



A Nation Remembers- Teachers' Guide and Resources

9/11 Lesson Plans and Activities Grades 6-12

Created by:
Educators' Leadership Group,
Pentagon Memorial Fund

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Introduction

This teachers' guide and resources were developed to assist teachers and educators in sharing information about the events on September 11, 2001 at the Pentagon, in New York City and in Pennsylvania.

ON SEPTEMBER 11, 2001, nineteen al Qaeda terrorists hijacked four commercial aircraft, intending to strike the World Trade Center (WTC) and various targets in Washington, D.C.¹ At **8:46AM**, hijackers deliberately crashed American Airlines Flight 11 (scheduled from Boston to Los Angeles), carrying 87 passengers and crew, into floors 94-98 of the North Tower (1 WTC), and at **9:03AM**, United Airlines Flight 175 (also scheduled from Boston to Los Angeles), carrying 60 passengers and crew, into floors 78-84 of the South Tower (2 WTC).²

At **9:37AM**, hijackers purposely crashed American Airlines Flight 77 (scheduled from Washington Dulles to Los Angeles), carrying 59 passengers and crew, into the Pentagon, near Washington, D.C.³

At **10:03AM**, after learning of the other attacks, passengers on United Airlines Flight 93 (scheduled from Newark to San Francisco), which carried 40 passengers and crew, launched a counter-attack on hijackers aboard their plane to try to seize control of the aircraft.⁴ In response, the hijackers crashed the plane into an empty field in Somerset County, Pennsylvania.⁵

Within an hour of the first crash, all U.S. flights were halted and military fighters had established combat air control over New York City.⁶ As a result of the attacks, all seven buildings at the World Trade Center were destroyed and a portion of the Pentagon collapsed, resulting in almost 3,000 fatalities -- the largest loss of life from a hostile attack by a foreign entity on American soil.⁷

As a teacher, you may remember where you were when you heard about the attacks. These events have been a defining moment in our history. But for many students in today's classrooms, these events are merely part of the historical record. Younger students may not have even been born, and even those in the upper grades had just started elementary school. As a result, the Pentagon Memorial Fund feels a responsibility to provide information and materials to assist teachers who would like to cover the events of September 11, 2001 in their classroom.

We know that teachers may have difficulty finding relevant material and time to cover this topic in an already full school year. Thus, the lessons and activities provided will work in a variety of subject areas to encourage use wherever there might be time and space in your planning.

These materials were developed as a companion piece to the documentary, "A Nation Remembers," which tells the story of the National 9/11 Pentagon Memorial in a 60-minute DVD.

¹ "9/11: Stories of Survival and Loss Commemorative Resources for High School Educators" *National September 11 Memorial and Museum* n.d. PDF. March 16, 2011 page10 <<http://www.national911memorial.org/img/EDUCATION%20Packet%20-%206.pdf>>

² Ibid.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

It is our hope that you will use this teachers' guide either in its entirety, should you have the time to devote to several concurrent sessions, or individually, where the lessons or activities meet your specific time limitations. We encourage using the materials in observance of the commemoration of September 11th, but we hope you will find that these materials can be used at any point during the year.

The teachers' guide and resources included target a middle and high school audience (grades 6-12). You may find that a particular lesson does not meet your exact needs and some modifications are necessary for your classroom. If you do make specific modifications, use the evaluation form included at the end of these materials to send us information on what you changed and why. You may also choose to access the elementary-level lessons on our website, though we understand this may be a difficult topic to share with very young students.

Please use the evaluation form at the end of this guide to send us feedback on how we may make changes for clarity, organization of content, or inclusion of additional information.

Any additional questions or comments may be directed to the Pentagon Memorial Fund, info@pentagonmemorial.net or via fax at 391-560-3401.

Background and Purpose

The Pentagon Memorial Fund, Inc. (PMF) was incorporated in May 2003 as a non-profit 501(c)(3) organization to raise the private funds necessary to design, build and maintain the Pentagon Memorial.

The PMF convened an Educators' Leadership Group comprised of teachers, administrators, university personnel, communications specialists, PMF Board Members and others to help draft a set of educational materials that could be used in or out of the classroom. This teachers' guide was one of the results of that convening, and were written as a companion to the documentary, "A Nation Remembers," available online in the education section of our website (<http://www.pentagonmemorial.org/learn/educational-resources/media/video/nation-remembers>).

In order to help tell the whole story of what happened on September 11, 2001, the PMF works closely with their counterparts in New York and Pennsylvania. We encourage you to visit their websites (listed below), view their resources and ask your own questions.

