighters attended around 20-30 funerals post 9/11) and the associated cumulative grief and sadness, to dealing with the beginnings of anxiety, depression and PTSD.

The loss of many of the most senior firefighters within the FDNY also resulted in the added stress of transfers and relocations. Physical injuries also led to the early retirement of many FDNY responders. In a normal year, around 40 retirement applications are lodged per month with the FDNY - in the year following 9/11, these applications increased to around 40 per week. (1)

As the FDNY struggled to replace the firefighters who had died, firehouses all over New York had to integrate new members in their house while still grieving the colleagues that these new probationary firefighters were filling the space of. Being a “probie” - or new firefighter - can be difficult at the best of times. FDNY are renowned for hazing new probies in their first weeks and months on the job. However, being a new firefighter in the shadow of the 9/11 terrorist attacks was particularly difficult, with many probies feeling that they didn’t receive the same support or mentorship that they would have received prior to 9/11.

Early health and psychosocial assessments of firefighters following 9/11 indicated that sleep issues, mood changes, feelings of detachment, and flashbacks were common problems for

Fire Department of New York (FDNY) responders. (4)

In the twelve months following 9/11, firefighters were experiencing intrusive thoughts, hyper-vigilance and frequent nightmares. They were plagued by quirks of fate - if I had turned left instead of right, I would have died. Many are impacted by the sights and sounds associated with the “jumpers”, those people who had jumped from the high levels of the WTC to avoid the raging inferno within.

Despite these issues, most firefighters were not actively seeking mental health support.

In December of 2001, the FDNY in conjunction with two psychologists, developed a small pilot study which involved six firehouses in Manhattan and Brooklyn. The goal of the “Firehouse Project” was to bring the mental health support directly to the firefighters. In March of 2002, the FDNY expanded the program to include 63 houses - nearly every firehouse that had lost members. (1)

Mental health professionals identified that many firefighters were living with shock and impacted grief - which is a prolonged type of grief associated with depression.

Impacted grief can block further growth and development.

The younger firefighters tended to be the more severely impacted, most had never before experienced the death of someone close to them, and many were single and not used to seeking support. Many were angry and resisted discussing their feelings with mental health professionals or sharing them with their colleagues. Many who felt relieved to be alive were not able to voice these normal emotions. (1)

In the years that followed, many more firefighters left the department due to permanent physical disabilities as a result of the toxins they were exposed to. Many also left due to psychological reasons. A number of firefighters would take their own lives.

Dr. David Prezant, FDNY's Chief Medical Officer and Special Advisor to the Commissioner on Health Policy, has been actively following illnesses among the FDNY responders. The statistics he provides highlight that more than 7,000 FDNY firefighters and EMT's have been treated for a 9/11 injury or illness since 9/11. Around 5,400 members have been diagnosed with lower respiratory diseases such as asthma, chronic bronchitis, and

less commonly emphysema, Chronic Obstructive Pulmonary Disease (COPD), sarcoidosis or pulmonary fibrosis.

Approximately 5,200 members have been diagnosed with upper respiratory diseases such as chronic rhinosinusitis and/or vocal cord diseases and 3,700 members have been diagnosed with mental health stress-related conditions.

Almost 5,500 members have been diagnosed with gastro-oesophageal reflux disorders and around 1,100 have developed a cancer caused by 9/11 toxins.

It is unclear how many emergency first responders have already died after contracting cancer as a result of their work at Ground Zero. However, one recent figure estimates that a 43 year old FDNY engineer who died in August, 2017 (one year after his 9/11 firefighter father died) is the 159th FDNY member — including firefighters, EMS personnel, civilian employees and fire marshals — to have died of 9/11-related illnesses. (5)

Doctors say those who spent significant amounts of time at the WTC site are at increased risk of a number of different cancers, including prostate, thyroid, leukaemia and multiple myeloma, after

coming into contact with the toxic dust that hung in the air above the WTC site for months and covered every surface on the pile. (6)

Thousands of firefighters who helped in search and rescue and remains management efforts at the WTC site after 9/11 were exposed to a complex web of psychological traumas and toxic exposure. Although few were physically injured by their efforts, many responders witnessed the death and dismemberment of others, lost colleagues in the tower collapse, and dug through debris to search for survivors (including colleagues and friends).

Many have since recovered, but others continue to suffer from a range of conditions that are associated with their exposure to the WTC site, including upper- and lower-respiratory illnesses, and mental health conditions such as anxiety, depression and PTSD.

Equally troubling is the prospect of late-emerging and potentially life-threatening diseases such as cancer and pulmonary fibrosis arising in the future. The likelihood and scope of these long-term health consequences is starting to be understood. We must continue to monitor 9/11 first responders and analyse

data to determine the incidence of these illnesses in the future.

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5

First responder stories

Police

The morning after 9/11, search and rescue operations were well underway. As you neared the WTC site, you could hear the generators powering the lights. Scattered around the perimeter were first responders taking a brief break, resting on cots before they climbed back on to the pile. They were eating food that had already starting arriving from all over the country - a sweet potato pie arrived from someone in Atlanta, a tray of sandwiches from Connecticut.

Where the twin towers of the WTC once dominated the downtown landscape in Manhattan, there were now cranes. One police officer recalls arriving at the WTC site for the first time mid-morning on September 12th. Awestruck, he was staring skywards when another responder asked him to move - it turned out he was standing on a flattened, dust-covered fire truck. Once the hub of New York business, the WTC has now been reduced to

crushed metal, steel girders and dust. Everything pulverised into nothing. But despite the mass destruction - some unlikely artefacts survived the carnage. Photos from desks. Licenses and credit cards from wallets. Books. Meaningless pieces of paper float around the scene.

There are several thousand law enforcement agencies in the United States, with the majority operating as local or municipal forces. New York City is no different with at least eight local and state agencies operating in the city. On September 11, 2001 two police agencies deployed more than 2,000 personnel to the WTC to secure the area, search the towers and rescue survivors. These two agencies were the NYPD and the PAPD.

In September 2001, the New York City Police Department (NYPD) was staffed by over 40,000 police who provided the majority of policing services to one of the world's largest cities. Over 20,000 NYPD

officers would ultimately be deployed to the WTC in response to the 9/11 attacks. Most of these officers came from general duties and traffic and detective units. NYPD specialist teams that would play a prominent role on the day included their Emergency Service Unit (ESU), aviation and harbour units. (1)

The Port Authority of New York Police Department (PAPD) consisted of 1,301 officers on 9/11, several of whom were posted at the agency's WTC station. The PAPD provide policing and associated services at Port Authority locations across New York. The PAPD also has an ESU which undertakes rescue, bomb evaluation and disposal and tactical assault operations. A number of PAPD members are also trained to operate ambulances. (2)

The NYPD and PAPD are not rescue services. When most of the officers entered the WTC towers they didn't even have helmets.

Police Officer Moira Smith was the first NYPD member to radio in a report of the attack. Smith, 38 years old, was on patrol when she witnessed the strike of the first plane hitting the North Tower and was last heard administering first aid to a collapsed

civilian. Smith's body was not located until five months after 9/11. (3)

After the hijacked American Airlines Flight 11 hits the North Tower of the WTC at 08:46am, the plaza area between the twin towers was filled with chaos and destruction. Exterior windows in the lobby of the North Tower had been blown out; debris was everywhere. Victims were running from the building, some with severe injuries and skin dripping from their bodies. Bodies could be seen laying on the ground. As a police officer attempts to radio in a situational report, another body lands just fifty feet from him with a very loud noise. "I look over and see that the skin has been forced away from the flesh." (4)

There are countless examples of police officers selflessly volunteering to be a part of the rescue and evacuation effort. One example was NYPD officer John Perry who was submitting his retirement paperwork when the first plane struck. Perry ran to the site and later died in the North Tower. (5)

The main focus for the NYPD was to clear the roads to allow emergency vehicles in to the scene and to establish crime scenes around parts of the plane and building

which had been thrown from the WTC site on impact. Police were also called upon to facilitate the evacuation of tens of thousands of civilians away from the WTC site and downtown Manhattan. Nearby tunnels and bridges were closed by various police agencies while overhead NYPD helicopters circled the burning building. At the intersection of Church and Vesey Streets the NYPD's ESU established a forward command post. Two ESU teams were moving into the site when the South Tower was struck. (5)

Just before 09:00am a group of PAPD officers from the Manhattan Bus Terminal are dispatched to the WTC. The team is led by former ESU member Sergeant Jim McLoughlin, who had previously responded to the 1993 WTC bombing and had been involved in the development of emergency response plans for the twin towers. The PAPD team made their way into the complex and began locating additional breathing apparatus and equipment in a storage area located in the concourse area that ran underground between the North and South Towers. Having obtained oxygen sets, helmets and firefighting coats, the group were about to begin their climb up the North Tower when the South Tower fell.

Among the team led by Sergeant McLoughlin, PAPD police officer Will Jimeno later recalled:

"It is like an earthquake when the plane hits [the South Tower]. ... The whole concourse above us collapses [and] ... I feel a ball of debris hit us. Now, I see a huge fireball coming at us and I yell 'Run! Run toward the freight elevator!'"

Sergeant McLoughlin described it as sounding like "car bombs going off" and a "wall of destruction rolling at us".

The collapse of the South Tower killed two of McLoughlin's team - PAPD Police Officers Amoroso and Rodrigues - but McLoughlin managed to lead Police Officers Jimeno and Pezullo to cover in the vicinity of a freight elevator within the 15 seconds that it took the tower to come down. McLoughlin and Jimeno were trapped, but Pezullo managed to get free. Instead of climbing out to safety, he chose to stay and attempt to free his fellow officers. That act of selflessness cost him his life: when the North Tower came down, a piece of concrete struck and killed Pezullo. (6)

The fall of the North Tower had buried McLoughlin and Jimeno about 30 feet below the surface, crushing McLoughlin's

legs and pinning Jimeno under steel. The men were only about 20 feet apart, but they could not see each other. Fire was encroaching on the hole that Jimeno was trapped in, and enveloped Pezullo's gun, causing it to start firing.

Jimeno, who was closer to the surface, attempted to get the attention of rescuers by yelling and banging on a pipe with his handcuffs - he tried to fire his pistol, but his hands were too swollen to operate it.

About 10 hours into their ordeal, Jimeno heard voices of rescuers moving around above where he and McLoughlin lay buried in the rubble. He yelled back and continued to bang on the pipe until he caught their attention.

It worked!

Several rescuers began work to locate and retrieve the trapped men. Putting their own lives at risk by entering into the unstable mountain of rubble, the paramedic, police, and firefighter responders reached Jimeno by about 11:00pm. They extracted him and sent him to the hospital.

The problem, however, was that McLoughlin was more seriously injured - and his retrieval was complicated by him

being buried deeper. It took until about 07:00am to free him.

Jimeno had been trapped for 13 hours and McLoughlin for 21 hours.

McLoughlin and Jimeno were among only twenty survivors to be pulled alive from the rubble by rescue teams. Only Genelle Guzman, a civilian, spent longer in the rubble - 27 hours.

McLoughlin's injuries were so severe that doctors at Bellevue Hospital doubted he would survive. His family, initially informed that he had "walked out" of the rubble, rushed to Bellevue expecting to find John alive and well. He was in a coma for six weeks, during which time doctors performed 27 operations on his legs.

Jimeno's family were notified that he had been rescued and they too rushed to Bellevue to find Will awake, with rubble being suctioned from his mouth and airway. Jimeno's hospitalisation and rehabilitation lasted for nearly three months.

No one who was in the South Tower at the time of the collapse survived.

Once the South Tower collapsed, NYPD police officers were given the order to

evacuate the remaining North Tower. These evacuation orders, given some 20 minutes before the tower fell, saved lives. However, not everyone had successfully evacuated when the rumble began again - indicating the collapse of the North Tower - a collapse which took around 10 seconds. First responders to survive the collapse of the North Tower include PAPD dog handler David Lim and a small group of firefighters and a civilian who had been in the stairwell on the sixth floor of the North Tower. Lim later recalled: "we smell jet fuel, and I wonder now, having survived this, is everything just going to explode into fire? ... The smoke and dust begins to clear, and suddenly there is a ... big light and I realise it is the sun. We seem to be on top of the collapse, if that is possible. I say to anyone 'what are the chances that we have survived this?'. Chief Picciotto (from the FDNY) ... answers 'One in a billion, Officer' he says. 'One in a billion". (4)

The badly injured PAPD officer tried unsuccessfully to find his dog Sirius before he was taken to hospital. Sadly, Sirius died in his cage when the tower fell.

Scene coordination totally broke down in the period of time immediately after the collapse of the North Tower (the first tower

to be hit, but the second tower to fall). The FDNY lost 23 senior officers, including the Chief of Department and three other executive officers. The PAPD's Superintendent of Police, Chief of Department, an Inspector and Captain also died. (5)

With the loss of senior staff and the confusion that reigned in the aftermath of the collapse of both towers, all responding emergency agencies became paralysed for a time with malfunctioning or overworked radio systems. Within an hour the PAPD had established a new command post to coordinate rescue and recovery work.

Sadly, 23 NYPD officers and 37 PAPD officers died on 9/11.

Police officers were among the two sets of brothers to die on 9/11: NYPD detective and ESU member Joe Vigiano died, as did his brother, FDNY firefighter John. The other brothers to die were NYPD officer Tom Langone and his FDNY firefighter brother, Peter.

By late evening, both the NYPD and the PAPD were starting to get an idea of who among their staff was missing, and how much equipment they had remaining.

The morning after 9/11 brought with it a grim new world. The gaping hole in the New York landscape was a glaring reminder of what had occurred the day before. First responders reporting for duty that morning were greeted by a massive pile of debris, smouldering fires, and a bucket-brigade of other responders perched precariously on top of the debris, searching for survivors and removing body parts.

The smell was like nothing they had experienced before. Death. Mixed with smoke.

There had been instances of looting in the streets around the site. “People don't talk about that, but it was a problem. Everyone talks about first responders and rightly so”, says NYPD Police Officer Frank Lione, but “there was still a city to police”. When he walked into a cafe near the WTC site, it was like something after Pompeii: “dust everywhere, a newspaper, a cup of tea with a wedge of lemon still in it.” (7)

The strangest thing, looking back, says Frank Lione, was the stillness; as he drove his car down the West Side Highway, one of the city's busiest thoroughfares, there were no other cars on the road and no

ambient sound, until fighter jets flew over central Manhattan. (7)

The rescue and recovery effort became the largest of its kind in US history surpassed on scope only by the response to the 2005 devastation of New Orleans.

The number of police officers who have died from Ground Zero-related illnesses now outnumbers the 60 killed in the 9/11 attacks. (8) The exact number of police officers to have died since 9/11 due to 9/11 illness was estimated in 2015 to be 92 (9). And that number continues to grow.

Paul Gerasimczyk, a retired NYPD police officer who worked in the Ground Zero cleanup first went to Mount Sinai Hospital in New York in 2005 for treatment of a persistent cough. “Beads of sweat were breaking out on my face, I was coughing so hard,” he says. “The doctor said, ‘Did you call the ambulance and go to the hospital?’ I said, ‘No, I thought it was just coughing.’” And she said, ‘You had an asthma attack.’” By 2007, Gerasimczyk learned he had developed kidney cancer. “When you're told you have cancer, you're in disbelief,” he says. “You feel you're healthy, and you're in denial. You feel you can beat it, the operation will be successful.” (10)

He says two close friends who worked at Ground Zero didn't make it—one died of pancreatic cancer and the other of brain cancer. "They don't just die; they die in the worst ways imaginable," he says.

In addition to the physical health impacts, police enrolled in the World Trade Center Health Registry (WTCHR) have demonstrated increased probable PTSD after the terrorist attack of 9/11/2001. Half of police with probable PTSD in 2003-2007 continued to have probable PTSD in 2011-2012. Women had higher prevalence of PTSD than men and risk factors for chronic PTSD included decreased social support, unemployment, life stressors in last 12 months, life-threatening events since 9/11, injuries during the 9/11 attacks, and unmet mental health needs. (11)

Police responders to the WTC attacks continue to bear a high physical and mental health burden. Improved access to both physical and mental health treatment for police exposed to 9/11 is needed as is appropriate ongoing support.

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6

The “forgotten” first responders

9-1-1 emergency dispatchers

The calls came in without pause on the morning of 9/11, more than 3,000 of them in the first 10 minutes - constant pleas for help. Throughout the day, more than 55,000 calls would come in.

On the morning of 9/11, New York’s already overworked and stressed 9-1-1 dispatchers were thrust into a situation for which no training could adequately prepare them. Forced to improvise answers with little to no information, dispatchers felt helpless and overwhelmed. With no access to radio or TV, they knew less than the public watching at home. Haunted by the confronting content of those calls, many now live with feelings of guilt and overwhelming sadness, even 16 years after 9/11.

Nearly 300 9-1-1 dispatchers could do little but record the location of people in the towers and to tell people that “help was on the way”. 9-1-1 dispatchers faced

impossible decisions. Did they stay on the line when someone was no longer responding? How long did they stay on the phone with someone when thousands of others were trying to call? The day was so traumatic, many would never return to work.

Many years after 9/11, Fire Department dispatcher John Lightsey still lives with the voices.

"Sometimes at night you hear stuff," he said. "You hear voices ... you know, calling for help." (1)

Operating in office buildings far from the chaos, the dispatchers didn’t have the visual aids that the rest of the world had - they couldn’t physically see what was happening at the WTC. All they had were the voices at the other end of the phone. Often-times, scared, always pleading for help.

And then there are the voices of the hundreds of firefighters, paramedics, EMT's and police officers that they dispatched into the mouth of hell.

"We were the people that sent the companies down there, and those guys, a lot of them close friends, are dead," retired dispatcher David Rosensweig said. "Some people feel guilty about that, even though we were simply doing our jobs." (1)

Lightsey and Rosensweig were among 37 FDNY dispatchers on duty the morning of Sept. 11, 2001. They would send 214 fire units racing to Ground Zero that day, the largest response in FDNY history.