National September 11 Memorial and Museum: <http://www.national911memorial.org>

Tribute World Trade Center (WTC) Visitor Center: <http://www.tributewtc.org>

Flight 93 / National Park Service: <http://www.nps.gov/flni/index.htm>

Following the September 11th events, there were thousands of volunteers who were part of the rescue, recovery and rebuilding efforts in New York, at the Pentagon and in Shanksville, PA. We also saw a shift in our culture and an increase in the number of people volunteering all over the United States. That spirit of service lives on, as September 11th is now a National Day of Service and Remembrance. In honor of all of the lives that were lost that day, you might consider organizing a service project for your class or encouraging your students to plan their own. Visit <http://911dayofservice.org/> for others' ideas and resources, and to register your own ideas.

As the National 9/11 Pentagon Memorial, we feel a responsibility to contribute to the literature currently available and to ensure that the story of the events that happened at the Pentagon are told in a way that is as respectful of the victims and survivors as possible, and honors the work done to rebuild lives.

Our goal is to provide resources and materials in order to help educators teach the events of September 11, 2001. We encourage you to explore our website (<http://www.pentagonmemorial.org>) and let us know if there is any information you are in search of that is hard to find. All content is available electronically and free of charge. We would like to hear about your experience as well, so please use the evaluation form located at the end of these materials to share your story.

Chapter Overviews

A Nation Remembers: Teachers' Guide and Resources provides information about the construction, purpose and history of the Pentagon prior to September 11, 2001. These materials were developed as a companion to the Pentagon Memorial Fund documentary entitled, "A Nation Remembers," which tells the story of the construction of the National 9/11 Pentagon Memorial. The full version of "A Nation Remembers" can be found on the Pentagon Memorial Fund's website: <http://www.pentagonmemorial.org/learn/educational-resources/media/video/nation-remembers> .

Chapter One: Life at the Pentagon Before September 11, 2001

This chapter is focused on life as we knew it in the days preceding the September 11th attacks. Students will learn that although the Pentagon is home to the Department of Defense, there are both military and civilian employees working there.

This chapter best complements the documentary from 0:00 minutes through 7 minutes, 14 seconds.

Chapter Two: September 11, 2001—The Attacks in New York City, at the Pentagon and in Shanksville, PA

This chapter leads students through the events of the day, and asks them to think about al Qaeda and the escalation of terrorism acts in recent years. The documentary shows the imagery of the attacks, including photos and videos of the sites in New York City, at the Pentagon and in Somerset County, PA. It also includes several interviews with government officials including: former President George W. Bush, former Secretary of Defense Donald Rumsfeld, Senator Joseph Lieberman (I-CT) and Senator Carl Levin (D-MI).

This chapter best complements the documentary from 7 minutes, 15 seconds through 17 minutes, 19 seconds, with the majority of the information about the attacks around 13-minutes.

Chapter Three: The Emergency Response at the Pentagon

This chapter provides students a chance to learn from several first responders who were at the Pentagon on September 11, 2001 and asks them to think critically about the lasting effects of rescue and recovery efforts at a disaster site. In the documentary, there is an interview with Senator Joseph Lieberman (I-CT), images of the Pentagon after the attack and introductions to the victims of Flight 77 and those who died at the Pentagon through a photo montage around 28 minutes.

This chapter best complements the documentary from 17 minutes, 20 seconds through 34 minutes, 58 seconds.

Chapter Four: Honoring Lives Lost

This chapter is intended to help students understand the idea of memorialization and the importance of remembering certain events and the people affected. As the whole movie is dedicated to the building of the

Pentagon Memorial, this chapter focuses on the design, symbolism, meaning of memorialization and the family members impacted by the events on September 11, 2001.

This chapter best complements the documentary from 45 minutes, 19 seconds through 53 minutes, 39 seconds. For the most comprehensive understanding of the material, please view the documentary from 34 minutes, 59 seconds through 53 minutes, 39 seconds.

Additional video footage is also available to complement these lessons and activities:

- The Memorial Dedication <http://www.pentagonmemorial.org/learn/educational-resources/media/video/nation-remembers-memorial-dedication>
- The Reading of Names <http://www.pentagonmemorial.org/learn/educational-resources/media/video/nation-remembers-reading-names>

Chapter Five: Those Affected at the Pentagon

This chapter is focused on the people affected by the attack at the Pentagon. “A Nation Remembers” provides additional information about the National 9/11 Pentagon Memorial in this section. The material included in this chapter focuses on the ‘everyday heroes’—people who worked at the Pentagon and helped with the rescue operations, those involved as first responders, and the individuals who lost their lives as a result of the attack.

These materials best complement the documentary from 45 minutes, 19 seconds through 53 minutes, 39 seconds. For the most comprehensive understanding of the material, please view the documentary from 34 minutes, 59 seconds through 53 minutes, 39 seconds.

Chapter Six: September 12 and Beyond: The Nation and the Pentagon Post 9/11

This chapter focuses on the changes to the Nation and the Pentagon as a result of the September 11, 2001 attacks, including the changes to society, the development of the Department of Homeland Security and the differences in travel experiences since September 11, 2001.

These materials best complement the documentary from 53 minutes, 40 seconds through the end of the film at the 60-minutes.

Using this Guide as a Teaching Tool

The goal of these materials is to provide materials that will help teachers discuss the tragic events of September 11, 2001 with their students. Soon, the majority of young people will not remember when the attacks originally occurred because they will have been too young at the time or not yet born. However, these events were a defining moment for our nation and have changed how we live, travel and interact with others.

The lesson and activities can be used as standalone teaching aids, though we encourage the teacher to show the relevant section of the movie as a warm-up exercise. The content was developed for use in the classroom. Should you wish to use these materials with special needs students, you may need to make the following adjustments:

- Extra processing time
- Adjusted workload
- Preferential seating
- Modified breaks
- Reading of directions
- Visual cues
- Reduce distractions

Chapter 3: The Emergency Response at the Pentagon

Experiencing the Response at the Pentagon

By: Dr. Paula DeForest, PhD

“The gash.” That is what responders called the huge fiery canyon carved out of the E Ring of the Pentagon on September 11, 2001. I spent several days facing that gash from a distance of 100 yards during the week I served as a mental health volunteer with the American Red Cross (ARC). Like so many Americans, I felt a strong desire to help in the aftermath of the attacks. As a psychologist, my role was to provide emotional support to the other responders, airline employees, and the families and friends of those who died.

My service was an especially personal experience for me. The Pentagon was about 20 minutes from my home and my husband was in the Air Force at that time. He was scheduled to be at a meeting at a Navy office in the Pentagon the morning of September 11th. That was the section of the building that was hit. Unknown to me at that time, that meeting had been moved to September 10th. What a difference a day makes.

Responders are all the people (and in many instances, dogs) who are required or volunteer to go to the site of a disaster and help out. Responders put out fires, rescue people, find and recover bodies of those who have died, and feed and provide shelter to those in need.

Responders at the Pentagon were local, state and national law enforcement officers, including the Arlington County Police and Fire Departments, Arlington County Sheriff's Office, many FBI agents and Federal Marshals. Urban search and rescue canine teams also were present. The National Transportation Safety Board (NTSB) and Federal Emergency Management Agency (FEMA) were also there investigating the crash. As expected, numerous members of the military were responding, including chaplains and teams especially trained in disaster response. Members of the American Red Cross, Salvation Army, and numerous associations volunteered their services. Even rock and movie stars, as well as politicians, were escorted to the site to encourage and support all the workers.

As a result of the attacks on September 11, 2001, there were several sites where volunteers assisted in relief efforts. They included the three sites where the planes crashed (in New York City, at the Pentagon, and Shanksville, PA) and where the planes originated. I was first asked to go to Newark Airport in New Jersey as one of the planes that crashed had taken off from that airport. Airport workers are the last ones to see the victims alive when there is an airliner crash. They often react with great sadness and disbelief. Although needs at Newark Airport were great, my request to report to the Pentagon was granted.

I have served at various national disaster sites in the aftermath of hurricanes, tornadoes, and airliner crashes. My Pentagon service was a very different experience from the others. First, this disaster site was considered a crime scene and security was very tight. In addition, this disaster was not an accident or caused by bad weather.

The staging ground of the rescue and recovery effort, which was located in the huge parking lots of the Pentagon, had a nickname: Camp Unity. This busy camp was home to dozens of agencies and thousands of people and included mobile restaurants from several national chains, massage therapists from all over America who gave massages to rescue workers, and canine search and rescue teams. All of this support was donated.

American Red Cross (ARC) mental health workers were stationed all around Camp Unity. Some were at the huge mess tent (“mess” is a military term for where meals are served, like your school cafeteria) where a Southern Baptist Men's organization brought in huge mobile kitchens on tractor trailers to cook thousands of meals a day. The Salvation Army and American Red Cross also participated in the feeding of the thousands of responders. Outback, McDonalds, and Burger King also set up smaller mobile kitchens, giving the responders a nice variety of

food choices while many worked weeks at a time.

Some ARC mental health workers, including myself, were at the actual work and recovery site. Others were at the mortuary tent. A few were in the courtyard of the innermost ring of the Pentagon, ironically referred to as Ground Zero prior to the attacks. Volunteers at this site were counseling Pentagon employees who were feeling especially sad and fearful about entering the non-damaged portions of the building for the first time since September 11th. In my volunteer service at the Pentagon, I was asked to listen to hundreds of people who needed to talk about their feelings, fears and sadness about the attack.