Dispatchers live with continuing grief and guilt because they sent people into that situation - or they couldn't help to get people out of it.

Despite the considerable emotional trauma inflicted on these dispatchers, there has been little recognition of what they suffered - in many ways they are the forgotten first responders.

The first radio transmission came in at 08:47a.m.

A call crackled over the radio:

"Battalion 1 to Manhattan. We just had a ... a plane crashed into an upper floor of the World Trade Center. Transmit a second alarm and start relocating companies into the area."

Tyron Connell, a beginner fresh from radio training, fielded the transmission:

"Ten-four. All companies stand by at this time."

"There was a little nervous panic," Connell recalled. "Units were calling in almost simultaneously."

Frantic pleas for help began pouring in via 9-1-1, Thousands of calls within minutes. Each dispatcher spoke to hundreds of people. For many - the dispatcher's voice was the last that they heard.

One man called 9-1-1 repeatedly from the North Tower.

"The first time I spoke to him, he was relatively calm," Connell recalled. "By the fourth time, he was very distraught, talking about his kids and his wife. I think there was a point where he knew he wasn't going to get out. That is something I will never forget." (1)

Civilians who called from the towers were told to stay put.

"That was the protocol," Rosensweig said. "We told them not to try to go down, help was on the way. We believed it. We never, ever, thought those towers would come down." (1)

Recordings of 9-1-1 dispatchers trying to calm the thousands of distressed callers are hard to listen to. On some, the 9-1-1 dispatcher is on the line with someone in one of the Towers when they die. Some die slowly from probable smoke inhalation - their response becoming slower, until there are no more words and just empty air at the end of the line. On other calls, you hear the rumbling start as the Tower collapses, and the call drops out.

How do you cope with that? How do you hang up the phone, knowing that the person at the other end has just died?

The FDNY 9-1-1 dispatchers were trying to deal with these incredibly distressing calls while also juggling engine and ladder companies from across the city.

And on top of all of this - there was the normal, everyday business of responding to emergencies across one of the busiest cities in the world. People still had heart attacks, asthma attacks, medical emergencies. There were other jobs requiring EMS, police and fire.

As the magnitude of what was happening at the WTC become evident, emergency services across New York City begged to be sent into the action.

Lieutenant Timothy Higgins of FDNY Squad 252 in Brooklyn called five minutes after the first plane struck.

"We're available for the Trade Center," he volunteered.

"Okay, thanks," the dispatcher replied, then unknowingly sent the entire squad to its death.

There was no relief. The calls from civilians kept coming as did the radio transmissions from the emergency units at the scene.

Brief silences for the FDNY dispatchers were broken by frantic calls. But perhaps some of the most difficult were the ones that crackled in after the towers had fallen: "Mayday! Mayday! One of the towers has collapsed! Mayday! I'm trapped in the rubble."

Many of these calls were from firefighters who had survived the initial collapse of the tower - but were never found in time.

In the beginning, the 9-1-1 dispatchers were largely forgotten. As civilian

employees, they couldn't access support through the FDNY medical office.

However, the union eventually convinced the FDNY to provide access to the 9-1-1 dispatchers to the same trauma specialists designated for firefighters.

Some dispatchers experienced trouble sleeping, headaches, restlessness, and nightmares reported psychologist Michael Lonski, who counselled firefighters and dispatchers after 9/11. "Some turn to alcohol or substance abuse. Some have trouble focusing on tasks. Some take it out on their families." (2)

The Police Department's 9-1-1 dispatchers also heard trapped people screaming for help from inside the burning buildings.

"I remember them saying that everything had turned black," said Gladys Mitchell, who took calls from rescuers after the South Tower collapsed at 09:59am, and the North Tower 29 minutes later. But she said the silence between their screams was the most terrifying.

"The building was going down," she said. "They couldn't see anything. They couldn't get out. A lot of them were trying to crawl their way out. Doors were closed. They

were asking me, 'What's going on? Is anybody out there? Central, help us. How can we get out?' And then after that, I didn't hear any more from them."

In her dreams, Gladys can still hear police officers calling for help or telling about civilians who were jumping out of windows. (2)

She was among 192 police communications workers who provided a vital service on 9/11.

One police dispatcher, Modesto Muniz, recalled how Police Officer Moira Smith - who was the only city policewoman to die on 9/11 - requested his assistance. "Help me, please" he said Officer Smith pleaded into a radio. "I think I was the last person to talk to her." (2)

For police dispatcher Russell Alston, there is one particular call that he can't forget. His eyes well with tears as he recalls how a panicked woman on a smoke-filled upper floor asked him how to smash a window and then said never mind, some companions had already done it. Then, as she implored Mr. Alston to stay on the phone with her, she said that people had begun leaping out.

“What should I do?” Mr. Alston said the woman asked him twice. He said she was sobbing and having trouble breathing. “I said, 'Ma'am, I can't tell you what to do. You have to do what you have to do.' Then the phone went dead.” (2)

In the 102 minutes between the time the first plane struck the North Tower at 08:46am and when that tower fell at 10:28am, the demeanour of the 9-1-1 dispatchers evolved. Initially answering with brisk professionalism - even gruff efficiency. They were efficient to the point of being abrupt: “I've got to answer more calls” a fire dispatcher told a man at 08:51am “Can you speed it up?”.

The responses start to offer more empathetic tones as the prospects for rescue became more remote. “We are on the way, we are on the way. I am here with you”.

Helplessness increasingly defined the dispatchers predicament, and it showed in some of their conversations.

“I wish I could tell you,” one operator told a caller. “I don't know anything more than what people calling in tell me. I don't have any access to a radio or TV or anything. I don't know. I'm looking at the job and

there are people there. I mean everybody's there. Please.” (3)

About 09:50am that morning, the 9-1-1 phone line seemed to have gone quiet.

It was a rare moment for people near the centre of the tragedy to reflect on what was happening, their thoughts recorded as they spoke quietly to each other on the same phones that connected them to the WTC.

“I don't know what they're doing,” an EMS dispatcher said. She was referring to a group of perhaps five people she had been talking with on the South Tower's 83rd floor before they had gone silent. “I hope they're all alive because they sound like they went - they passed out because they were breathing hard, like snoring, like they're unconscious.” (3)

The moment for reflection soon passed and the calls began coming again as the final chapters in the tragedy unfolded.

Overworked, overwhelmed, they were thrust into situations for which no training could prepare them. Yet they kept picking up the phones, improvising answers even when they were exasperated, even when they were in the dark about evacuation

orders that had been issued by fire and police commanders.

Three types of municipal workers took calls on the morning of 9/11: police, fire and ambulance dispatchers and operators. About 37 FDNY dispatchers were on duty that morning in five communications offices. Around 200 of the Police Department's 9-1-1 operators were located in Brooklyn and Manhattan. And about 50 EMS dispatchers were seated at 1 Metro Tech in Brooklyn. (3)

The day was so traumatic, the toll so great, that some 9-1-1 dispatchers simply could not bring themselves to return. That was the case for Monsitah Corney, who fielded several calls from those in the towers. She left the job soon after 9/11, never to answer 9-1-1 calls again.

For Ivan Goldberg, who was working as the Deputy Director of FDNY Dispatch Operations on 9/11, working at the Manhattan command centre that day changed his life forever. Many 9-1-1 dispatchers retired in the four years following 9/11. "For me, the decision to leave the job three months after the incident was hastened by the fact that the Fire Department became a very sad place

to work." He paused, and added, "I lost a lot of friends and co-workers". (3)

135 new 9-1-1 dispatchers were trained between 2002 and 2003, reflecting the rapid exodus of staff following 9/11.

Mr. Goldberg said that rehashing the day re-opens old wounds for many. This was particularly difficult following the public release of the 9/11 calls in 2006.

In January 2002, the New York Times had filed a public-records request for many documents relating to 9/11, including the recordings of 9-1-1 calls made by people inside the WTC. The City of New York fought the release of these records, but in 2005 an appeals court ordered their release. The court agreed with the city that for privacy reasons, the voices of the callers should be redacted.

On March 31, 2006, the city released the audio and transcripts of some of these 9-1-1 calls, with supplemental calls released on August 16 and later on January 26, 2007. The releases were on CDs - a total of 15 - sent to major media outlets.

These transcripts document the frantic conversations between people trapped in

the WTC before the towers collapsed on September 11, 2001.

"Which stairs do we take?" asked one man working on the 78th floor of the North Tower.

"Whichever is the easiest one nearest without too much smoke," a dispatcher responded.

"Get out right now, right?"

"Right, exactly."

Another male worker on the 39th floor of the North Tower said, "We're not getting any messages. Can somebody tell us what's up?"

"Just come on down, everybody just come on down. Get down the staircase. Don't take the elevator," the dispatcher responded.

The transcripts were released by the agency that built and ran security at the World Trade Center -the Port Authority of New York and New Jersey.

Many of the documents are from handwritten and typed notes of Port Authority police and civilian employees recounting afterward what had happened.

In these accounts, some dispatchers plainly observed that dozens of trapped WTC occupants took their fate into their own hands.

The rest of the documents are transcriptions of conversations that took place over nearly 100 telephone lines and civilian radio channels.

"They show people performing their duties very heroically and very professionally in a day of unimaginable horror," said Greg Trevor, a spokesman for the Port Authority, which saw 37 of its police officers and 47 of its civilian employees killed. (4)

At the top of the North Tower, the conditions in the Windows on the World Restaurant were quickly deteriorating after the plane struck the tower.

"We're getting no direction up here. We're having a smoke condition. We have most people on the 106th floor, the 107th floor is way too smoky," said Christine Olender, the restaurant's assistant general manager.

"We need direction as to where we need to direct our guests and our employees, as soon as possible."

"We're doing our best. We've got the fire department, everybody. We're trying to get up to you, dear," a dispatcher told her. (4)

More than 70 staff and 100 guests were unable to evacuate and perish when the North Tower falls.

There's a call from the 100th floor conference room, where a man lies on the floor, struggling to draw breath. And another from the 103rd floor, where the caller asks about tossing a chair through a window to get more air.

A 9-1-1 dispatcher, speaking to a woman trapped on the 83rd floor of one of the WTC towers, offered hope of a rescue team that never appeared.

"Listen to me, ma'am," the dispatcher told a panicked Melissa Doi during a 20-minute phone call. "You're not dying. You're in a bad situation, ma'am."

"I'm going to die, aren't I?" Doi asked the dispatcher. "Please God, it's so hot. I'm burning up."

"No, no, no," the dispatcher tells her. "Ma'am, you're not going to die. Say your prayers. You're doing great. We're going to get help."

Later, the dispatcher takes the name of Doi's mother and promises to call her. The dispatcher remains on the line even as Doi's answers become faint. As she appears to fall unconscious, the dispatcher repeats over and over: "Hold on, baby, hold on. You're going to be fine, baby, can you hear me? You're going to be fine, you're going to be fine."

Then there is a long silence.

"Melissa? Melissa? Melissa? Hold on, honey."

More silence.

"Oh, my God," the dispatcher says eventually. "The line is dead." (5)

Doi died that day.

The conversation was one of more 1,613 previously undisclosed emergency calls from the morning of the Sept. 11 terrorist attacks. They include the voices of at least 19 firefighters and two EMT's killed when the twin towers collapsed, although most of the calls are from firefighters asking dispatchers where they should report for duty.

An exchange between two dispatchers relaying details from callers indicates the

sporadic manner in which the information came in.

Operator 1490: "This is operator 1490. I have a call from a lady at the Bank of New York. She states that the World Trade Center..."

Operator 8736: "Yeah we got that already."

Operator 1490: "She states that at the northwest side, that there's a woman hanging. There's an unidentified person hanging from the top of the building. OK, that's all the information. That's One World Trade Center."

Operator 8736: "Alright, we have quite a few calls."

Operator 1490: "I know."

Operator 8736: "Jesus Christ."

Operator 1490: "I know." (6)

The September 11 Commission concluded in 2004 that many operators didn't know enough about the situation to give the best information to those trapped. Although the commission determined that NYPD officials ordered an evacuation of the buildings shortly after the first plane hit, many dispatchers are heard on the

recordings telling callers to stay where they are and wait for help.

"I'll have somebody come up to you, OK," says one dispatcher. "We're going to get somebody up there as soon as we can. Just listen to what we say and what they tell you on the air, OK. Sir, if you can get out of the building then get out of the building. If you can't just remain there and somebody will get you." (6)

The transcripts also reveal that dispatchers were dealing with so many calls that their computers went down, temporarily crippling their response.

The recordings also document in painful detail the failed link in the chain of emergency communications, which was first cited by the 9/11 Commission.

No more than two of the 130 callers to 9-1-1 were told to leave the towers, even though unequivocal orders to evacuate the entire WTC had been given about 10 minutes after the first plane hit, by fire and police commanders on the scene. Indeed, most callers were told to wait, the standard advice in ordinary high-rise fires. The city had no procedure for field commanders to share fresh information with the 9-1-1 system. (7)

On the upper floors of the North Tower, advice to evacuate would not have saved anyone: all three of the building's stairways had been destroyed at the 92nd floor. But some callers from below the 92nd floor were also told to wait for help, and in the South Tower, where one stairway remained passable, hundreds of people huddled in offices, unaware of the order to leave and told to stay put by 9-1-1 dispatchers.

One unidentified man in the South Tower called at 09:08am, shortly after the second plane struck the building. For the next 11 minutes, as his call was bounced from police operators to fire dispatchers and back again, the 9-1-1 system confirmed its reputation as a rickety, dangerous contraption, one that the administration of Mayor Rudolph W. Giuliani had tried to overhaul with little success, and one that Mayor Michael R. Bloomberg pledged to improve by spending close to \$1 billion. (7)

The voice of the man, who was calling from the 88th-floor office of Keefe, Bruyette and Woods, was removed from the recording by the city. From the police operator's responses, it appears he wanted to go. "You cannot. You have to wait until somebody comes there," the dispatcher tells him, instructing the caller

to put wet towels or rags under the door. The dispatcher then attempted to transfer his call, the phone rang - 15 times - before the dispatcher gave up and tried a FDNY dispatcher in another borough. Eventually, a dispatcher picked up, and he asked the man to repeat the information that he had already provided moments earlier to the police dispatcher. The Police and Fire Departments run separate computer dispatching systems that are unable to share basic information. After that dispatcher hung up, the man on the 88th floor apparently persisted in asking the police dispatcher, who stayed on the line, about leaving. "But I can't tell you to do that, sir," said the dispatcher, who then decided to transfer his call back to the FDNY. "Let me connect you again. O.K.? Because I really do not want to tell you to do that. I can't tell you to move." A FDNY dispatcher picked up and asked the distressed caller -for the third time in the call - for the man's location. "O.K.," she said. "I need you to stay in the office. Don't go into the hallway. They're coming upstairs. They are coming." (7)

At Keefe, Bruyette and Woods, 67 people died. Many of them had gathered in conference rooms and offices on the 88th and 89th floors. Some tried to reach the roof, a futile trek that the 9/11 Commission

said might have been avoided if the 9-1-1 dispatcher had known that the police had ruled out helicopter rescues - yet another piece of information that had not been shared.

New York City released additional tapes in the spring. On these tapes, FDNY and EMS dispatchers can be heard talking to firefighters struggling up dozens of flights of stairs to rescue trapped office workers. There are constant calls for surgeons, for nurses, for rescue workers. Chief Dennis Devlin of Battalion 9 is heard as he stands inside the lobby of the South Tower and desperately tries to figure out where his men are and how to get help to those above.

"We are in state of confusion," Devlin said to a dispatcher. "I need you do something because we have no cell phone service anywhere because this is a disaster. I need you to call Division 3 and have the messenger van and bring all the additional handy talkies he can." (8)

Devlin tried to get a list of all the companies dispatched. He was standing inside the South Tower when it collapsed at 09:59am

Looking back, Mr. Goldberg, Deputy Director of FDNY Dispatch Operations on

9/11 said that "they did the best job they could have done, given the circumstances."

Given the incredible emotional toll on the 9-1-1 dispatchers, it is evident that along with the "traditional" first responders - the firefighters, the police officers, the paramedics and the EMT's - the 9-1-1 dispatchers need to be recognised for their role on 9/11 and require the same ongoing support as afforded to all emergency service members to protect their mental health, as many are still plagued by lingering questions, nightmares and flashbacks from that day.

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7

First responder families

It was the evening of the 10 September, 2002 when FDNY firefighter John Zazulka sat down with his wife, Susan, in their Staten Island home and told her that their marriage of 19 years was over.

At least that's how Susan remembers it.

It was the night before the one-year anniversary of 9/11 and John told her that he hadn't been happy in their marriage in a long time. Susan knew things had been "tough" since John was involved in the response to 9/11 and lost so many of his colleagues and friends, but she hadn't realised that it had come to this - to the point of ending a marriage.

However, over time, it became increasingly clear to Susan that the reason John left her wasn't so much about him being unhappy in their marriage - but more about another woman. A few months earlier, John had met and become involved with Debbie Amato. Like Susan, Debbie was an

attractive woman in her early 40's, a stay-at-home mother to four children who had hardly worked outside the home since the day she married her firefighter husband.

Although Susan and Debbie would deny that they had anything in common, their lives had followed very similar paths until the 11 September, 2001, when Susan's husband came home from work and Debbie's husband did not. One woman's life never recovered from that day, although no one would have predicted it was the life of the woman whose husband was spared. (1)

Unlikely though her story seems, Susan Zazulka is not the only wife of a firefighter whose husband left her for a 9/11 widow. Anecdotal reports highlight that around 12 other firefighters and at least one EMT divorced their wives and re-married the widows of their fallen colleagues.