For the first part of my assignment, I was situated in a large tent about 300 feet from the crash site. It was stocked with a huge variety of items: snacks, drinks, clothing, and toiletries, even pillows and blankets for responders sleeping in short shifts on site. Most of the rescue and recovery workers were involved in searching through the building for human remains and evidence. It was a hot, dirty, and emotionally draining job. When human remains were found, they were placed in a body bag by an FBI agent and given last rites by a military chaplain in a somber, brief yet dignified ceremony. It was always sobering to see the Honor Guard line the path for a stretcher carrying a body bag.

I wore a discrete badge indicating I was an ARC mental health volunteer, but very few people seemed to notice it. As responders came by the tent, usually for a cold drink, I would offer a casual greeting. Some retrieved what they needed and got right back to work. Others wanted to talk. They spoke of the emotions they felt upon finding the personal items of those killed, such as photographs and medals. They talked about missing their families back home and about their own children's newfound fears. They also expressed their disbelief at what unfolded on September 11th. One Navy chaplain expressed his grief at the loss of life and for a loss of a *way of life*. All the people I spoke with had an unyielding desire to help.

Later, I was stationed in the north parking lot of the Pentagon. It was here that law enforcement personnel and canine search and rescue teams meticulously combed through huge piles of rubble removed from the building, searching for human remains and evidence. This was a painstakingly cautious process. Some days were more successful than others. Dog handlers said the dogs became depressed and bored during stretches when nothing was found. That seemed to be the case with the human workers as well. The dogs did lend some tenderness to this grizzly situation as they were wonderfully tame and approachable. Many workers found comfort in petting them once the canine search teams had completed their shifts.

When the victims' families and friends came by the Pentagon, ARC mental health workers accompanied them along with therapy dogs to provide support as they viewed the site where their loved one died. Young children seemed to enjoy petting the dogs as they provided comfort in a very sad and upsetting situation.

The final part of my assignment was to offer support to the families at the October 11th memorial service at the Pentagon. It was an incredibly moving service that provided the families with an opportunity to grieve the tremendous losses they had individually and collectively experienced one month earlier. I will never forget the families and Pentagon workers spontaneously rising and singing out "The Battle Hymn of the Republic" while waving thousands of American flags. It was a wonderful moment of unity for all the people in attendance including then President Bush, former President Clinton and the other civilian and military leaders.

During my time at the Pentagon, I was amazed with the variety of reasons people were thankful. One FBI agent, who bagged human remains, was thankful he was not tasked with the job of those who later would closely inspect the remains for evidence and identification. A construction worker, who had just completed his part of the Pentagon renovation project, was now thankful for the bureaucratic snags that had postponed the issuance of an occupancy permit for some of the new offices, now destroyed. The aunt of a Navy man who died at the Pentagon was thankful that his body was one of only two that was found relatively intact. His family had

something to bury. Most others did not. In a final salute to this young Navy man, his father, a construction worker, came from out of state to help rebuild the Pentagon. He was especially thankful for that opportunity. Finally, others were thankful for the opportunity to serve, such as myself.

Dr. Paula DeForest, Ph.D.

Psychologist

Rockledge, FL

From: The 9/11 Commission Report—The “Official” Account of the Response at the Pentagon



If it had happened on any other day, the disaster at the Pentagon would be remembered as a singular challenge and an extraordinary national story.²⁴⁷ Yet the calamity at the World Trade Center that same morning included catastrophic damage 1,000 feet above the ground that instantly imperiled tens of thousands of people.²⁴⁸ The two experiences are not comparable. Nonetheless, broader lessons in integrating multiagency response efforts are apparent when we analyze the response at the Pentagon.²⁴⁹

The emergency response at the Pentagon represented a mix of local, state, and federal jurisdictions and was generally effective.²⁵⁰ It overcame the inherent complications of a response across jurisdictions because the Incident Command System, a formalized management structure for emergency response, was in place in the National Capital Region on 9/11.²⁵¹

Because of the nature of the event -- a plane crash, fire, and partial building collapse -- the Arlington County Fire Department served as incident commander.²⁵² Different agencies had different roles.²⁵³ The incident required a major rescue, fire, and medical response from Arlington County at the U.S. military's headquarters, a facility

²⁴⁷ 9/11 Commission Report" *National Commission on Terrorist Attacks Upon the United States* pages 311-315. July 22, 2004. Web. February 25, 2011. <<http://www.9-11commission.gov/>>

²⁴⁸ Ibid.