Within days of 9/11, the FDNY started consulting with a range of mental health professionals in an effort to anticipate the pressures and problems that the surviving responders would face. Wives of firefighters were coached in how to detect signs of post-traumatic stress in their husbands and where to turn for help.

But where was the help for the wives themselves?

For so many, they felt trapped between relief and anger. They were the lucky ones - their husbands had survived. The grieving widows were entitled to all the extra attention, support and multi-million dollar payouts. But what happened to the wives whose husbands were so haunted about what they had witnessed on 9/11 that they sought solace amongst those they believed truly understood their grief and suffering. Many responders started to spend more time away from their own families, choosing instead to surround themselves with the widows and their colleagues.

Brenda* is the wife of a 9/11 EMT. She recalls how difficult it was to know how to be there for her husband Joe* following the terrorist attacks.

“It was hard. We didn’t hear from him until 11pm that night, so for most of the day we thought he was dead. Then he turned up at the front door, covered in soot, smelling of death. He already had a haunted look on his face – and it’s never really left. He was gone for days at a time, and it seemed like each time he came home, he had left a little bit more of himself on the pile. I told him once that he may have survived, but part of him died that day.”

Joe, like so many other responders, started to spend more time away from his family, including Brenda and young son James* and spending more time with a group of 9/11 widows and their young children.

For Brenda, it was particularly difficult to help James understand what was going on.

“How do you explain to your young child why Daddy is acting the way he is? Why he is never at home with us anymore. And when he is, he is tired, or angry, or drinking. On one hand I was trying to shield James, he was only 8 at the time. But we couldn’t escape it. Joe lost so many colleagues, they were good friends, part of our extended family. So we had what felt like an endless stream of wakes

and funerals. And Joe was spending so much time with the families of his fallen brothers, and well, James didn't understand that. He didn't understand why his Daddy didn't want to be at home with us. And to be honest, while I understood it, it was still very hard. I could feel myself losing my husband, even from very early on in the piece."

As months went by, Brenda started to suspect that Joe was spending a little extra time with one particular widow. Eventually, Joe admitted to having a brief affair.

"We ended up separating...I joked with my friends that the wives of the dead responders were moving on, re-marrying, living off the multi-million dollar payouts. And what did I get? Cheated on, lied to, our life savings was gone, and my son was starting to act out in response to the constant upheaval...We needed help. And if Joe wasn't going to do it, I had to, so I left. It took us three years to get past that. We are OK now, but there is still a lot of pain there."

It is difficult to determine to the exact precursor to any of these families' life changes. Grief was certainly a key influence, as was the change all around

them: a new rush of ceremonies and social functions, sudden influxes of money (many widows, benefiting from donations, pensions and victims' compensation funds, found themselves millionaires), job shifts from one firehouse to another to fill empty slots. (1)

For many of the families of 9/11 responders, the increasingly risky behaviours of their husbands/fathers/partners became a problem.

For Susan, finances were tight after John moved out. Things that he would have taken care of have gone unfixed, like the malfunctioning sprinkler system that's left the backyard dead and dry. Sometimes, Susan said, she barely has money for groceries.

Brenda noticed the dwindling family finances after being caught at a supermarket one day after doing the groceries, her credit card declined. Sure it was a mistake, she called the bank when she returned home, only to learn that their joint bank account was almost empty and their credit card was over the limit. When she confronted Joe, he initially denied any knowledge of what had happened, instead blaming a bank error.

“That was one of our biggest fights” recalls Brenda. He sat there listening to me argue with our bank over the phone - knowing all the time that the money was gone because he had taken it. “About a week later he finally came clean, he had been gambling”.

That Joe had been having an affair with a 9/11 widow - a friend of Brenda’s no less - made the situation unusually painful, compounding the anger that she felt regarding the financial position that Joe had left the family in. “Here he was, draining our bank accounts, then I learn he is having an affair with Mary* who has just received all this money from John* dying. I know I shouldn’t begrudge her the money, after all, she had lost her husband...but did she have to move on to mine? I felt like I was the one that was losing everything. I actually felt jealous of her. Can you imagine - feeling jealous of someone who has just lost their husband?”

Some firefighting officials believe that many of these affairs, divorces and fractured families are due in part to some bad decision-making within the FDNY. In the wake of the overwhelming number of losses of 9/11, a job that should usually have fallen to a designated senior member of the FDNY became the job of all the men

in the New York firehouses. They were tasked with checking up on the widows of their fallen colleagues and to ensure that they attended all of the relevant meetings for the 9/11 families and received all of the support that they were entitled to. For many firehouses, an individual firefighter would be “assigned” as a liaison for a widow, many of whom were unprepared for the emotional burden that would come with this role. In some cases, the firefighters and widows formed close bonds, threatening marriages that may already have been in a somewhat precarious position.

In other cases, the widows, looking for any source of light amidst the darkness of their grief fell in love with their designated liaisons and these happily married men had to try and find a delicate way to extricate themselves from the situation without exacerbating the distress that the widows were already experiencing.

Even now, all this time after 9/11, there are still firefighters who have platonic but nonetheless unhealthy relationships with widows, responding to demands for emotional support and time that someone with a family of his own can ill afford.

“I think there was tremendous tolerance by the spouses in the beginning,” Malachy Corrigan, the director of the FDNY counselling unit, said, describing the early days when most firefighters worked overtime shifts on the pile, resting wherever they could, often for nights on end at various firehouses. “And there was a lot of freedom to let people not be home and let people do what they needed to do. But after the first set of holidays, they started asking questions: ‘When will you have time for me and the kids?’”(1)

Rudy Sanfilippo, the Manhattan trustee for the firefighters' union, knows first-hand the toll that “the pile” takes on the families of responders.

“You work and work, and the best thing you can do is call a widow to say we found the tip of your husband's pinkie? We lost control at the site, and we lost control at home. In both places, we were doing the best we could, and it wasn't sufficient. Before this, we'd been good providers.”

Around 18 months after 9/11, Sanfilippo sat down for a family dinner with all of his adult children. “And one of them says to me (pausing, with red-rimmed eyes)...my kid says, ‘Dad, welcome home.’”

Janet*, the wife of a 9/11 police officer, recalls how her husband started to withdraw from family life and social interaction after spending hours at Ground Zero. Janet said he would often just watch TV for hours without any conversation or interaction with others. He stopped going to their son's baseball games and was distracted and agitated when talking to anyone.

Every year on the anniversary of 9/11, he would disappear for several hours only to return home late in the evening without a word about where he'd been. Though her husband had been only a social drinker, Janet could smell the alcohol on his breath when he came to bed. (2)

Alcohol became a problem for many of the 9/11 first responder families. Along with other risk-taking behaviours including gambling, recreational drug use, and speeding.

Family members were put in the difficult position of trying to support their loved ones through the crisis of 9/11 and its aftermath, but also trying to find the right way to address the emergence of these behaviours.

One report from the WTC Health Registry stated that five to six years after the

attacks, those with the greatest Ground Zero exposure who reported PTSD were twice as likely as the the group with less or no exposure to binge drink four to five drinks at a time. Another study showed 50% of NYPD officers at Ground Zero who reported PTSD symptoms after the attacks were still suffering from the disorder in 2012 — more than a decade later. (2)

“It got to a point where I did not want to contemplate divorce, but I was suffering too,” said Janet. “My husband did not die on Sept. 11, but I lost him all the same.”

This sentiment is echoed by Doreen* whose husband Bill* was a paramedic on 9/11. “Part of Bill died on 9/11. I might have been one of the lucky ones that had my husband come home that day, but he has never been the same”. (3)

When Doreen reflects on the day of 9/11, she remembers Bill coming home around midnight covered in ash. “I’ll never forget the smell. I felt like he brought the smell of all of those dead people into our house. He went down to the basement, changed out of his uniform, put it all in a bag, and never touched it again. It’s still down there. When he had a shower, he realised he was actually injured, but he didn’t go to the hospital. He slept for a couple of

hours, then went back down to Ground Zero. He spent 12 hour shifts down there for months. We barely saw him.”

The impact on the families of the responders was not only felt by the spouses. The children of the 9/11 responders were also directly affected by growing up in the shadow of the terrorist attacks.

John* was ten when his dad, an EMT responded to the 9/11 attacks. “It’s hard you know, my Dad and I don’t have the greatest relationship. And I don’t know if that is just because of 9/11, or if it would have been that way anyway. But as a kid, it was definitely tough, everyone in our community thought Dad was a hero. But to me, he was a coward. He never spent anytime with us, he preferred to be with all of the 9/11 families. He forgot that WE were a 9/11 family, his own flesh and blood. But it seemed more important to him to spend time with the widows and other kids. Then when he did come home, he was a mean drunk. I pushed his buttons I admit. He hit me a few times — until I started hitting back. I would rather he take it out on me than Mom or Kate. But I have never forgiven him. We still don’t really talk too much. It’s sad to

admit it, but at times I actually wished he had died that day”. (3)

John’s sister Kate* who was only seven on 9/11, has a slightly different view to her brother. Kate recognises the difficult time that her Dad had following 9/11, and unlike her brother, has managed to develop a happier relationship with her father over the years.

“I don’t think any of us can ever really understand what he went through, what he saw, what he lost. I guess I was too young to really understand at the time. I was lucky that school was really supportive and I had a really great counsellor who let me talk about all of my feelings. John went as well, but he never really opened up. He didn’t see the point in it. John took it harder than me I think, Dad seemed to take it out on him as the only other male in our family. It’s sad, I think they had a really great relationship before 9/11, but John was very protective of me and Mom, and didn’t like the way that Dad dealt with his pain. If Dad had been drinking, I would just go to my room or avoid him, but John had to get in his face and tell him he was a crap father”. (3)

James*, the son of Brenda and Joe, readily admits that growing up with his Dad so

affected by the terrorist attacks led him to act out in unhealthy ways in a desperate attempt to get his Dad’s attention.

“Looking back, it wasn’t fair on Mom...I started drinking, staying out late, I guess I was just trying to get my parents to notice me. One day, after Mom and Dad had been fighting, I swallowed some pills that I found in the bathroom. I ended up in hospital for about a week. Pretty stupid thing to do, but at least Dad turned up each day at the hospital. I was 13...since then I’ve overdosed again..but I am doing ok at the moment.” (3)

For family caregivers, there is some relief in the recently reauthorised Zadroga Act, which ensures that the WTC survivor and responder health care programs will continue for the lifetime of eligible victims. Part of the funding goes to the September 11 Victim Compensation Fund, which will continue to be supported through 2020. Out of 13,437 claims to date, more than 9,100 victims and their families had received compensation as of the last 2015 report. (2)

John Feal, founder of the Fealgood Foundation that advocates for September 11 responders and their families is concerned that “everybody thinks when

we got the bill passed in 2010, it's been all unicorns and rainbows...the reality is there are still people who are falling through the cracks.”

Sal Turturici is one example.

While the former EMT wasn't in lower Manhattan on the day the planes hit, Sal worked for four months after 9/11 operating machinery that transported body parts from Ground Zero to a makeshift morgue. In 2016, Sal was diagnosed with terminal liver cancer.

“I died that day,” said Turturici. “I'm trying to hold on as much as I can. But sooner or later, I'm going to succumb to this.” (4)

Despite the numerous government programs designed to help 9/11 survivors, responders and cleanup workers, many - like Sal and his family - are still struggling to get by.

Under the 2005 World Trade Center Disability Law, responders who became disabled as a result of 9/11-related operations are entitled to a 75% disability pension. But in order to qualify, responders had to submit a sworn statement to the New York City Employee Retirement System (NYCERS) indicating the dates and locations of their participation at Ground

Zero. The deadline to submit that form was 11 September, 2015.

Sal got sick on 4 Oct of that year.

“He missed it by three weeks,” said Turturici's wife, Wendy. “The only reason he wasn't eligible for a three-fourths disability pension was not because he wasn't sick enough ... but because he didn't fill out the paperwork in time. It's the most ridiculous thing.” (4)

Gary Smiley, a retired EMT with the FDNY, took cover under a truck when the WTC towers collapsed. Gary has numerous respiratory and digestive disorders and mental health illness. Despite these conditions, Gary has been denied a disability pension multiple times by NYCERS. The medical board, which examines each disability applicant and issues a recommendation to NYCERS, has repeatedly found Gary to be psychologically and medically fit to perform his job duties. This has placed considerable strain on Gary and his family and has resulted in them spending thousands of dollars on legal fees trying to contest the rulings. (4)

It's unclear exactly how many responders like Sal and Gary are struggling to get the help they need. But, it is clear that for so

many, the impact of 9/11 has been long-lasting and devastating for both the responders, and their families.

* Names have been changed to protect the identity of research participants and their colleagues.

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8

The 'other' responders

For most people, the story of 9/11 ends with the collapse of the towers. The recovery operation that lasted for eight months is generally nothing more than a few scenes of footage tacked on to the end of 9/11 media that usually surfaces around each anniversary.

But if you watch any of the footage of the aftermath at Ground Zero, you will no doubt see thousands of people climbing on top of the pile, carefully looking for victims while also clearing the immense pile of smouldering debris that was all that remained of the famous twin towers.

Have you ever wondered who all of those people were?

New York City didn't have enough emergency rescue personnel to continually man the twelve-hour search shifts - no city does.

So who were they?

The answer is, they were regular people. Ironworkers, engineers, heavy equipment operators and construction workers who were tasked with very tangible physical work of cleaning up the WTC wreckage. Most of them volunteered from all over the United States, spending lengthy periods of time away from their families to work on top of the the mountain of still-burning rubble, breathing in toxic smoke for days and weeks in hopes of doing some good.

John Feal, a foreman with a private demolition company, was working on a job site about an hour upstate of New York City when his crew got the news that a plane had struck the North Tower. After reports came in minutes later that the South Tower had also been hit, John gave the order to the men on site to go home. John, however, packed up and headed straight it New York City with whoever wanted to come along. They were motivated by the thought of people buried

under the rubble, and they knew they could help get them out.

When John arrived at Ground Zero he realised that he was one of hundreds, if not thousands of volunteers to self-deploy to the WTC site. Most had no clear idea about what they were going to contribute to the overwhelming task at hand, but many, like John, had come to help with the demolition and excavation that was going to be needed. The immediate goal was finding any survivors under the 1.8 million tons of steel, concrete, and plaster that made up the pile. In those early hours, everyone at the site was convinced that they would find survivors. Surely, there were voids within the rubble where people were waiting to be rescued. There had to be some people who had survived the collapse of the buildings, only to be trapped somewhere below the debris. Within those first 48 hours at Ground Zero, the thousands of emergency first responders, including firefighters, police, paramedics and EMT's joined forces with the tens of thousands of non-emergency responders like John to try and find those buried below.

Below the pile, subterranean fires would continue burning for around 100 days, a hostile pile of heat, acrid smoke, and

anguish. No one turned the volunteers away - the need for sheer numbers was immediate and dire.

But as the days wore on, and with hope of finding anyone else alive beginning to fade, the initial search and rescue activities changed to debris removal and remains management. The "bucket brigades" of emergency and non-emergency responders working together could be seen lining the surface of the pile like lines of ants. A human hand was found, placed in a bucket, and moved along the convoy line until it was sent to the temporary morgue on site. A piece of bone, a fragment of flesh, a firefighters jacket with no body inside. Legend has it that a whole human heart was found on the subway tracks deep below the WTC site.

John realised early the importance of implementing some form of coordination and control at the scene - people who didn't know what they were doing were climbing all over an unstable, smouldering pile of debris. It was an accident waiting to happen. John took on a role that he was familiar with - that of foreman. He set about finding qualified people among the sea of well-intentioned volunteers, and then match them with appropriate tasks. And that's how it was in those chaotic

early days. He would train someone on a certain piece of heavy machinery and then move on to the next person and the next task that needed to be addressed. There was no time to worry about who had what certification - the experienced people had to hope they could share enough on-the-job training to the newbies to bring them up to speed. (1)

It was quickly becoming one of the largest volunteer movements the United States had ever seen.

Mountains of work gloves and other equipment was donated. Responders were fed by food sent in from all over the country. Chiropractors and physiotherapists volunteered their time to massage the tired and aching responders. Mental health practitioners and religious representatives provided responders with the opportunity to talk and reflect on the devastation that they were in the midst of. People sent in blankets which responders rested under when they came in from their twelve-hour shifts on the pile. New Yorkers lined the perimeter of the Ground Zero site, cheering and yelling “thank you” to the responders as they sought a brief moment of refuge from the hell of the mass-burial site.

Then there were the family members of the victims, straining over the barriers that had been put in place around the site, calling out to responders and holding up pictures of their loved ones, asking if they had seen them. As the days turned into weeks, surely these families knew that their loved one wasn't coming home. But still they came, still they showed their photos, always with that same look in their eyes.

Other people would offer gift bags, or just generally offer their support and gratitude.

The responders worked twelve-hour shifts with very few breaks, quickly eating when they could before moving on from one project to the next. Some workers set up temporary shelter or found places to sleep nearby in the city. Some rested in St. Paul's Chapel. After the attacks on the WTC, St. Paul's, which sits directly across the street from the WTC site, suffered no physical damage. The NYPD turned a nearby blown-out Burger King into a temporary headquarters.

Only 20 survivors were pulled out from the rubble after the towers collapsed - and none were found after the second day. And yet, thousands of volunteers like John worked side-by-side with the emergency first responders searching, hour after hour,

day after day, in hopes that somebody had defied the odds. He said that one thing he's never going to forget is seeing grown men at Ground Zero weeping as they slowly realised the chances of finding anyone alive were quickly dwindling to zero. (1)

There is something else that isn't apparent in the footage of Ground Zero. We see the thousands of responders climbing over the mountain of debris without realising that what these responders were precariously perched on top of was a pile of loose debris ready to shift and collapse at a moment's notice.

And it was a dangerous landscape to be working in. Aside from the long-term danger of breathing in the toxic dust that hung in the area and covered every surface, there was the risk of immediate injury from walking over the moving, smouldering pile of debris. The whole time John and the rest of the responders were working, it was with the knowledge that the ground could give way beneath them at any moment. Each step came with the knowledge that they could be plunged into the darkness and fiery hell below Ground Zero.

The danger finally caught up with John on 17 September. He was helping to load a truck full of debris - something he had done dozens of times already. Before he knew it, about eight tons of steel was falling towards him. He had to leap out of the way, and it was probably just incredible luck that he wasn't killed. After recovering from the shock of the incident, John noticed a shooting pain coming from the end of his leg - his foot has been severed entirely and blood was spurting several feet into the air.

A fellow responder made a makeshift tourniquet to help cut off the bleeding, and John was rushed to hospital. After months in the hospital undergoing various reconstructive surgeries and almost dying of gangrene, he lost about half of his foot. Much more time spent in physical therapy has enabled him to walk with only a slight limp now. It was only later that he would realise how close he had come to being the first fatality of the WTC clean-up.

"As soon as they amputated it, I probably didn't talk to anybody for about four days," he recalls. "I just counted ceiling tiles. I just went into complete shutdown." (2)

Over the next five years, John underwent more surgeries on both feet. He couldn't

work because of his injury. And, because of when he got hurt, his application for financial help was denied. Only people who got hurt within 96 hours of 9/11 were eligible to receive money from the first victims' compensation fund set up by Congress. John was hurt about 120 hours after the attacks.

That timing is what has transformed his life. A patriot and Army veteran, he refused to accept the terms the government laid down. And he's since worked to change them - setting up the FealGood Foundation to help anyone affected by 9/11 get health insurance and other benefits. (2)

Responders regularly sustained musculoskeletal injuries. Hundreds had repetitive motion injuries, like carpal tunnel syndrome. Responders were treated for fall injuries, back injuries, lifting injuries, knee and ankle injuries, abrasions, burns, sprains and fractures. Responders climbed through the remnants of the twin towers, balanced on beams to search for bodies and perform cleanup, and all the while had burning debris falling on them, so the injuries were severe.

Many of the responders originally seen with serious hip and knee injuries are now

demonstrating gait deterioration and require surgery to replace the affected joint. We don't know yet all of the impacts the trauma of 9/11 will continue to have on the musculoskeletal system of responders. Many are being treated for asthma and use steroids, which are known to wreak havoc on bones. Responders can have so much bone disease that they fracture bones when they cough, and they cough a lot because of the asthma. We also don't yet know the potential harmful impact that all of the medications used by the responders for other 9/11-related conditions may have on the musculoskeletal system. (3)

Chronic gastro-oesophageal reflux disease (GERD) is a common condition seen in 9/11 responders. GERD is a digestive disorder in which stomach acid travels back up into the oesophagus. We're not sure which particles or fumes in the dust cloud contributed to this condition, but it's clearly related. Chronic reflux can cause precancerous changes in the lining of the lower oesophagus, known as Barrett's Oesophagus. Although the progression of Barrett's Oesophagus into cancer is very low, many responders are worried about it. In some responders GERD has evolved into a form of intractable reflux. It may not respond to any medications and quality of life can be very poor because of constant

symptoms. In addition, a lot of responders are at an age where you wouldn't expect them to be having such severe reflux symptoms. While reflux is a common problem, the difference is that some of the 9/11 responders appear to be less responsive to the medical therapies. (3)

In the next five to ten years, we may see a continued progression of gastrointestinal disease that leads to elevated rates of colon polyps or colon cancers as compared to the general population.

Like the emergency first responders, the non-emergency responders commonly have mood disorders which include major depressive disorder, mild and moderate depression, anxiety, panic disorder, and generalised anxiety disorder. Responders have experienced other physical symptoms such as decreased appetite, abnormal sleep patterns, problems with their memory, and difficulty concentrating. Something particular to this population of is that they have demonstrated a tremendous amount of avoidance. They don't necessarily have memory impairment but are using avoidance as a psychological way of defending and protecting themselves from things that were painful. (3)

More frequently now we are also seeing adjustment disorders, where responders had been functioning with some underlying anxiety but are now facing major life changes like retirement, developing cancer, chronic medical illness, or other major tragedy—that pushes them over the edge. For the general public, retirement is usually something to look forward to, but for many 9/11 responders, work was the stabilising factor in their life—it allowed them to escape from their worries and was truly part of their identity. That identity helped them continue to be strong and powerful, but when that's taken away they begin to feel weak and vulnerable. That weakness is actually what becomes anxiety invoking. (3)

Incredibly, in the eight months that thousands of responders worked at the Ground Zero site, no one was killed.

But over a thousand first responders have died since.

The main reason for all of these deaths? The toxic dust cloud that consumed Ground Zero and lower Manhattan. Smoke, dust, ash - John called it a "soup of toxins," and everyone at Ground Zero was breathing it. "I never put on a mask once, no one ever told me to," he says.

“And that goes for a lot of people. And those who did wear one, they were the wrong [masks] anyway.” (1)

Four months after the disaster, there were reports that half the workers at Ground Zero, perhaps the most hazardous work site in the nation, still were not wearing respirators. From the very beginning of the operation until months later, many observers pointed to poor compliance with the requirement to use respirators as one of the most serious safety and health shortcomings at the WTC site. The National Institute of Environmental Health Sciences (NIEHS) directed attention to this problem in its 6 October, 2001 report on the early response to the disaster, noting, “respiratory protection is rare.” (4)

Respirator use by heavy-equipment operators was never above 50 percent and at times dipped to 20 percent, despite intense education efforts. On top of the long hours and discomfort of wearing the devices, poor role models abounded at Ground Zero. Supervisory personnel from many responding organisations on site regularly entered the restricted zone without respiratory protection.”Respirators were worn much like loose neckties, hanging below the neck”. (4)

Complicating matters was that many of the non-emergency responders were immigrants or undocumented aliens, hired to clean up the buildings near Ground Zero, these workers faced the risk of exposure to hazards with very limited protection.

Over 7000 responders are now enrolled in the World Trade Center Health Registry with illnesses directly related to breathing in that “death cloud”. Those that are sick have various cancers, gastro-oesophageal and breathing problems, and a respiratory disease called Sarcoidosis.

Sarcoidosis is the growth of tiny collections of inflammatory cells (granulomas) in different parts of your body - most commonly the lungs, lymph nodes, eyes and skin. Doctors believe sarcoidosis results from the body's immune system responding to an unknown substance, most likely something inhaled from the air. There is currently no cure for sarcoidosis, but most people do well with appropriate treatment. In approximately 50% of patients, sarcoidosis goes away on its own, however, sarcoidosis may last for years and may cause organ damage.

Many of the responders and their families have been left with not only the physical impact of volunteering their time, they are also left with mounting medical bills and the grief over the continued death toll of 9/11. John was fortunate enough to recover from his breathing difficulties after he had lost about a quarter of his breathing capacity in just the short time he was on-site, but is still suffering himself from PTSD, like so many other responders. And, if the responders didn't have health insurance, they were faced with the prospect of trying to find tens of thousands of dollars to pay their medical bills. You can't write "But I was at Ground Zero!" on a six-figure hospital bill and expect them to apologise and wipe out your tab. (1)

When the clean-up was finished, in May 2002, the responders had moved 108,000 truckloads of debris - around 1.8 million tons of material. The complexity of the activity performed at one site—rescue, recovery, demolition, and construction - is unprecedented. Many key recovery functions had significant environmental, safety, and public health implications for the responders involved. The earliest responders to the WTC attacks were trained FDNY, NYPD and PAPD personnel. Unfortunately, many other responders,

such as construction, demolition, ironworkers, electricians, volunteers, and cleaners, had never been trained or advised to use proper personal protective equipment, nor educated about the potential hazards at Ground Zero.

Respiratory protection was rare and responders were often observed in the smoke plume emanating from the pile without hard hats, eyewear, or respirators. Oftentimes, responders did not decontaminate after leaving the site. The hand/face and boot wash stations did not appear to be used by most of the workers.

During the September 22-26, 2001 period, an increase in worker protection was observed, notably respiratory protection. Hosing down the vehicles leaving the site finally began. There was no evidence that any safety and health programs were operating at the site. Various support personnel, workers, and government officials confirmed the lack of an operating safety and health program. (5)

The absence of site-specific hazard training and a uniform health and safety plan greatly increased the vulnerability of those with less experience with hazardous work or rescue and recovery.

These web of failures have ultimately resulted in the mass loss of life of the 9/11 non-emergency responders - people who volunteered their time to help respond to the nations most devastating terrorist attacks. And unfortunately, the death toll continues to rise, with responders dying on an almost weekly basis, some sixteen years after the attacks.

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9

Personal stories from responders

The following personal stories have been shared by a range of 9/11 responders and 9/11 family members. Some names have been changed to protect the identity of responders and their colleagues.

John* - EMT

The day started out like any normal day. I was on my way to work and had stopped at my local coffee truck to grab my morning coffee. A fire truck went racing by, heading south. Not long after, I heard a stream of emergency sirens. Something big must have happened I thought, that's a big job. When there was a break in the traffic, I stepped out into the middle of 7th Avenue and looked downtown, seeing the massive black cloud of smoke stretching across the sky. My phone rang - it was my wife. "A plane just hit the World Trade Center" she told me, she was watching it on the TV at home. I told her I was heading down there, and hung up. That was the

last time we spoke for about 12 hours. It was just before 9am.

By the time we got down to the WTC, another plane had hit the South Tower. We parked our truck as close to the towers as we could get. When we came up to the WTC, all we could see was blood and debris, people were running around, trying to get away from the towers. Some of them had horrific burns. I wasn't sure what was going on. I looked up at where the plane had gone into the tower - it was high up, like really high - how could these severely injured patients have gotten down so quickly? But then we met up with another EMS crew and they told us that a massive fireball had come down the elevator shaft after the plane hit the building and had exploded out of the lift well into the lobby of the North Tower.

As we walked towards the triage area, I remember just seeing all of these body-parts, and there were people coming

out of the tower that were really badly injured.

I was concerned about where we were triaging patients, I mean, we were right under the towers, which now we wouldn't do. The ambulances would pull up and we would load like five or six people in, and off they would go. I remember this woman had really bad burns, and we ended up having to put her on the floor of the ambulance, there was nothing we could do for her there, I honestly didn't think she was going to make it. It looked like she had burns to about 90% of her body. I heard she made it. It's hard to remember the individual patients I saw that morning you know, they all have kind of merged into one, horrible bloody mess

We started transporting burned and traumatised patients to nearby hospitals. I heard a loud popping noise, I turned around, but I couldn't see what had caused the noise. Not long after, I heard it again. One of the responders near me cried out "Oh Christ, they're jumping" and I remember looking up and seeing two people come out of the tower. They jumped, holding hands. I watched them until just before they hit the ground, then I turned away.

We needed to start looking up, because we had to dodge the falling bodies of people who had jumped more than 100 stories to their deaths, rather than die in the raging fires that had engulfed the upper floors of the tower.

Over to my left I noticed that two guys were struggling to help carry a woman. I started walking towards them, but then I heard this horrible rumbling sound. At first, I thought the roar was another plane. We had heard people saying that a third plane was reportedly heading to New York. But then I realised it was the South Tower coming down. I just started running and managed to dive under a sport-utility vehicle for protection.

Everything went black. I couldn't see my hand in front of my face. I didn't know if anyone around me was alive. I just focused on trying to breathe. The air was hot and thick. Each time I breathed in I could feel my throat burning. I tried rubbing my eyes, but I just felt the grit scratching my face. I felt a searing pain across the top of my head. It was so quiet, I can't remember hearing anything at first. I remember just laying there under the truck thinking, well you know, this is it, I'm going to die here. My life didn't flash before my eyes like some people say, but I definitely

remember thinking about my wife. We had been trying to have a baby for about a year, and it hadn't been going our way. We had fought the night before. I wanted to hit pause on trying. She didn't. And I remember laying there in the dark, barely able to breathe, and I just remember praying to God saying, "please look after her".

But then I heard people moving past me. I managed to push myself out from under the truck, and slowly started to make sense of what was going on around me. There was just a thick blanket of grey dust, it totally blocked the sun and covered everything. Then I noticed that the eerie silence was pierced by the sounds of the the firefighters PASS alarms. It's an audible alarm that signals a firefighter is no longer moving. I had never heard it before - and it's a sound I never want to hear again. Sometimes in my dreams, I hear that sound.

As the dust clouds started to clear, I did a quick check of my own injuries. I had some cuts, a pretty deep one on my forehead. I had been trying to wipe my eyes because blood from my head wound was streaming down my face. But I was OK. I didn't think anything was broken. I

couldn't believe that I had survived that. A tower had just collapsed on me.

I just started following the people who were running away from where the tower had just come down, and there's all this stuff just floating through the air. And then I realised, everyone is gone, everyone in the tower, they've just been pulverised, and I remember thinking that the dust is people. And I started vomiting.

I remember seeing firefighters and cops, just wandering around dazed, covered in dust, trying to find partners and friends. I just needed to find water to wash my face. I remember thinking, I can't see anything whole you know, no chairs or desks or file cabinets, or computers. No whole bodies. Just dust...a lot of dust and debris. And body parts. I remember standing on something as I stumbled through the semi-darkness. I thought I had just trampled over someone on the ground, but when I looked down to say sorry, I saw that it was just an arm. And that's when it hit me, like no one survived this, there won't be anyone to find in there, they're all gone. They either got out, or they died.

I ran into Tom* and I remember he said to me "where is everyone"? And I just said to

him, “they’re gone - it’s just body parts left.”

I managed to make my way to a cafe, I don’t know how far I had walked, and I just went in and sat on a chair. Someone bought a bottle of water over to me, and I just washed my eyes out. A woman in the cafe was staring at me: “Are you ok”? she asked. “Yeah, I just need to wash my eyes” I told her. She had a shocked look on her face, and when I looked down at the floor, a pool of blood was forming near my feet. I put my hand to my head and remembered that I had cut my forehead. It’s funny, I couldn’t even feel it. Someone gave me some napkins and I put pressure on. I left the cafe and kept walking, I’m not sure where I was going, but I ended up coming across an EMS crew who were loading up some walking wounded. I hitched a ride to the hospital and got my wounds patched up.

Later that night, before I went home, I went back down to the WTC. It looked like a war-zone. This smouldering, smoking, pile of wreckage and debris. There were already thousands of responders climbing all over the pile doing search and rescue. The bucket brigades had already formed, moving body parts from the pile to the makeshift morgue. I still thought that we

would find people under the rubble. There had to be voids where people had survived and were waiting to be rescued. I stayed for a few hours, but then realised that my wife must be worried. I had tried to call her a few times during the day, but the phone networks were clogged and not working. I finally left for home at around 1am. It was pretty crap of me to not try and let my wife know sooner that I was ok, when I got home she was sitting in the lounge with her mom, my parents and some of our neighbours. The TV was on and she was crying. When I walked in the door she jumped up and hugged me. She had thought I was dead, the last time she had heard from me was that morning when I said I was on my way to the WTC.

I went down to the basement and took off my boots and uniform. I went back upstairs to the bathroom to shower. The water ran black with soot and debris, and as it washed away the evidence of the day, I realised how many physical injuries I actually had. I ended up at the hospital the following day, I had to have wounds on my head, forehead, hands, arms and legs tended to. Scans revealed that I had three broken ribs. But I didn’t care. I was alive. So many hadn’t been so lucky. The phone started ringing from about 7am the next morning. Colleagues reporting on the

updated numbers of the missing. Two of my friends were among those on the list. We never found out what happened to them or where they were when the towers fell. Their bodies were never found. Later that day, I put my uniform and boots in a bag and left them in the basement. They are still there today. My wife wanted to wash them or throw them away, but I couldn't bring myself to do either. I don't know, to me, they are a physical reminder of what happened, of what I survived. Sometimes, when I have a bad day, I go down there and look at them. They remind me that I am one of the lucky ones and to just get on with it.

A few months after 9/11 I started having some problems. I was at work one day, and I just couldn't breathe. I thought I was having a heart attack. But it turns out, I was having a panic attack. I started seeing someone. The services had been good and had told us all we could speak to someone if we wanted to, but I hadn't thought I needed it. I actually thought I was doing pretty well.

The jumpers, I think, were the worst. To actually see them jump and, and pulverise just in front of you, you know? That was just horrible.

So I started getting some help. And I needed it. Some of the things I saw. Some of the stories I heard. A friend of mine was a police officer on 9/11, they have retired now. But I remember them telling me about something that happened at the makeshift morgue at the WTC one day. A retired firefighter went up to the medical examiner and he's holding bones in his hands and he says: "This is my son". Or the stories of the fathers on the pile looking for both of their sons who are missing.

I never had another panic attack, but about a year or so later, I started noticing some health stuff. It started with the 9/11 cough I had, which led me to have RADS (restricted airway disease) which means I can't get enough oxygen in or out. And then the allergies and the sinus issues, I had all of that.

At times I still have nightmares. A couple of times I would wake up on the floor next to the bed, trying to feel my way out of my own bedroom. I thought I was under the rubble. My wife had to wake me up and get me back to bed. That happened a few times.

I've been OK for a while now though. But when I look back, I know it was a close

call. If I had of run in the opposite direction that day, as the tower fell on top of me, I would have died.

It's lucky I ran in the direction that I did, lucky that I survived, because it turns out my wife was pregnant at the time. Our first son was born seven months later. We've since had two more little girls.

I still have the occasional nightmare, and the anniversaries are tough. But I have a good support network around me. I have tried hard to move on. But I know that I am one of the lucky ones, not everyone has been as lucky as me.

Tom* - Police officer

I wasn't working that day. My Mom rang me and said that I needed to turn on the TV.

I couldn't believe what I was seeing.