²⁴⁹ Ibid.

²⁵⁰ Ibid.

²⁵¹ Ibid.

²⁵² Ibid.

²⁵³ Ibid.

under the control of the Secretary of Defense.²⁵⁴ Since it was a terrorist attack, the Department of Justice was the lead federal agency in charge (with authority delegated to the FBI for operational response).²⁵⁵ Additionally, the terrorist attack affected the daily operations and emergency management requirements of Arlington County and all bordering and surrounding jurisdictions.²⁵⁶

At 9:37AM, the west wall of the Pentagon was hit by hijacked American Airlines Flight 77, a Boeing 757.²⁵⁷ The crash caused immediate and catastrophic damage.²⁵⁸ All 59 people aboard the plane were killed, as were 125 people inside the Pentagon (70 civilians and 55 military service members); the hijackers are not counted among the total killed.²⁵⁹ One-hundred-six people were seriously injured and transported to area hospitals.²⁶⁰

While no emergency response is flawless, the response to the 9/11 terrorist attack on the Pentagon was mainly a success for three reasons: first, the strong professional relationships and trust established among emergency responders; second, the adoption of the Incident Command System; and third, the pursuit of a regional approach to response.²⁶¹ Many fire and police agencies that responded had extensive prior experience working together on regional events and training exercises.²⁶² Indeed, at the time preparations were under way at many of these agencies to ensure public safety at the annual meetings of the International Monetary Fund and the World Bank scheduled to be held later that month in Washington, D.C.²⁶³

Local, regional, state, and federal agencies immediately responded to the Pentagon attack.²⁶⁴ In addition to county fire, police, and sheriff departments, the response was assisted by the Metropolitan Washington Airports Authority, Ronald Reagan Washington National Airport Fire Department, Fort Myer Fire Department, the Virginia State Police, the Virginia Department of Emergency Management, the FBI, FEMA, a National Medical Response Team, the Bureau of Alcohol, Tobacco, and Firearms, and numerous military personnel within the Military District of Washington.²⁶⁵

Command was established at 9:41AM.²⁶⁶ At the same time, the Arlington County Emergency Communications Center contacted the fire departments of Fairfax County and Alexandria, Virginia, and the District of Columbia to request mutual aid.²⁶⁷ The incident command post provided a clear view of and access to the crash site, allowing the incident commander to assess the situation at all times.²⁶⁸

At 9:55AM the incident commander ordered an evacuation of the Pentagon impact area because a partial collapse was imminent; it occurred at 9:57AM, and no first responder was injured.²⁶⁹

At 10:15AM, the incident commander ordered a full evacuation of the command post because of the warning of

²⁵⁴ Ibid.

²⁵⁵ Ibid.

²⁵⁶ Ibid.

²⁵⁷ Ibid.

²⁵⁸ Ibid.

²⁵⁹ Ibid.

²⁶⁰ Ibid.

²⁶¹ Ibid.

²⁶² Ibid.

²⁶³ Ibid.

²⁶⁴ Ibid.

²⁶⁵ Ibid.

²⁶⁶ Ibid.

²⁶⁷ Ibid.

²⁶⁸ Ibid.

²⁶⁹ Ibid.

an approaching hijacked aircraft passed along by the FBI.²⁷⁰ This was the first of three evacuations caused by reports of incoming aircraft, and the evacuation order was well communicated and well coordinated.²⁷¹

Several factors facilitated the response to this incident, and distinguish it from the far more difficult task in New York.²⁷² There was a single incident, and it was not 1,000 feet above ground.²⁷³ The incident site was relatively easy to secure and contain, and there were no other buildings in the immediate area. There was no collateral damage beyond the Pentagon.²⁷⁴

Video Resource:

This chapter focuses on the emergency response at the Pentagon following the September 11th attack. In the documentary, there is an interview with Senator Joseph Lieberman (I-CT), images of the Pentagon after the attack and introductions to the victims of Flight 77 and those who died at the Pentagon through a photo montage around 28 minutes. The material provided here gives students a chance to learn from several first responders who were at the Pentagon that day and asks them to think critically about the lasting effects of rescue and recovery efforts at a disaster site.

The full version of "A Nation Remembers" can be found on the Pentagon Memorial Fund's website: <http://www.pentagonmemorial.org/learn/educational-resources/media/video/nation-remembers> . This chapter best complements the documentary from 17 minutes, 20 seconds through 34 minutes, 58 seconds.

²⁷⁰ Ibid.

²⁷¹ Ibid.

²⁷² Ibid.

²⁷³ Ibid.

²⁷⁴ Ibid.