Both of the WTC towers were on fire. I tried to call a buddy of mine who was working that day, but before I managed to make the call, this growling noise came out of my TV and the South Tower came down. I just stood there stunned, and then not long after, I thought, well if one tower came down, the other one's gonna as well.

I didn't really stop to think at that stage about how many people had been killed. I mean, I knew that we would have lost a lot of people, you know, civilians and responders, but I wasn't really thinking about how many at that stage.

I had to get downtown and help. I lived in the East Village and I knew they would probably be shutting down public transport, so I put my uniform on and just started running downtown. I remember passing a neighbour on the way out and she yelled after me "be safe down there".

As I was getting closer to the WTC I heard that same noise I'd heard earlier. And I thought, there it goes, the North Tower is down, and then all of a sudden you could see this massive wall of smoke and debris just racing up the streets, swallowing all the buildings along the way. I managed to run inside a building and take cover just before everything went black outside.

One of the women in the building was screaming "we're going to die" and I told her "no we're not, we're ok", but really I didn't believe what I was saying. I thought we were going to die.

But as the smoke outside started to clear just enough to see, I walked outside. I had taken a towel from inside the building and

I'd wet it, and I was breathing through that. I told everyone else in the building to stay there until it was safe to leave. And I stepped into hell. The dust was nearly up to my knees, it was like walking through the snow. As I walked along, I kept looking up, trying to figure out where I was. But the familiar landmarks were gone. The towers weren't there anymore, all that was left were the skeletons of the towers. I remember thinking that nothing had survived. Everything had been pulverised. And I just kept thinking, man, I hope everyone got out in time.

As I kept walking I noticed this sound, it was like lots of car alarms going off at once. I found out later that they were actually the firefighters alarms, signalling that they weren't moving. I still didn't realise though how many people were lost.

As I got closer to the pile, I saw a dismembered body. A bit further along, I saw someone's leg. It was like a bomb had gone off, there was just debris and body parts everywhere. Paper was floating in the air, and that dust, I kept trying to wipe it out of my eyes, but it was full of grit, and each time I wiped my face it scratched. I tied the wet towel around my face and kept moving along, looking for anyone that might have survived.

The people I saw moving around down there looked like ghosts, they were just covered in dust. I saw firefighters trying to wash the crap out of their eyes with water bottles. One woman grabbed hold of my hand and she just said to me "I need to get home, how do I get home"? She was covered in dust and had an obvious wound to her arm. I guided her over to an EMT and left her there. All the responders I came across were confused, many were injured, but they were just trying to find their partner or their unit.

There were fires burning everywhere, and I just thought, crap, if anyone did survive and they're buried under the rubble, they're going to be cremated. But I had hope you know, some of the guys down there were convinced that there had to be voids under all the debris, that surely there were survivors. Throughout the day we heard that people had been found, I wasn't involved in any of the rescues.

There wasn't any real command or coordination in those first few hours, we kinda all just started working together, looking for people. I'm surprised no one was hurt or killed during those first few days down there. Everyone was running on adrenaline, motivated to try and find survivors, we were climbing all over

unstable, smouldering debris that could have given way at any moment. Later that day, I don't know how long I had been down there, my foot slipped awkwardly off a piece of steel and got stuck. I managed to free myself, but there was a moment of panic. I knew I'd hurt myself pretty bad, but I just kept going.

By the time night fell, there were thousands of people at the site, responders and volunteers. Everyone wanted to help, and no-one wanted to turn anyone away, but I remember thinking this site needs to be secured. We need to start getting credentials for people coming on to the pile. There were people in civvies who said they were ex military, or ex emergency service, but no one really cared at that stage. The more hands the better. But it could have ended up in someone being seriously hurt or killed. Search and rescue is a special skill and if you trampled over the wrong area, you could cause another collapse and kill anyone alive below. I was really mindful about where I was putting my feet, what I was moving around.

I started noticing that my foot was actually giving me a lot of pain, and I decided I needed to rest a bit. I thought it must have been around 7pm. When I made my way to one of the makeshift rest areas, I found

out that it was 1am. I had been down there for about 16 hours. I got something to eat and drink and sat down and took my boot off. My foot was purple and swollen. One of the medics that was there had a look and thought it was broken, he told me to go to the hospital and get it checked. I told him I would, but I just really wanted to get back out on the pile and keep searching for survivors.

But I decided to make my way home and have a shower and get some rest before coming back down again the next day. I walked home, it took me ages to wade through all of the debris and make my way back to the East Village. My answering machine was blinking, full of messages from my family and friends. I called my Mom, she answered on the first ring. She started crying when she heard my voice. "It's alright Ma" I told her, "I'm ok". She had thought I was dead because she hadn't heard from me all day.

I had a shower and the water just ran black. I put my uniform in the laundry and went to bed. I don't know how long I slept for, but I woke up from a dream where I couldn't breathe. I just layed there for a while, but when I couldn't get back to sleep, I got up and went back down to the pile. My foot was hurting pretty bad, but I

had a job to do. I made a mental note to get it checked out later that day.

Three days later, after doing twelve hour shifts on the pile, I tried to get out of bed one morning, but couldn't put any pressure on my foot. A friend took me to the ED and they x-rayed my foot. The doc came out and was shaking his head, and he says "you've been walking around for days on a broken foot". So I was kind of forced to take a break away from the pile for a while. But it was probably a good thing, it was starting to really affect me, the smell down there, and the body parts. I never found a whole body. But I came across a few body parts. I found a finger. A torso. The top of someones head. The firefighters were easier to spot in the rubble because of their uniforms. But I remember we found a turnout jacket, but there was no body in it, and I just kept thinking, where did the body go? They had just been pulverised.

I started getting bad allergies not long after being on the pile. Plus there was still so much crap in the air around downtown New York. So many of the guys who worked on the pile ended up with runny eyes and noses and a scratchy throat. I ended up with the 9/11 cough and about six months later I had some difficulty

breathing. I ended up back at the same ED as when I had broken my foot. They told me I was having an asthma attack. "But I don't have asthma" I told them. "Well you do now" said the doc.

I'm one of the lucky ones though. My cough went away and I only ever had one more asthma attack. Apart from that, I've been ok. I still have some nightmares, mainly around the anniversary each year. You know, it never gets easier. Around August each year I can feel it coming. Like the hairs on the back of my neck start to prickle. But those few weeks leading up to the anniversary are worse than the actual day. A few of my buddies and I get together each 9/11. Most of us are retired now. About two years ago I moved into a security job. I got married about 4 years after the attacks, and my wife has just been a lifesaver. She gets me through the bad days.

And there still are bad days.

Two of my colleagues died that day. Another one died recently of 9/11 cancer. Three more have it. I get my regular check-ups, but so far, so good.

Do I still think about that day? Not as much as I used to. But yes, at times, at times its tough. So many good men were

lost that day. Brave men, all just doing their job. And so many innocent civilians. I hope we never experience that kind of loss again.

Nick* - Firefighter

9/11 happened right on shift swap. Which meant that many firefighters who should have been on their way home jumped on the trucks and rode heavy to the WTC. Everyone wanted the big job - and this was a big job. About half of the 200 or so units that FDNY sent that morning never signalled that they had arrived. Where many of these units were and what they were doing when the towers came down will never be known. Then we also had units from all over New York and surrounding areas self-deploying to the scene. By nightfall, there were thousands of responders and volunteers on site. And we were starting to get updated information about who was missing. While many were busy at the scene searching for survivors, there were others who were working hard to try and figure out just who had actually been down there.

Each firehouse was fielding calls from the wives and family of the members trying to find out if they were still alive. As the day wore on, many would turn up at the

houses, I guess they just felt comforted being at the firehouse, somehow feeling closer to their missing husbands.

We didn't know what to tell them. We didn't have much information in the beginning. But then slowly, the names started filtering in, and the widows and families needed to be notified. As evening fell, we tried to ensure that all families of the missing were visited by a senior member, even if it was just to tell them that we didn't have much information at the time. Those were hard visits to make. You'd sit with the family members, witness their grief and distress, and then have to move on to the next family and do it all over again. Those visits went on throughout the night.

We suspected that we had lost a lot of guys, but I don't think any of us were really prepared for the final number - 343. The weeks and months following were filled with endless wakes, memorials and funerals. And there was always fire representation at each one. Some guys went to 20 or 30 funerals. It's tough.

And for the families who hadn't received any remains, we tried to keep them in the loop. As the months went by, the hope of finding whole bodies had faded, and the

days that we found body parts or bones were good days. At least those families would get some sort of closure. I remember after we found some remains for one firefighter. His wife asked me if he was in good shape. I didn't know what to tell her. How can you tell a grieving widow that we only found parts of her husband? A thumb, a foot, a bone? They don't need to know that. I heard that they found over 200 body parts for one person. That's the state that many of these bodies were in.

By the time that the WTC clean-up finished some eight months later, over half of all the victims had never been identified.

Thousands of families never got the closure they needed. Many had been holding off having funerals in the hope of finally having something to bury. I heard that some of the churches wouldn't let some families have a traditional funeral as there was no body to bury.

I still think about 9/11, especially around each anniversary. I think of all the guys we lost. How much has changed since then. We lost so many senior members that we had to train hundreds of probies to fill all the vacant spots at fire houses across New York. We lost a lot of experience that day. Guys with decades under their belt.

Good guys. It took us a long time to rebound from that.

Are we better prepared now? I'd like to think so. Could the same mistakes be made again. Perhaps. But we have learned some hard lessons.

Some of the guys get together on the anniversary. For me, I like to go to my shed with a beer and a smoke, and listen to music. That's how I reflect and remember. My family probably wish that I opened up to them more about it. But for me, talking about it with them doesn't help. I saw a counsellor a few times, it helped with some things, but all it really did was make me think about things I'd rather forget. But I know a lot of guys found it really helpful.

This anniversary will come and pass like all of the others. Ill think about the guys, then I will get on with it. There is still a job to do.

James* - Paramedic

When we first got the signal 10-40 it didn't take long for the guys to start talking about what they had heard. The initial word was that a small plane had accidentally flown in to the WTC. But I immediately thought that couldn't be right. It was a beautiful morning that Tuesday, I actually remember

thinking how blue the sky was as I drove over the bridge into Manhattan that morning. I rolled the window down and turned the radio up - it was going to be a good day. I hadn't been living in New York for that long, maybe about five years or so, so to me, I still go excited you know, each time I drove into the city and saw that New York skyline.

Anyway, I remember thinking straight away that it wasn't no accident, there was no way that a pilot could have accidentally flown a plane into the tower. I knew this was going to be a big job. But I never in a million years would have thought it was going to turn out the way that it did.

Units were volunteering to respond, and I remember the dispatcher telling us that they had enough units and that we should just hang tight for the time being. Well that was hard. Everyone wants to be part of the big job you know. And we knew that what was happening downtown was a big job.

I turned on the station TV and on every channel you could see the North Tower of the WTC on fire, I mean it looked like a bomb had gone off up there. A few other guys started sitting around as well and we were all watching as the next plane came

into view and slammed into the South Tower.

"Holy Shit" said Mike*, "man this is no accident, we are under attack".

Everyone nodded but hardly anyone was speaking, we were just listening to the TV. And not long after the reports came in about the plane hitting the Pentagon as well. And I just sat there thinking, the world is changing, right before our eyes. This is going to change the world.

I felt the goosebumps on my arms. I still do, every time that I see that footage. I think I always will.

The phone was just ringing off the hook in the background, but no one answered it.

By this stage we were all starting to get more on edge, we all wanted to be down at the WTC helping, rather than sitting around at the station. But we were told that downtown units were handling the job, it was still normal operations as far as we were concerned.

I could overhear the radio frequency - everyone wanted to be dispatched. A unit that had just dropped a patient at hospital told the dispatcher that they were free to go to the WTC. I remember hearing "10-40

at the World Trade Center” - our radio code for a mass casualty incident.

There was chatter about a third plane heading towards the WTC. The FAA apparently had information about a third plane that had been hijacked. We all sat there wondering if that plane was heading downtown. But if it was, I remember thinking, what is the target? Both towers were already hit. Maybe they were coming for the Empire State Building.

But my thoughts were disrupted when this loud roar started coming from the TV. The South Tower collapsed. I couldn't believe my eyes. I just sat there and watched it. I knew that thousands of people had just been killed. And then I thought, well they have to evacuate the North Tower, surely it's going to go to.

They kept replaying the South Tower coming down. In slow motion replay you could see the antenna sink and move, and then it just collapsed in on itself.

Some of the guys were yelling at the TV. One guy tried to call his wife. I was single. Mom lived on the west coast. I thought about calling her, but it was early over there, she might not be awake yet.

It was weird. The phones that had been ringing seemed to stop. It was like everyone had been stunned into silence when the tower collapsed. But then it was like that moment of silence passed and the phone started ringing again and the guys were all talking loudly. As the live coverage from the scene kept rolling, we could see the smoke start to clear and you could see the one remaining tower standing there among all the smoke and debris.

We started to check the supplies at the station and were ready to be dispatched. Then, about 1030am, that same roar came through the TV and I thought “well there it goes”. I just hope they got everyone out in time.

“This is bullshit” yelled Matt*.

“What the **** is going on, when are we going down there” asked Steve*.

After the North Tower came down, there were no more radio comms as most of the communication infrastructure was located on top of the WTC. There were no transmissions coming through from the WTC.

I decided to call Mom. But the phone was dead. No busy tone or anything. It was just dead. I tried a few more times over the

next 10 or 15 minutes, but no luck. I remember thinking that the city was quiet. There didn't seem to be the same routine calls coming in. I think everyone was transfixed by what was happening downtown. It was like the whole city was quiet, just holding its breath and watching and waiting.

I was finally sent downtown with Matt*. As we rushed to the WTC I said to him "there have got to be thousands of people injured and trapped down there". He was just silent, concentrating as he drove. The entire EMS system across New York had been sent into action, and EMT's and paramedics were being recalled for duty. I kept making small talk, probably trying to hide my nerves about what we were about to be confronted with. Matt nodded or grunted occasionally. I did a bit of a mental checklist as we sped along with lights and sirens on, making sure I had all of the equipment I would need.

As we got closer the traffic completely stopped. We got as close as we could and then ditched the vehicle and ran into what looked like a war-zone. It was deadly quiet and everything was covered in dust. People were walking around in a daze. Some seemed to be staring towards the sky, as if looking for the familiar landmark

of the twin towers. I ran past one guy sitting on the side of the road, with his arms around his knees, crying. I kept moving, I came across a lady with a large laceration on her head. I patched her up and told her to keep moving away from the scene. I helped a few other patients with minor injuries and remember stopping for a moment to get my bearings. I was trying to figure out where I was standing, but it was impossible to tell. As I moved further south the dust pile started getting deeper and at one stage it was almost up to my knees. As I walked on, I noticed body parts. I knew I couldn't do anything for them, so I just kept going. But that was hard, it goes against human nature to just walk past sights like that.

On the way downtown I had been preparing myself to triage the thousands of injured people I imagined would be trying to evacuate the scene. But I soon realised that there was no triage to be done. People either got out or they died.

I saw a firetruck still idling. It was covered in dust - both inside and out. The windscreen had been blown out and everything was just covered in ash and dust.

I noticed a familiar face and asked him “what’s the plan”.

“There is no plan, we are waiting for word”.

And in those first few hours after the towers came down, there was no real plan, no real coordinated response. We all just kind of did what we needed to do.

By about 1730pm there was a briefing that told us that most of the surface rescue had been done and that now they were going to start looking for survivors buried in the rubble. We all expected there to be survivors, word all over the site was that there would be people under the debris in voids. At least someone started to think about forward planning and started to try and get some guys to go home and rest, so they could come back and relieve those of us who stayed on. We knew this was going to be a lengthy search and rescue operation. But the weather was ok and a firefighter - I never got his name - was telling me that people could probably survive down there for a couple of days. But I remember thinking that with all of the fires that were burning, that if we didn’t get to people soon, they would be cremated before we ever got to them.

Then there was a loud rumbling sound again and someone yelled “Number 7 is

coming down” and we ran. Just minutes earlier, officials were monitoring radio traffic and calls from firefighters and civilians trapped in the basement of Building 7. But when the building collapsed, those calls for help ended.

I ran and took cover behind a damaged truck. As the rumbling sound stopped, the sky turned dark. For a moment again there was complete silence and darkness. I wasn’t sure if I had been rendered blind or deaf. I wiped the dust and grit out of my eyes and looked up, searching for a break in the darkness. Soon, rays of light started to shine through. I heard from someone later that the 47-story building only took seconds to collapse.

After that, there seemed to be more coordination. People had shaken off the initial shock and were getting to work doing what they do best. People were checking equipment and setting up packs and getting ready to go on the pile. Someone set up a boot-wash at the entrance to one of the command tents that had been set up. For most of us, we got through those first few days on the pile by doing what we knew best.

As evening fell, it became eerie on the pile. The air became cooler and the night

became filled with the sounds of generators and heavy machinery. I took a moment to stand back and look around. I was amazed at the massive response that had been mounted in such a short period of time. I think nearly every emergency responder in New York City was there! It was one of the most remarkable things I have ever seen - rows and rows and rows of diggers, excavators and trucks. Thousands of responders and volunteers climbing over the pile. Reports were starting to come in about the numbers of people missing. I heard that the FDNY had lost hundreds, many of them senior guys.

So many of us were just itching to get in there and try and rescue people, but we were physically pushed back by the inhospitable wall of fire and debris. It seriously looked like something out of a movie. By later that night, I remember thinking that no one could survive this.

After a few hours I started to notice pains in my feet. The strain from trying to balance myself on the pile of rubble was starting to take its toll. I knew I needed to rest, this was too hostile and dangerous an environment to be in tired.

An EMS unit was about to head back uptown, so I hitched a ride back to the station. But the bridges and tunnels had been closed, so I rang a friend who lives at Central Park North and asked if I could crash there for the night. She sounded sleepy when she answered the phone - I realised that it was nearly 1am. When I arrived, she gave me a towel and some spare clothes that belonged to her boyfriend and told me to shower. I think I stood in that shower until the water ran cold. Hoping that the water would somehow wash away the day. I noticed my hands were cut and bruised, but apart from that I was OK. I sat on the couch and put the TV on as my friend went back to bed. I think I finally fell asleep just before sunrise. The days and weeks after that are a bit of a blur. I finally got in touch with my Mom the following day, but I honestly can't remember when I actually made it back home again. It would have been a few days later. My friend let me crash on her couch until then. She said on the second night, she woke up from her sleep because she heard a strange noise from the lounge. She came out to find me crawling around on the floor in my sleep, trying to get out of the rubble.

The nightmares continued for a while. I would get flashbacks and certain things

(like the song that was playing on the radio that morning as I drove into the city) will send me right back there to the pile. I did better than some of the other guys I know.

Other guys slept at the station in the days after the attacks and at firehouses across Manhattan. We were all driven by the hope that we would find a body among the rubble. Any day that we found a body, or a body part, was a good day. It meant that a family would have some sort of closure.

People had put up 'missing' posters. I got to know the 'missing' on my usual routes to the station, to the subway, to the pile. One day I changed my route and came across a whole new set of 'missing'. I barely made it to the station one day before I lost it - the loss of those other sons, sisters, brothers, friends, children got to me. It was the first time I had cried since 9/11.

In the next six months or so, I lost about 20 pounds. I stopped seeing my friends. It was like I was on red alert, part of me seemed sure that something bad was going to happen at any second. I moved from where I was living, I couldn't keep seeing that skyline every time I drove into the city. And anytime I was downtown, I would avoid looking at the skyline. I

started smoking and probably drank more than I usually did.

But things got better with time. I recognised in myself that things weren't ok. My Mom told me that I needed to get help. But I still didn't go to counselling, even though, looking back, it is pretty clear I had PTSD or something like that.

I decided to tackle it myself, and just gave up the booze and smokes and started training for the NY marathon. I ran it the next year. When I got to the end, I cried. It was the second, and last time that I cried from 9/11.

I met someone about two years after 9/11. She was a nurse and she had been working that day. So she had some idea of what I had seen. It was good to have someone to talk to about things. We had access to support through the EMS, but I didn't feel comfortable talking to a counsellor. We did some debriefing not long after the day, but for me, it just didn't work. I ended up having nightmares afterwards. And I couldn't really talk to the guys about it. The truth is, I felt lucky that I had survived. And it's not OK to be talking like that to people who had lost so much and were really struggling.

Sophie* got an opportunity about six months after we started dating to take a job on the west coast. It seemed like the right move, Mom was back there, and the city just didn't have the same appeal for me anymore. When I made that drive into the city, the drive that used to make me excited to be alive and living in this amazing city, I just felt sad. Seeing the hole in the downtown skyline everyday was just a kick in the guts. So we moved. It was probably the best thing I could have done.

Not long after we moved I noticed that I was getting short of breath really easily. I had been getting bad allergies ever since 9/11 (and I heard through the grapevine that lots of guys were getting itchy eyes and throats and bad allergies) and I luckily found myself a really good doctor who said that I had asthma. I had never had that before in my life. She said it was probably because of all of the crap that I breathed in that day, and all those weeks afterwards working on the pile.

I'm not working in EMS anymore. Not because of 9/11, but just because I needed a change. I am a teacher now, and I make sure that I tell the story of what happened that day. We have a whole generation now who don't know about

9/11, for them it will just be something they read about in history books. I want to make sure they know what really happened and how important it is that we don't forget.

Marian - Wife of 9/11 Firefighter



Marian and Dave Fontana

*Note - part of Marian's story was originally published in The Guardian (1) and has been reproduced here with Marian's permission.

"Never Forget" became the slogan of the 9/11 terrorist attacks, a call for America to unite and remember the nearly 3,000 lives lost. It was plastered on signs, t-shirts and bumper stickers, the silhouette of the twin towers in the background, the words seared into the national psyche. Yet grief,

both national and personal, requires forgetting, and how does one move forward and still remember? For me, it has been a long struggle to find the answers.

My husband was a firefighter who died on 9/11. Recently, I recounted the story of 9/11 to my therapist who shook her head as I told her how I watched my husband, Dave, die on television and about the ensuing chaos that prevailed. I told her about the endless stream of friends, family and firefighters that filled my house, the wakes and funerals, the protest when they tried to close Dave's firehouse, the visits to Ground Zero, the meetings with Rudy Giuliani, Hillary Clinton, Eliot Spitzer and then-Governor George Pataki. There were trips to the White House, to Hawaii, to Ireland to scatter Dave's ashes when parts of him were found. There were the medical examiner meetings where we would create a form to make the multiple identifications more bearable.

In the 16 years since Dave died, I have started a not-for-profit organisation, written two books, dated, volunteered, served on countless boards, met two presidents, been on yoga retreats, bought a house, got engaged, travelled, survived breast cancer, taught writing classes, helped open a museum at Ground Zero,

run races, held fundraisers, performed an intervention, attended meetings, became an aunt, lost an aunt and most of all, raised my son Aidan, alone.

The therapist tells me I have kept myself busy to avoid the pain of Dave's death, to keep distracted from feeling the magnitude of his loss. I nod through my tears, frustrated by how little my sorrow has dissipated through the years.

I met Dave in my first year of college where we both lived in the arts dorms. He was a sculptor who lived upstairs. I was a musician living on the first floor. He told me he loved me by holding up a candy heart that spelled the words in faded red dye. We were married 10 years later, on 11 September 1993, two years after Dave was called to the fire department. He picked the date because he liked to tell people we were married on 9-1-1.

Our son was born three years later and while I knew Dave would be a good father, his love for Aidan surpassed all my expectations. Aidan was ever-present in Dave's arms, on his shoulders or holding his hand. I used to worry Aidan would wake up whenever Dave whispered "I love you" into Aidan's sleeping ear.

As I continued in the overwhelming whirlwind that my life became, I watched my widow friends forging ahead: dating, moving, my best widow friend even getting married a few years ago. At the wedding, I couldn't help but feel the trajectory of my grief was somehow different than everyone else's. With every milestone – the five-year anniversary, Bin Laden's death, the ten-year and fifteen year anniversaries – the press calls come, wanting to gauge where I am and I sense they want me to feel better, to be healed. It is not that I didn't want to be. In fact, I worked hard to try to return to the person I was before.

Before 9/11, I was a comedian. I wrote one-woman shows in which I used my bassoon. I did sketch comedy and improvisation. I played characters in a live comedy soap opera that ran off-Broadway for two years. There is nothing I love more than making people laugh. The irony that I ended up as a "9/11 widow" never escaped me. While I still made jokes after Dave died, humour no longer dominated my thoughts.

When loneliness became too profound, I tried to date, but "Never Forget" felt like a tattoo my dates could see. I made a point not to mention Dave on dates, but I found the process challenging. I felt as insecure

as I did when I was 16, only now I had belly fat and wrinkles. Still, I have faith that life will somehow get easier. I know it is a slow process, but it is happening.

There have been setbacks. When I was diagnosed with breast cancer, I joked with my friends that perhaps I was Hitler in my last life. I have had many "bathrobe days" where I pulled the covers over my head and wallowed in self-pity and tears. Even then, I could never indulge these feelings for too long. After all, I have my son to raise.

Aidan was five when Dave died, and I have marvelled at how his joyful spirit has remained intact in spite of all that has happened. He is smart and kind and wickedly funny, making me laugh, even when I don't want to.

Like his dad, he is a talented artist and deeply sincere, noticing the injustices of the world. He writes songs and plays a mean electric guitar. In the past few years, he has become more politically aware, asking sophisticated questions about Dave's death and the endless politics surrounding 9/11. He called me upset from school the day the news broke that Bin Laden had been killed. He was upset that his friends were excited and

congratulating him. He didn't want to talk about it and said he felt strange, sad. I knew exactly what he meant.

Shortly after that incident, I was invited by the White House to meet President Obama on his visit to Ground Zero. The event was attended by a small group of family leaders, many of whom I hadn't seen in years. Donning my black suit, I felt as if I was attending a reunion of a school I never chose or wanted to go to and as I watched the group leaders still championing their causes, their buttons reading "Never Forget", I realised how far I had come from that place. I just hadn't noticed.

On 9/11, we were living on \$480 a week. Things were tight and we relied on Dave's overtime to get by. It was difficult to reconcile when the checks began arriving in droves within days of 9/11.

I threw them into a drawer on my desk, hiding them under stacks of mail like they were porn.

One of the firefighters who came to install a new couch found a \$10,000 check from the Red Cross laying in the dust on the floor. When Dave started on the job, that amount would have been half a year's pay.

But once the big bucks starting rolling in, I sensed a waning empathy.

I lent money to friends who asked, then felt confused when they quietly slipped out of my life as though embarrassed. I hired a man Dave knew to repair some things around the house and later heard he'd charged me double the market value.

Most of the firefighters stopped visiting altogether.

Holidays have been the hardest.

Not only do memories of Dave take my breath away, but once everyone knew that I had money, deciding what to buy them was daunting. Did I purchase a nice bowl for my sister, like I might have done before 9/11? Or replace the TV that she has been complaining is on the fritz?

I bought my sister the television.

I replaced the rickety stools in my parents kitchen, and tried to resist buying Aidan everything that he wanted. I gave to a dozen charities and bought my eleven in-laws tickets to a Broadway show.

My mother-in-law joined a group of parents who had lost FDNY sons, and many alienated their daughters-in-law with jealousy and resentment over the funds

the widows have received. When she heard about a fund for fallen 9/11 firefighters from the sale of a postal stamp, she commented that she would finally “get what’s due me.” The next week, I got a letter from her with a mortgage bill for her Winnebago, insisting she would have to sell it if I didn’t give her the money.

I felt emotionally blackmailed.

Angry.

But I still couldn’t bear to cause the woman further pain.

So I wrote the check.

The hole that Dave has left in both our hearts is as wide as the ocean, and nothing can bring him back to us, not even a dollar a tear.

I am not ungrateful for the money, but in a way it’s been as much of a burden as a blessing.

With loss, there is no "a-ha" moment, no door you walk through leaving your sadness behind. Grief, like life itself, is transient and ever-changing with only time guiding its direction.

I, of course, will never forget.

How can one ever forget the love of your life?

But Dave exists in my heart in a different way now, as a sort of spiritual guide, a loving presence reminding me that in spite of life's many challenges, I am truly fortunate.



Lieutenant David Fontana, Squad 1

Roger* - Recovery Worker

Im 62 years old. I was 46 on the 11 of September, 2001 I was working at a large warehouse in the city when the twin towers of the World Trade Center went down. When the towers fell, I went straight down. I knew I would be able to help.

There are a many things that I can’t do now, not because of my age, but mainly because of what happened that day, and all the time I spent in the eight months following as part of the biggest clean-up in US history.

I can't play ball with my grandkids. I can't run. I go to a park, but I can't do anything. I am tired all of the time. I am not much of a father. I don't have the energy to really do much by way of family activities.

I've put on about 110 pounds, mostly from the steroids I'm on for my breathing problems. I'm on oxygen. I have a wheelchair. I can walk from the house to the car, maybe into my doctors surgery, but if I need to go further, like when I go shopping with my wife, then I have to use my chair.

Breathing in all of those toxins at the pile has crippled me. I take 29 pills twice a day to stay alive, but I'm not the only one. And there are others much worse off than me - I am one of the lucky ones. I am still alive. So many of my colleagues who worked their guts out on the pile searching for bodies are now dead themselves, further victims of the terrorist attacks that just keep killing.

One of my friends, who was a 9/11 recovery worker, he died in 2004. Another one died in 2007. A few died from 2010 until 2016. Another two died this year. It just keeps getting worse. John Feal is putting the names of these guys on the wall at the Responders Remembered Park,

and the number of names on the wall will end up being more than the number of names who died on the day. Not many people realise that. I think most people kind of stopped thinking about 9/11 after the towers fell, but I can't. I still live with the fallout everyday.

When we got to the World Trade Center on 9/11, most of the FDNY and police bosses were killed, and there was really nobody in charge. There was debris piled up, fires and smoke, body parts everywhere. It was really a mess. I ended up being at the site for nearly 300 days. Around 15-20 hours everyday. But I wasn't the only one, lots of guys did the same thing, never missing a day, doing their duty. There wasn't one guy that didn't stay until the end. Our motto was 'until the last rock was turned.' We were there until the last day.

There were many of us that were spending most of our time at the pile. We would sleep wherever we could, sometimes on cots around the site, sometimes on a pew at nearby St Paul's Chapel. Volunteers would feed us, massage our weary bodies, and provide an ear when we needed to chat. Most of us would only manage to grab an hour or two of sleep before heading back out on to the pile. I was lucky, I was single then. But there were

guys there that were sacrificing time with their own families. And it cost some of them big time. But it was hard, you just felt like you needed to be there, that there was a job to be done and we all felt bad if we left the site.

And we weren't really using masks to protect ourselves. When the environmental guys were on the site and would come up and talk to us, I asked them whether the masks really did anything, because in two minutes the inserts would be dead and there was no chance that we were going to stop what we were doing and change them every five minutes. That just wasn't going to happen. And the paper masks were useless.

It annoys me when I hear people say that we are all sick because we didn't use the masks properly. It wasn't that we didn't use them, it's just that they didn't provide us with masks that were actually useful given the situation.

So yeah, I breathed in a lot of toxic crap.

We all did.

About six years after 9/11, I moved out of New York. I just needed to get away from the city to try and move on. It was hard being in New York and seeing the big

gaping wound downtown and not remember. The smell was horrible, and I felt sorry for the emergency guys who were crawling all over the debris, having to find body parts. Some things just stick in your mind and you can't forget them. The smell is one of them. I was there when they found a flight attendant from one of the hijacked flights, and I think about that all of the time. And I remember when we found part of a firefighter, that was tough. They were easier to spot in the rubble because of their uniforms.

In the years since 9/11 I have been diagnosed with PTSD and sarcoidosis. My breathing is bad, but luckily I don't have cancer - yet.

When people think about the response to 9/11, they really only think about the emergency responders, the firefighters, the police. Don't get me wrong, those guys did a great job. But we were there too. People don't realise how many recovery workers were involved. There would have been tens of thousands of us there over the eight months that it took to clear that site. So I guess, if I can send out any message, it's that - don't forget that we were there and what we did. Don't forget that we are getting sick and dying too.

John Napolitano - Father of FDNY Firefighter

I am the father of Lt. John P. Napolitano, FDNY Rescue 2, who also served the people of Long Island with the Lakeland Fire Department for 16 of his short 33 years.

He started as a junior volunteer, held every rank, including chief of the department, and then one of their commissioners. As we approach the anniversary of that day in September, for myself and I would guess many others - especially those of us that lost loved ones, those who were rescued by our firefighters and police officers, and those who participated in the search - those days of September, we live that day, each and every day of our lives.

For me, the World Trade Center, no matter where I am, is a place that I never left - perhaps that is the way it should be.

My son was an excellent firefighter, but before he became a hero to America, he was a hero to us, his family and friends that loved him. He was a trusted and loyal friend, a devoted husband and father, a caring "big" brother to his two sisters and a loving son to his mother and I.

He made being a father the most wonderful adventure and he would do anything for me.

When I heard about the attacks that day at the World Trade Center, I didn't know that my son was there. I thought that my son was at home but I knew that he would be responding so I called his home, but kept on getting a busy signal. I wanted to tell him to be careful, don't take any risks, don't be a hero. My son loved me, and I feel his love every second of every day, but I know that he would have never listened to me.

I had some time as a NYC cop and I got to the World Trade Center on the morning of 9/12/2001 to search for my son. With me was my best friend from childhood, Lenny Crisci. He retired from the NYPD, we grew up on the same street in Brooklyn, five houses from each other. We were searching also for his brother John from the FDNY and three of my son's friends from our neighbourhood - one police officer, and two firefighters. My son John went to school with two of them and all of them volunteered their time with the Lakeland Fire Department.

Lenny and I were overwhelmed by what we saw, and like many that were there will

taste the ashes forever. I still see myself climbing on the debris, not knowing where to look, but looking through twisted steel and calling my sons name, and hoping to hear him call back to me.. "I'm here Dad!...I'm here!!.." I would try so hard to hear that.. and when it didn't happen, I would cry... maybe if I yelled louder..



Lenny Crisci (left) and John Napolitano *Photo Credit: Steven Sunshine*

Lenny and I would ask the firefighters that were there if they knew anything about my son, or Lenny's brother, or my son's friends...but they could only shake their heads, and look down...the pain in our eyes, only adding to the pain in theirs. At some point at a triage area, I wrote with my finger in the ash on a table a message to my son.. I wrote... "Rescue 2 John Napolitano I'm here and I love you Dad" ... The firefighters treated my message to my son as a shrine, and some have told me that whenever they would collapse near it

from exhaustion, that they would look at it, and put their helmets back on and go back to the "Pile". In the days after I wrote to my son, firefighters and rescue workers from all over wrote messages back to me to let me know that they were there, and to not give up "hope".

That day on Sept 12 near a fire truck, under a steel beam, Lenny and I found the body of a young girl. She was wearing a sundress, and covered with gray ash... this was somebody's "little girl". Somewhere, people were worried about her and missing her. My heart was so broken. She didn't deserve to die like this. And I didn't want her to be alone. Lenny and I made a cross from scraps of wood and we stood it near her and said a prayer for her. I will never know her name and her family will never know that someone prayed for and loved their baby, but after we alerted nearby rescue workers and moved on I hoped that if my son was gone, and found by someone, that they would pray for him, and even if for a little while, love my baby. I felt like my son was beside me telling me.. "don't cry Dad, she is no longer there, she is with me now, and she is alright..and so am I".