Chapter 3 Vocabulary:

Term	Definition
Calamity	A state of deep distress or misery caused by major misfortune or loss, a disastrous event marked by great loss and lasting distress and suffering
Catastrophic	A momentous tragic event, extremely harmful, bringing physical or financial ruin
Collateral damage	Injury inflicted on something other than an intended target.
Compassion Fatigue	Compassion Fatigue (also known as a secondary traumatic stress disorder) is a condition characterized by a gradual lessening of compassion over time. It is common among victims of trauma and individuals who work directly with victims of trauma. It was first diagnosed in nurses in the 1950s. Sufferers can exhibit several symptoms including hopelessness, a decrease in experiences of pleasure, constant stress and anxiety, and a pervasive negative attitude. This can have detrimental effects on individuals, both professionally and personally, including a decrease in productivity, the inability to focus, and the development of new feelings of incompetency and self doubt. ²⁷⁵
Dignified	To give distinction to; serious and somewhat formal.
Last Rites	A religious ceremony that is performed by a Catholic priest for someone who is dying.
Mobile	Capable of moving or being moved; movable; changeable in appearance, mood, or purpose.
Mortuary	Of or relating to the burial of the dead; of, relating to, or characteristic of death; A place in which dead bodies are kept until burial, especially a funeral home.
Reflect	To realize or consider.
Remember	To bring to mind or think of again; to retain in the memory.
Renew	To restore to existence.
Somber	Of a serious mien; of a dismal or depressing character; melancholy.

Definitions for the terms above were taken from <http://www.merriam-webster.com> unless otherwise noted.

²⁷⁵“What is Compassion Fatigue” *Compassion Fatigue* n.d. Web. February 25, 2011.
<<http://www.compassionfatigue.org/pages/compassionfatigue.html>>

3.1 Remember- The Experience of a First Responder

For this activity, you may choose to either watch a video or read a written interview completed by a first responder. Video interviews may be found <http://www.pentagonmemorial.org/learn/educational-materials/media> and the written interviews are available by searching the Education Resources Database by keyword "first responder" [http:// www.pentagonmemorial.org/learn/educational-materials](http://www.pentagonmemorial.org/learn/educational-materials) . There are also two transcripts of interviews included following this activity.

Sergeant James P. McMichael, *Arlington County Sheriff's Office* (video)

Arthur Castellano (Retired), *Arlington County Sheriff's Office* (video)

Chief Deputy Paul Larson, *Arlington County Sheriff's Office* (written statement included in these materials)

Captain James Wasem, *Arlington County Police Department* (written statement)

Officer Isaac Ruiz, *Arlington County Police Department* (written statement included in these materials)

Officer Scott Wanek, *Arlington County Police Department* (written statement)

In the space below, please record the basic information of the first responder. It should indicate his or her name, title, and organization/affiliation.

Summarize the first responder's experience during the response.

What was most surprising to this person about the events of the day?

What kind of educational background did this person have prior to becoming involved in their career?

First Responder Experiences: Deputy Chief Paul Larson, Arlington Sheriff's Office

Former Lieutenant, Arlington County Police Department
Arlington, VA

Transcript of Phone Interview conducted January 12, 2011

1.) How were you involved in the response to the attack on the Pentagon on September 11, 2001?

I was a Lieutenant with Arlington County PD at the time. I was in my car on Route 50 on my way to work and I noticed a plane flying very low. Moments later I heard someone in the motor pool over the radio say that a plane had crashed in DC, but we realized very quickly that it was actually the Pentagon that had been hit. By that point, I was at Route 50 and Washington Blvd, so I immediately went to the Pentagon and was one of the first responders on the scene. I remember helping people out of the building. To the left and right of the gash, people were streaming out of windows trying to get away. I remember being very concerned about the fact that I was walking around in jet fuel, but I had a job to do.

2.) What was the most surprising element of the day?

As I was there helping people, there was a steady stream of people fleeing the building. But then we started hearing cries for help and you could see a tide of people turn around and come running back as they realized that there were people stuck inside that they needed to help save.

3.) What is your most vivid memory of the day?

I remember being struck most by the victims that had been very badly burned and later died. I helped set up a command center and run things that day.

4.) Has society changed since September 11, 2001? How?

Yes. People don't react as negatively to law enforcement and increased security concerns. It's like they realize it's for their safety. Law enforcement has changed a lot though. We now respond to every call as if there is some terrorist element—whether it's running a Driver's license during a traffic stop or screening someone for entry to the courthouse—those names are automatically checked against the terrorist watch list.

5.) Have you changed personally since September 11, 2001? In what ways most significantly?

Yes, definitely. I am much more appreciative of the freedoms we have. I have visited the Memorial for the dedication and with my family on several occasions.

6.) Please describe your current job including your title and the duties you may perform on a daily basis.

Currently, I am the Chief Deputy at the Arlington Sheriff's Office. That means I'm the number two in command and basically run the day to day operations of the office. The Sherriff (a female!) is a political appointee and maintains a very busy schedule. It's my job to make sure that things run smoothly. We have 210 sworn deputies and another 55 civilians working for the Sheriff's Office. As secondary law enforcement, we support Arlington County Police Department, run the jail, courthouse duty and screen for entry.

7.) What steps did you find most helpful in pursuing the career that you've chosen?

I attended community college, transferred to a four-year school to complete my BS in Criminology, and started with the Arlington Police Department in 1988. I worked my way up through the ranks to Lieutenant and earned my Masters in Public Administration from George Mason in 2004. The greater amount of education you have, the better prepared for leadership of any sort—not just law enforcement, but in any command-level atmosphere. My advice if someone is interested in law enforcement: go to college, be in good physical condition, and pursue those activities that will best prepare you to lead. Being a leader and having some leadership training is essential to succeeding in law enforcement.

First Responder Experiences: Officer Isaac Ruiz, Arlington County Police Department

Arlington, VA

Transcript of Phone Interview Conducted January 12, 2011

1.) How were you involved in the response to the attack on the Pentagon on September 11, 2001?

I was living in Crystal City at the time. I had just finished a midnight shift and had gotten home that morning. I thought I smelled smoke and then I got a phone call from my sister asking if I was ok. I told her yes, I was fine, why? And she told me about the crash at the Pentagon. I looked out the window of my apartment which was in a high rise building and I could see the smoke at the Pentagon. I hung up with her, I got back into my police car and I headed to the Pentagon. Along the way, I stopped to help an ambulance get through to an Urgent Care center, and there were so many cars and people everywhere. When I finally got to the scene, there were people everywhere. The Fire Department was already there trying to control the fire and we got word from the FBI that another plane was headed toward the Pentagon. Minutes later, there was the report that it had crashed in Pennsylvania. We went to work establishing a perimeter, getting the fire under control and we noticed that people were stopped on 395 taking pictures. So I was sent up there to keep traffic moving along. 24 hours later, I was still in that spot when I radioed for someone to come relieve me.

There are so many things to remember but I think the second or third day it started raining and I did not mind it one bit. I was standing there and the Red Cross came in to actually help the people's families and anybody who needed help. They were great. They made this kitchen and they were giving people food, water, anything that you needed. I was standing there and it was raining, and this woman from the Red Cross said, "Why are you standing there? It's raining. You should get out of the rain." And I said, "All I have to do is look back behind me...and those people didn't have a chance. And that's the least that I can do and I'll do anything that is necessary, that they need me to do." I went home

reluctantly, I couldn't sleep. I slept maybe three hours and I went back. When I went back, I was assigned to the same post, which was the security post."

2.) What was the most surprising element of the response?

I was so overwhelmed by what happened and I remember being surprised that it was terrorism. A plane had crashed into the Potomac back in 1987 so I thought maybe this one just missed the airport too. Even though we'd heard about the planes in NY already, it's like I didn't want to believe that something so terrible could happen.

3.) What is your most vivid memory of the day?

I remember seeing pieces of the plane everywhere. And in one spot, a piece of the wheel had made a huge hole in the side of a trailer that had been there. And I was just astonished at the size because I'd never seen anything like that before.

4.) Has society changed since September 11, 2001? How?

Definitely has changed. Airport security, national security alerts; the Department of Homeland Security in general didn't exist before. We've seen a big change for law enforcement too. We no longer use police codes in communications. During the response, we realized the need for open lines of communication between agencies and using our own codes hampered that communication.

5.) Have you changed personally since September 11, 2001? In what ways most significantly?

Yes. I cannot go through the Memorial. It holds too much emotion. I was assigned to take the County

Manager and some people to the Memorial service on 9/11 and I had to stay in the car.

6.) Please describe your current job including your title and the duties you may perform on a daily basis.

I'd just returned from service during the first Gulf War and realized that I needed a job. I am from Puerto Rico and a Spanish speaker and I saw an ad that Arlington County PD needed Spanish speaking officers. So I enrolled in the police academy. Over the years I've done a number of things: gangs, community policing, field training officer, teaching at the academy. I'd say I started in hostage negotiation because of the events of 9/11/01. During my day as a patrol officer, I do routine things like responding to calls, traffic stops, responding to burglaries, etc. But I also do training for my fellow

officers, help the citizens that live in my community, and am currently part of a project called "Project Lifesaver" to arm people with Alzheimer's and Schizophrenia with ID bracelets meant to keep them safe so we can help them get home if they get lost.