The days go by and everyday that Lenny and I go back to the Trade Center, it is with

renewed hope...today I will find my son, I will wipe the dirt from his face and tell him.. "your wife and daughters are missing you..and your mother is worried" ..and I will bring him home.

Two friends standing on the steel, one looking for a brother, the other looking for a son, and we look up at the stars, and we know that they are gone. That was the hardest day leaving "the pit". Outside the police barriers were still so many people praying and giving us their support, they cheered as they saw Lenny and I leaving, and I thought to myself "We are not the heroes..the heroes are still back there..and some will never leave", and I bowed my head and pulled my helmet down and put on my sunglasses. I didn't want anyone to see the tears.

I had the very best son...and for 33 years he gave me the most wonderful adventure.

It has been said that it is not the destination that matters but the journey, and although John reached his destination too soon and his journey was much too short, John's journey was magnificent and watching the chapters in my son's life, living his dream to help others, being a devoted husband and father, a loving and caring brother, a trusted and good friend to

so many, and to his mother and me, the very best son... he has made my journey magnificent.



John Napolitano's message to his son, left in the ash on a table near a 9/11 triage area.

Jack Delaney, Director of EMS, New York Presbyterian Hospital

*Note - part of Jack's story was originally published in the Journal of Emergency Services (2) and has been reproduced here with Jack's permission.

On 9/11, I was the Director of Emergency Services at New York Presbyterian Hospital (NYPH). When I picked up my coffee that morning on my way into the office, nobody had any way of knowing that this day would bring unimaginable terror on a scale not seen before. I went into my office at 6.30am not knowing that by the end of that day, my life - and the

lives of many thousands - would be changed, forever. There was nothing to suggest that this day would be anything other than a regular day. That morning, I did what I always did: I stood out on the ambulance deck with the EMT's and paramedics enjoying the magnificent view of the East River, watching the tugboats. It was an incredibly beautiful day.

Locking the office door behind me, I set about doing those things I always did. But before the usual day could start, the phones started ringing off the hook, and somebody was pounding on my door, people were screaming at me. I went out into the communications centre. A TV had been installed for the midnight shift. It was on. I stood there looking at pictures of one of the World Trade Center towers with smoke billowing out. Dispatch was saying there were reports of a small aircraft gone into the tower. We all assumed it was probably a pilot who had a heart attack or something, but it was a pretty sizeable fire. It had obviously just happened. I told my staff to prepare the emergency vehicles and make sure they were stocked with disaster supplies.

The FDNY called us for additional units. "Tons of injured people. We need all available units." Two of our guys, Keith

Fairben and Mario Santoro, had arrived at the tower and got on their private radio to dispatch: "We need help. So many people."

Just as I was leaving to go to the scene, the TV was reporting that it was not a small plane that had flown into the tower but a large commercial plane. An intentional act, no accident. I called the Vice President of the hospital and told him to put the disaster plan into effect. NYPH is one of two burn centres in the region, and a well regarded trauma centre.

We sent 23 EMT's and paramedics. We parked right in front of the South Tower on West Street. Everybody was trying to get away from the building. We were probably 1,500 feet away from the building, we had to be careful because of the people who were jumping out of the buildings. They were jumping by themselves and in groups of two or three, holding hands. It was an eerie, surreal feeling, watching them jump. They knew there was no other way out. I stopped to look at a guy trying to scale down the outside of the building between the columns that paralleled the windows. He was not ready to die. He was putting all his might, his concentration, into getting down. He got maybe 35 feet and he slipped and fell backwards.

I was staring at the jumpers, studying them as they came down, because I was worried they would land on one of my guys and kill them. As the jumpers came down they landed on the canopy leading to the lobby of the South Tower and they bounced off. The canopy was strong enough to withstand the weight without breaking. My thought process then became to get close enough to the tower and have crews run in under the protection of the canopy.

Because of the debris coming down, some of our units went and parked under the pedestrian South Bridge. That bridge actually is what saved the majority of us. I think we would have lost a lot more if we weren't near it.

We started walking toward the tower. It was very slow going because of all the debris and body parts - hands, feet etc. We were all in auto mode. We were trying to walk with respect and avoid walking on the bodies and the body parts, but eventually the sheer amount of body parts were too close together and we were inadvertently stepping on them.

I walked to the Command Post to get our orders. I was walking back down to the group to tell them what our assignment

was, and an ESU cop standing right in front of the South Tower started screaming, "Everybody run for your lives! It's coming down!"

When the ESU cop yelled, you heard a "pop, pop, pop." I looked up to where I thought the noise was coming from. That's when you could see the debris starting to break away at one location. You could see the top of the tower hanging over, not perpendicular with the rest of the building.

We just looked around and saw what we could dive under or run for. Everybody scattered in different directions. Then the tower came down. As we ran, a tremendous force of hot air came at our backs and pushed us further away. Debris started to fall. First small chunks of rock and concrete. The debris started getting bigger. A HVAC duct came down and landed in front of me. I kept running.

Then steel beams started coming down. I was running with another guy. Running between us was a young woman. As we ran, a steel beam cut off her head.

I realised we weren't beating this. I figured if I could dive under some stairs - could get into a niche - that major pieces would be deflected. Diving for cover, I was flying

through the air and was carried, gliding, for about 100 feet. A bunch of us landed together. We lay there as the debris continued to land on and around us.

I was laying there thinking about my children. As I lay there, I realised my heart rate was down to high 30's, low 40's. I was not breathing. I was at peace, waiting to die. But I wasn't fading away. Wiggling the fingers on one hand, then the other. Then wiggling my toes. It was so surreal. I remember thinking: "This is so weird. I'm not fading away. I think I'm wiggling my hands and my toes."

All of a sudden my heart rate shot up: "oh crap. I'm not dying!" I went to take a breath. I couldn't breathe. Something was stopping me breathing. I don't know why, but I lifted my head up, and took a breath - if you want to call it that. I realised I was buried in six to eight inches of concrete dust face down. I have no idea how long I was buried. The doctors say I was knocked unconscious, but I don't believe I was, because I was aware of everything.

I unburied myself, and managed to crawl around on my hands and knees. I could not stand up - and you couldn't see your hand in front of your face. It was so extraordinarily difficult to breathe. I was

able to get to my feet in a crouching position. As I managed to get further on I was able to see a little. I got to the World Financial Center. I saw a broken window. My thought process as I stood there was to get through the window away from the smoke. If I had gone just three more steps I would have fallen down 25 feet on the sub-basement stairs.

As it was, there was a maintenance man at the bottom of the stairs, and he opened the door and myself and some cops went in.

There was a canteen with a couple of gentlemen behind the counter, who had absolutely no clue what was happening outside. They had bottled water, so we grabbed some and we tried to clean our mouths out. My mouth was full of concrete dust, and I started to gag. Several of the guys vomited. I couldn't hear, my ears were full of concrete. Our eyes were burning. We couldn't see where we were going. Every time you opened your eyes, you couldn't see what was going on.

We made it down to a small deli.

We looked for towels so we could put them over our faces. Unfortunately, with modern technology, there were no regular

towels—just disposable napkins. So we took off to go back and see if we could find the rest of our coworkers. We went back to where the building came down but couldn't find any of our people. Then everybody started yelling that the second building was coming down. So we took off again. Windows kept breaking. We ran by the Chase Manhattan Bank. I figured, "Bank, secure. Go in there." We dove into the bank.

You could hear the ground rumbling and the North Tower came down. The bank started to fill up with dust and smoke. So we went in deeper, into the back rooms of the bank. I shut one of the doors behind us to keep the smoke out. I told Mike Mokson to stand under a doorframe, and we stood there as the building came down. The entire building we were in was shaking. The ceiling tiles were coming down. The light fixtures were popping out of the ceiling. I actually thought the building we were in was about to collapse. The power went out, but the bank's emergency lights went on. When we tried to get out of the bank, all of the doors that I had closed to keep us free from the debris were locked. We went around some corridors, found an open door and exited the bank.

We walked down toward the New York

Harbour. Everybody seemed to be migrating down toward the water zone. Police boats had started to congregate at that location. I ran into a couple of my staff members and FDNY EMS Deputy Chief Charlie Wells. I looked at Charlie; Charlie looked at me, and we hugged one another. Then we started gathering our staff.

I saw a lot of civilians down at the water. People didn't know what had hit them. There was no sense of time down there. They were walking along asking for directions. We were walking around there looking like snowmen. Literally, the only thing you saw of people was the red around their eyes.

Back at Ground Zero, I could intermittently get through on my Nextel to keep in touch with my dispatcher, do roll calls and figure out who was missing. I had been out of radio contact for more than 90 minutes until then. It took about three hours to account for 21 of our personnel.

We did radio roll calls, trying to locate the different staff members. There was a period of time where some of us were not in radio contact. We were hoping that our two missing members, Keith Fairben and Mario Santoro, were just out of radio contact. They were last seen working near

the South Tower. Newsweek has a photograph of them treating patients there. The last photograph taken of them was about 12 minutes before the building came down. Keith was on the cell phone with his dad just minutes before the South Tower collapsed. His dad called him, and he said to his father, "Dad, I'm really busy. There's a lot of people here that need my help. I have to go."

Mario and Keith weren't responding over our private radios. The fire department was calling wondering why they weren't responding to the fire department dispatchers. So it was a matter of did they lose their way, or did something happen?

My personal frustration is that we went down there with the expectation of saving a lot of lives. In actuality, for a period of time, we were concentrating on saving our own lives. Anybody we came across, we helped. But we were retreating instead of going in.

I eventually ended up being taken to NYPH. When we got there, I got out by myself and was met at the ambulance deck by the Nurse Manager. All my guys were waiting at the ER entrance. I went to my office where a couple of nurses were waiting for me. I took off all my clothes and

put them into a big garbage bag they were holding out. While in the shower, I realised I now had no clothes, so I better be nice to the nurses! They found me something to wear and I went to the ER and laid on a stretcher. I had six security guys placed around me to guard me, and then all the different doctors came: Burn doctors (the hair on half my head was badly singed,) Ophthalmology for my eyes, ENT for my ears, nose and throat, and at least eight others from different specialties.

I couldn't hear, and the doctors were pulling out all sorts of debris from my ears and my nose. They put me on oxygen. They wanted to do a blood gas on me. My response? You guys do it first, then maybe we'll talk. No blood gases were done!

My boss came in, then the hospital President. I told them I was going to leave. They told me they wanted to keep me on oxygen. My reply? "Dude, I'm out of here. I've got two families to call."

The President turned to the ER attending and told him: "We have to let him go, because if we don't, he'll leave anyway, and then never come back. Letting him go, means that he may come back if he needs to."

By this time it was about 7:30pm and I knew I had to call Ken and Diane Fairben, and Mario's wife. With the security guards stationed outside my office, I knew I had to tell these families that we lost radio contact with Keith and Mario when the first tower came down. I had to tell Ken and Diane "I lost your son," and Mario's wife "I lost your husband." Turns out that Keith's mom and dad had called dispatch earlier in the day, and had already been told about the loss of radio contact.

After I had called both families, I then returned to Ground Zero. Because we absolutely respected the dead lying all around, the search and rescue was very time consuming. I had 10 people with me and we did a complete tour of the WTC - we went to the last known location of Keith and Mario, the area of the South Tower lobby, and were still continually calling their radio and cell phones. Nothing.

Silence.

I didn't go home for a week and a half. My kids, [ages 20, 13, 9], came to the hospital to see me the Thursday after the event. The following Sunday, I snuck out of the hospital and went home. Sunday tradition: Go to mass and then Dad cooks breakfast. I was out of here for about three and a half

hours. Throughout the night of the 11th and throughout the following days, there were a lot of rumours going around about this person being found, that person being found. I was even listed among the missing for a while. There was a tremendous amount of misinformation throughout the EMS, police and fire communities because you were dealing with a lot of emotion.

On the 12th, I gathered the staff because it was getting to a point where if I left the premises, people were saying, "He got notification." I told them that I made a commitment to the families to stop the misinformation. I told the families I would tell them exactly what was going on at all times because we had been told - unofficially - five or six times within the first 24 to 36 hours that they had found their bodies. That was an emotional roller coaster.

After that, I pulled the staff together, and we had impromptu staff meetings about three or four times a day. I promised them that I would tell them everything, honestly. I told them I had agreed with the families that I was not going to notify them until I personally verified that it was actually their loved one that had been recovered. I also told the staff that I was not going to share

with them the discovery before I shared it with the families. That was the only rule I was not going to break.

We lost a total of nine vehicles: seven ambulances and two command vehicles. When I was being treated in the emergency room, the President of the hospital came and spoke to me. He said, "Call and do a verbal order, and we'll replace everything you lost."

We had three or four staff members who wanted to take flyers of Keith and Mario around to the hospitals in Jersey and throughout New York. They coordinated that among themselves. This was something they felt they wanted to do. They wanted to make sure their coworkers weren't laying in some ICU on a respirator, not able to speak. They did that on day two, three and four. We gave them the vehicles to take.

The lack of recognition of EMS efforts by the news media and others affected the staff. I try to get them to put everything into perspective. Had the towers not collapsed, we probably would have gotten a lot more recognition. Mostly, I think people are upset about the lack of recognition for those that have fallen.

After 9/11, I tried to avoid the people in my community at all costs. When I wasn't physically at Ground Zero (and I was there for 12 weeks after) I didn't want to be there mentally. Human nature being what it is, anybody from the town who saw me, immediately wanted to talk about it. I didn't want to talk about it, so it was better to avoid them. I was still struggling with the fact that I was almost killed, and that I had lost four of my guys. Apart from Keith and Mario, we also lost my guys Kevin Pfeifer and Jimmy Pappageorge, who had been working for the Fire Department at the time of 9/11.

In the immediate aftermath of that Tuesday, I put psychiatrists on call 24/7 for all my staff. I held briefings twice a day, and we had counselling sessions for everybody - some open, and some closed. My department policies, that I was able to implement, were different to the general NYPH policies. We had provisions put in place so that my guys were provided psychological help through "Team Leaders." Prior to 9/11, the Police and Fire Dept were very territorial, but that all changed. Now we were all focused only on doing the honourable thing, with no regard for whose territory was whose. We were in this as one, and we worked as one.

What did I learn from all of this?

Professionally, I had already been teaching Emergency Management classes. I like to share knowledge, and 9/11 gave me more tools for the toolbox. In '93 (when I responded to the WTC bombing) we had seen the face of terrorism, and yet we had not learned enough to prevent a 9/11. Because of that day, the knowledge we gained augmented my knowledge related to terrorism and gave me more information to share with my students. Knowledge is power, and we know this is going to happen again.

What am I most proud of from 9/11?

My kids.

I could not have done what I did - gone through what I did - without their love and support. Very powerful. I can't put into words how important that was.

Irreplaceable. I lost 56 buddies that day, and my kids chose to go to the funerals with me, standing beside me. If I hadn't had that, I don't know how I would have survived the emotional roller coaster.

I retired on the 8th of August, 2006. Prior to that, I had continued working and kept up with physical therapy. I had shoulder surgery for my right shoulder which I blew

out on 9/11. That surgery didn't go exactly as planned. On 9/11 I sustained all sorts of injuries, long term health issues, and this surgery was supposed to fix some of that, so I could continue working. Didn't happen.

Yes, I have PTSD, but no, I don't allow it to affect me on a day to day basis. I won't go there.

I was emotionally devastated at leaving my job. I had things I still wanted to complete. However, because I was in constant distress and physical pain, that took my mind away from the loss of my professional life.

There was, and is, a silver lining. I always look for the silver lining.

Prior to retirement I was working 12 - 16 hour days. Forced retirement gave me the opportunity to be with my kids. Prior to that, I used to do online shopping. Now I actually go shopping at the stores, which gets me out of the house. I keep myself busy, because you cannot go from 16 hour days to a standstill. I walk every day for physical activity, and I go to the gym to exercise and maintain range of motion in my right shoulder. In the wintertime cold, the pain is excruciating, but the rest of the year it is tolerable.

My three kids today? Prior to 9/11 my oldest son had always wanted to be a paramedic. He just saw the glamorous side of it. I told him “it's a rough go.” Post 9/11 I said “you have now seen what it is really like. If you still want to do it, go.”

He did.

The second thing I am most proud of that day was the tremendous support from my staff. They thought I was supporting them. I was always seen as the rock, never showing emotion, and I don't think they realise how much they supported me.

My biggest regret? Not having the foresight to prevent the loss of my guys.



Jack Delaney

Bonnie Giebfried - EMT



Bonnie Giebfried - former Flushing Hospital Medical Center EMT

*Note - part of Bonnie's story was originally published on CBS News (3) and has been reproduced here with Bonnie's permission.

I remember desperately gasping for breath on the morning of Sept. 11, 2001. I was an emergency medical technician and along with two dozen others, I had just been buried alive in the World Trade Center.

A fireball had sucked a mountain of smouldering debris on top of us. Entombed in rubble, we were unable to break the window panes that led to oxygen outside.

There was no way out. It got very quiet. You could hear everybody breathing and the breaths got less and less. At that point, I heard my heart beat and I just closed my eyes and resigned myself that I was gonna die right there.

Moments later, I heard a pop, pop, pop. One of the trapped police officers had managed to get to his service revolver and shoot out the window of the alcove. We broke through two thick panes of glass and escaped.

My partner, Jennifer Beckham, and I emerged into a black abyss. A dark you've never seen before. We had no idea that the South Tower of the World Trade Center had collapsed.

As we stumbled through the darkness, we were breathing in a toxic mixture of pulverised metal, asbestos and unimaginable debris.

Debris and paper swirled around us in the streets; cars and trees were on fire; human limbs were strewn on the ground. I could hear bodies explode like gunshots as they hit the ground.

It was a war zone.

About 30 minutes after being buried in the rubble, the ground started trembling again. We ran into a parking garage and again there was a deluge of debris.

We were buried alive. Again.

We managed to escape from under the rubble for a second time.

Over the next few hours I had problems with my asthma - it was really difficult to breathe. At the end of the day I ended up in New Jersey at Bayonne Hospital.

Watching the TV at the hospital, I could see the ambulance I had driven that morning, buried and crushed. Close to midnight, I was transported to Jamaica Hospital Medical Center.

I went back to work three months after the attacks, but I had to retire in April 2004 because of my deteriorating health. I lost my pension because I fell six months shy of qualifying.

Six months.

I lost my medical and prescription drug benefits because the union cancelled them.

EMS is seen as the band-aid people, but I'll tell you, on 9/11, they weren't yelling for

the fire department or the police. They were yelling for medics. It's scary because people don't realise we put our lives on the line very single day.

Now I live on Long Island with my grandmother and I'm sick from my exposure to the toxic air at Ground Zero. I struggle to breathe — and to be heard. I have asthma, gastrointestinal reflux disease, an hiatal hernia, damaged vocal chords, nerve damage, sciatica, post-traumatic stress disorder, and a surgically reconstructed wrist.

I'm a 52-year-old woman and I feel like I'm 90.

Like many other 9/11 victims, I have fought a losing battle with New York City bureaucracy to get treatment for my physical, emotional and mental trauma. That toll began mounting just moments before I was buried alive by the South Tower's avalanche of debris. My partner and I had helped three women out of the South Tower's lobby, carrying one physically disabled woman to safety on a stretcher.

After 9/11, there wasn't the same funding support for EMTs like there was for firefighters and police officers, so I had to pay for the majority of my medical

expenses. Before 9/11, I took two medications. Afterwards I was taking 22. I don't want a medal. Just give me the treatment I need. I was a healthy, active person before 9/11. Then I ended up with over \$60,000 in outstanding medical bills. We went from heroes to zeros. That day we were the cavalry for a war we didn't sign up for, but we stayed and did our jobs. We didn't run away. But they left us in the dust because it's about money.

Had they given us treatment from the get-go, a great majority of people would not be dying a painful, slow death. We're walking time-bombs - our time is limited. And 9/11 and the exposure to toxins and not getting treated in time have shortened our lives.



EMT Bonnie Giebfried with her 9/11 uniform

The emotional stuff is tough to. I have PTSD. I still have flashbacks and anxiety attacks and over the years I have watched

responders families torn apart by drinking, divorce, and slow deaths.

I knew 40 people who were killed on Sept. 11. Tim Keller was one of my best friends. He was an EMT at 9/11. He died from 9/11-related illness.

The impact on us as EMT's has gone largely ignored, but I won't stay silent. I joined the board of "Unsung Heroes Helping Heroes", an organisation devoted to helping Ground Zero rescue workers get the health treatment they need. That helped to alter my focus. Then I was ordained as an inter-faith minister and had the honour of presiding over Tim's wake.

I don't return to Ground Zero for the anniversaries. I vowed to stay away from the city where I lost more than just colleagues.

Part of me died that day. I will never retrieve that part. It's gone.

* Some names have been changed to protect the identity of responders and their colleagues.

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10

Working towards wellness

Lessons for emergency services from 9/11 responders

Wellness is typically divided into two components: physical and psychosocial. The physical component often deals with nutrition, exercise, illness and injury. The psychosocial component often involves stress factors and mental illness.

Healthy lifestyles that promote wellness allow first responders to perform more effectively and efficiently. In light of the importance of responder wellness, programs aimed at maintaining health and wellbeing have become commonplace around the world. Wellness programs are likely to keep first responders healthier, reduce absenteeism, lower the incidence of injury and long-term illness, and help address issues related to stress (1).

Common key components of wellness programs include physical and medical evaluations, fitness programs, behavioural modification, and psychological support (2).

The Emergency Medical Services Workforce Agenda for the Future identifies “health, safety, and wellness of the EMS workforce” as being critical for developing a thriving, achieving workforce (3). As part of their routine work, first responders experience complex exposures to a succession of challenging events, resulting in concurrent experiences of both physical and psychological trauma.

The routine activities associated with work as first responders have been directly linked to increased risk of developing depression, suicidal ideation, anxiety, post traumatic stress disorder (PTSD), substance-use disorders, as well as cardiovascular illness, musculoskeletal problems, fatigue, and burnout (4)(5)(6)(7).

This increased risk of health impairment may also be due in part to operational factors, such as perceived lack of job autonomy and control, incompatible workplace culture, and work overload.

(7)(8). Shiftwork, fatigue, and burnout have also been linked to health problems in paramedics and EMT's (9)(10). The length of time employed also impacts on health, with the risk of developing depression, anxiety and stress increasing the longer someone has been a first responder (11). Levels of PTSD amongst paramedics and EMTs appear to be consistently above the rates for the general population (11)(12). This rate increases again for paramedics and EMTs who have responded to major disasters such as terrorist attacks (13).

There is a wealth of information supporting the positive returns of health and wellbeing programs directed at worker lifestyle and general health. There also exists comprehensive advice on how to plan for, design, implement and manage organisation-specific programs. Environmental programs comprising physical safety initiatives and interventions geared toward ensuring safe workplaces are reasonably well addressed in the literature. However, the volume of literature reporting on programs targeting paramedic wellness is scant and there is little evidence of what wellness programs need to address to be effective.

Recent Australian research has reviewed the lessons from 9/11 responders and

identified seven key areas for wellness that emergency services should consider when developing health and wellbeing strategies and programs. (14)

Lesson One: Understand the workforce

“They just don't really understand what is going on with us.”

It is important for emergency services to have a good understanding of the baseline wellness of their staff. This includes understanding the range of influences on wellness and any pressing needs of the responders and their families. This baseline could be determined through the use of a survey of all staff within an organisation or through targeted qualitative methods such as focus groups or interviews with a representative sample of the workforce.

Lesson Two: Engage with staff

“They never actually asked us what support we needed.”

Wellness programs need to be based on the actual needs of staff. What do they want? How do they want it delivered? In what format do they want it delivered, whether it be face to face or electronically and how often do they want it delivered?

Who do they want to deliver it? Should it be compulsory? What should it include? It is important for the emergency services to listen to the needs of their staff, to understand what they are being told, to be seen as being responsive and to provide what is actually needed to improve wellness. Wellness programs should be delivered both face to face and electronically, and should be delivered by a mix of their trained peers and qualified psychologists. It would be useful for at least one wellness session to be compulsory for staff every twelve months, to ensure that evolving needs of staff are addressed and responders have a regular outlet to discuss their wellness concerns in a “safe space”. Additional electronic or online wellness sessions should also be available year-round for staff to access as needed. These sessions should focus on topics like communication, self-care and recognising signs of “un-wellness” in themselves and their colleagues.

Lesson Three: Avoid silo approaches to physical and psychosocial health

“I am sick in the body and I am sick in the head.”

Successful wellness programs will address both the physical and psychosocial needs

of staff simultaneously. Traditional approaches have tended to operate in silos, addressing physical health needs in one domain, and the psychosocial needs in another. Emergency services should avoid making staff attendance compulsory for each of these needs in a silo approach by bringing together the support services required into one, easy to access, responsive wellness system.

Lesson Four: Ongoing professional and personal development

“I need something else to focus on.”

Effective wellness programs will provide opportunities for responders to expand both their professional and personal development. It is important for emergency services to engage with staff to identify a range of professional development opportunities that would be of interest and benefit to their staff. Professional development opportunities around leadership, communication, building personal resilience and mental health first aid would be welcomed.

Lesson Five: Provide the tools for peer-to-peer communication

“I don’t know how to talk about it.”

9/11 responders often highlight that they were amongst the first people to notice changes in their colleague's wellness. However, they didn't feel equipped to engage in a conversation about health, especially around issues of mental health. Helping responders to start - and exit - these conversations and providing them with some resources for supporting their friends could help save lives.

“John* started changing, it was about a year or so after the attacks. He just seemed angrier. Little things on the job would just get to him more than they used to. He used to really care what he looked like, we used to rib him about how long he took doing his hair! But he just didn't seem to care anymore. He started turning up to work late and I could smell the booze on him. I wanted to say something to him, but I was scared I would set him off you know. I didn't want to be the thing that set him over the edge. So I didn't say anything. I heard a few years later that he got diagnosed with PTSD and left the service. I don't know what he is doing now”. (Male, 9/11 EMT)

Lesson Six: Include family members in wellness initiatives

“It impacts my family too.”

9/11 responders often highlight that their family members were “left out of the loop” when it came to the provision of psychosocial support. Wellness programs need to be inclusive and provide opportunities for families to access support together, and also individually. Successful initiatives in the United States following 9/11 included family gym memberships, cooking classes, discounted home food deliveries, weekend camps for children, support groups for spouses, and family events held by the services to foster engagement and a feeling of belonging.

Lesson Seven : Ongoing support for those who have left the service

“Don't forget about us.”

Many 9/11 responders can no longer work. For many, being a first responder is all they know, and the job has been their life. What do they do once they leave the service? Many feel like they were cast aside and forgotten about – this feeling of abandonment exacerbated the impacts on wellness. Emergency services should find ways to provide some form of ongoing support to staff who are in the process of retiring or have recently retired. Retired staff could also be involved in the running

of support programs and share their own lessons.

We can take some important lessons from the lived experiences of the 9/11 first responders.

We are making some great advances in regards to working towards first responder wellness, but we need to ensure that we are actively engaging with the emergency service workforce to understand their ongoing and developing needs and concerns.

* Names have been changed to protect the identity of research participants and their colleagues.

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11

A personal reflection

Dr Erin Smith

I stood at the still-gaping wound in the downtown New York landscape in 2003. Fences still surrounded the World Trade Center site and there were viewing platforms from where you could peer down into the excavated site where the twin towers had once soared into the sky. Wandering along to St Paul's Chapel, I found a makeshift memorial inside. Hundreds of "missing" posters. Letters of hope. Banners and posters sent in from school children. I took my turn lighting a candle, then I sat down on a pew in this beautiful historical church.

And I cried.

I shed tears for the overwhelming loss of life. For all of the families who lost so much.

As I write this now, tears fall again, just remembering those emotions.

As a then 27-year old, I was well along my way to my chosen career as an epidemiologist. I had dreams of moving to the United States and working with the FBI's Epidemic Intelligence Unit. But something about this had impacted me so profoundly, that I felt some sort of calling to change my career focus. The world was now well awake to the threat of terrorism, and SARS had reminded us of the potential devastation of naturally emerging threats. So I decided, on that trip to New York, to try and do something to help improve our understanding of how best to respond to disasters.

I was working with paramedics at the time, so it seemed natural to pursue this new interest from the prehospital perspective. Taking the lessons learned from the response to 9/11, could we better prepare our paramedics to respond to these kinds of incidents?

But I soon realised that the operational and logistical aspect was only one component of effective response. We needed to understand whether our paramedics were willing and able to perform their roles when disaster strikes.

So it was with this topic in mind that I returned to New York in 2005. Sitting at home one night, I was catching a train to Boston the next day to attend a course at Harvard University. I was flicking through TV channels when I came across Marian Fontana reading from her book. I sat there, listening to her read an excerpt in which she tries to soothe her distressed five-year old Aidan who wants to go to heaven to see his Daddy. I sat there listening to Marian, and then went straight out to the closest book store and purchased her memoir: *A Widow's Walk*.

Immersed in her words as I travelled between New York and Boston, a stranger approached me with a tissue and asked if I was OK. I realised I was crying. Not lovely little lady tears, but big ugly crying. I finished the book the next day. For days I kept reflecting on Marian's experience, her story was so emotionally raw and honest. As devastated as I was by Marian's loss, I yearned for a love like the one she had lived with Dave. I had never been so

moved by a book before. So I decided to contact her to tell her how much her book had affected me. Never thinking I would get a reply, one dropped through the next day. We organised to meet up in Brooklyn, in a little cafe not far from Marian's Park Slope home.

Sharing with me her experience of 9/11, she points out that we are actually sitting across the road from her firefighter husband Dave's firehouse - Squad 1. Dave and half of the Squad died on 9/11 while climbing the South Tower trying to save people.

The desire to tell the stories of the 9/11 responders was born that day. As was a lovely and enduring friendship. I always remind Marian that if it weren't for her sharing her story of Dave, I would probably be off somewhere today investigating the outbreak of a disease. Instead, sixteen years on, I am privileged to have been allowed an insight into the private world of the 9/11 responders and their families. Dedicated to sharing their collective voice and ensuring that the richly descriptive experiences of these brave men and women are not lost, I have made some incredible, life-long friends.

But in that process, I have crossed the precarious line between the professional and the personal. When they started getting sick, I was emotional. When they started to die, I was devastated.

I was presenting some of my 9/11 research at a major national disaster conference in Australia in 2016. I got to the last slide - a photo of Marian, Dave and Aidan. I was meant to acknowledge the many first responders who had been kind enough to share with me their personal experiences. I wanted to dedicate my work to Marian and Dave. But instead, I started crying.

Embarrassed, I choked my way through my few final words, only to hurry off the stage, mortified about what had just happened. But as I made my way back to my seat, I noticed that many people around me were crying as well.

As fate would have it, the speaker following me was discussing vicarious trauma on researchers. Before this, I had never really stopped to consider the personal impact of being involved in this research for such a long period of time.

As researchers we explore a wide range of topics to enhance our understanding of the many issues that affect health and wellness in today's society. The capacity

to empathetically engage with this information and listen, validate, understand and respond to the trauma of others is a vital aspect of conducting this research.

Qualitative methodologies offer researchers a useful way to gather the richly descriptive and contextual data needed to answer many of these issues. However, there is a growing recognition that undertaking this type of qualitative research can pose many challenges for researchers - like vicarious trauma.

It has been nearly two decades since the term vicarious trauma entered the lexicon of psychological conditions. In early descriptions by Karen Saakvitne and Laurie Anne Peralman, vicarious trauma was defined as a “pervasive effect on the identity, world-view, psychological needs, beliefs, and memory systems of therapists who treat trauma survivors.”

Prior to the advent of the term vicarious trauma - and even after it was introduced - many other conditions described by psychologists and psychiatrists had similar cause and outward symptoms. Babette Rothschild notes in her book “Help for the Helper” that vicarious trauma has also been popularly known as compassion

fatigue, secondary traumatising, and simply, burnout.

Hearing the details of a research participant's suffering, the researcher's body reacts - often subtly and unconsciously - to the description of the traumatic event as if they were experiencing it themselves. The depth, scope, and causes are different for everyone, but signs can include fatigue, episodes of sadness and depression, sleeplessness, general anxiety, and changes in behaviour.

My personal experience with vicarious trauma "started" at 3am on a Thursday morning. I sat bolt upright in bed, heart racing, sweating and with a feeling I could only express as impending doom. I say "started" as this was the first time I recognised that something was not quite right. In reality, the road to this point had started long ago, a specific time-point impossible to determine. However, after seeking help from my GP and later through a range of mental health professionals, I realised I had been reacting to the stories told to me over the years. What I thought had been anxiety and panic attacks were more likely a natural reaction to the sadness that I was witness to.

And sadness on such a large scale has an impact.

Over the years I had listened to hundreds of hours of interviews, read dozens of memoirs, and met countless responders who shared their stories with me. How can that not have some sort of impact on me?

I wish someone would have warned me sooner!

In June of 2016, my husband and I travelled to New York as part of my 15-year follow up with the 9/11 responders. Their stories were getting more difficult to bear witness to. They were getting sicker, sadder, angrier. They were starting to die. Things weren't getting better with time, they weren't able to "move on" despite the community and their fatigued support networks wanting them to.

In the months following that trip I noticed a change in my mood. I felt flat. I cried watching sappy TV adverts. I cried when I listened to sad songs. I cried because my husband didn't put the toilet seat down.

I made an appointment with a psychologist. Two days later I was sitting in an office waiting for my first appointment.

Katie* helped me understand my sadness, reinforcing that it was a normal response to witnessing what I had. While I wasn't physically there during 9/11, I had vicariously taken on so many of the responder's personal lived experiences, that I might as well have been.

She asked me what I had hoped to achieve when I started this research journey, all those years ago. I told her I wanted to tell their stories, to ensure they weren't forgotten.

"But haven't you done that? Haven't you succeeded in what you set out to do?"

I sat there with that for a moment.

"But there are still stories to tell" I told her.

"But you don't have to be the one to tell them. You've been that person for 15 years. When will it be ok to put a final chapter on all of this?" Katie asked me.

And I still don't know how to answer that last question.

How do I walk away from these amazing people that I have spent a considerable amount of time building up rapport and trust with? That I have become friends with.

Is it ok to say "tell me your stories" when it suits my research timeline, but then turn them away outside of those confines?

What do I do when a responder reaches out in crisis, because they don't know who else to turn to? Do I answer the phone in the middle of the night?

I'm not a mental health professional. I'm always aware that what I say could do more harm than good. So Katie has given me some useful advice to act as a sign-post, to listen, but to direct people on to more appropriate sources of support.

But this will be hard.

Will they think I've abandoned them? That I no longer care? That the story-teller is no longer interested in the story?

These are all issues I continue to grapple with.

But no matter when I decide to put the final chapter on all of this, one thing is for certain. These people, their stories, have changed me forever.

*Names have been changed.

About the Author

Dr Erin Smith has been working within the multi-disciplinary field of disaster health and prehospital medicine for the past 17 years. Erin is a member of the Board of Directors for the World Association for Disaster and Emergency Medicine (WADEM) and is the Co-Convenor of the WADEM Psychosocial Special Interest Group and Deputy Chair of the WADEM Oceania Chapter. Erin is currently the Course Coordinator for the Graduate Certificate, Graduate Diploma and Master of Disaster and Emergency Medicine courses within the School of Medical and Health Sciences at Edith Cowan University. Erin lives in Melbourne with her husband and two black pugs, Elizabeth Taylor and Bette Davis.