7.) What steps did you find most helpful in pursuing the career that you've chosen?

Being in the military prior to joining the police force was really beneficial. It prepared me to accept leadership, stay in control and be calm during an emergency. Staying drug free and being nice to others are important too. Not just a cliché, but having sensitivity to others will greatly help you on the job. Being a police officer is not about the power behind the badge, but rather helping the people in your community.

3.2 Lesson Plan: Language Arts and English Primary Sources and Expository Writing

GRADE LEVEL(s): Grades 8-12
Duration: 40-45 minutes

STUDENTS WILL ENGAGE IN: X Independent Activities
Project X Cooperative Learning

COMMON CORE STANDARDS:

Key Ideas and Details²⁷⁶

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Text Types and Purposes²⁷⁷

4. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
5. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

Production and Distribution of Writing²⁷⁸

6. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
7. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
8. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge²⁷⁹

9. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
10. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
11. Draw evidence from literary or informational texts to support analysis, reflection, and research.

²⁷⁶ "College and Career Readiness Anchor Standards for Reading" *Common Core State Standards Initiative* n.d. Web. April 9, 2011 <<http://www.corestandards.org/the-standards/english-language-arts-standards/anchor-standards-6-12/college-and-career-readiness-anchor-standards-for-reading/>>

²⁷⁷ "College and Career Readiness Anchor Standards for Writing" *Common Core State Standards Initiative* n.d. Web. April 9, 2011 <<http://www.corestandards.org/the-standards/english-language-arts-standards/anchor-standards-6-12/college-and-career-readiness-anchor-standards-for-writing/>>

²⁷⁸ "College and Career Readiness Anchor Standards for Writing" *Common Core State Standards Initiative* n.d. Web. April 9, 2011 <<http://www.corestandards.org/the-standards/english-language-arts-standards/anchor-standards-6-12/college-and-career-readiness-anchor-standards-for-writing/>>

²⁷⁹ "College and Career Readiness Anchor Standards for Writing" *Common Core State Standards Initiative* n.d. Web. April 9, 2011 <<http://www.corestandards.org/the-standards/english-language-arts-standards/anchor-standards-6-12/college-and-career-readiness-anchor-standards-for-writing/>>

OBJECTIVES:

Student Will Be Able To:

- Read and discuss texts representing diversity in content, authorship, and perspective.
- Discuss reactions to and information gained from reading experiences. Identify and explain the main idea.
- Identify and explain what is directly stated in the text.
- Identify and explain what is not directly stated in the text by drawing inferences.
- Connect the text to prior knowledge or personal experience.
- Analyze main ideas and universal themes.

MATERIALS:

- Copies of two introductory articles (by Dr. Paula DeForest and the excerpt of the 9/11 Commission Report) found before this lesson plan

WARM-UP ACTIVITY:

- Summarize what expository writing means.
Expository: Used to describe writing that is done to explain something¹
- Describe what information is needed and where you would find this type of writing.
- Divide the class in half.

Pass out the two articles found before this lesson plan—Dr. DeForest’s personal account and the excerpt from the 9/11 Commission Report.

One group will be assigned to review Dr. DeForest’s account of the September 11th relief efforts at the Pentagon and the other group will review the excerpt from the 9/11 Commission Report describing the response at the Pentagon.

PROCEDURE:

- 1.) Instruct students to read their assigned article and ask each group to discuss the following questions and record their group answers:
 - What was the main idea of the article?
 - Detail the themes from the article.
 - What are some examples of information stated directly in the text?
 - What is an example of an inference that the group was able to draw about the situation presented in the article that was not directly stated?
- 2.) Have student representatives share their group’s responses to the questions.
- 3.) After each group has presented, compare and contrast the articles as a class.
 - How are the articles different?
 - One of the articles was written by someone who spent time onsite after the attack. What information can be found in her article that is not part of the 9/11 Commission article?

- 4.) Instruct students to work independently to form their own expository essay to explain an idea that they gathered from the group answers and personal experience.
- 5.) Students will outline potential ideas to write an expository essay that incorporates themes from either article.

ASSESSMENT:

Teacher will assess students understanding of expository writing by having students complete an outline and write their own expository essays (roughly three to four paragraphs).

Thematic suggestions:

- Describe an event that caused you to feel fear or sadness. How did people help you through that situation?
- Describe an event where you had to respond to an action in spite of your fear or other emotions.
- Investigate and report on how the events of September 11, 2001 impacted someone's life: a family member, friend, teacher, coach. Write an expository essay based on your research.

Assessment: Expository Essay Grading Rubric:

Criteria

Students thesis was clearly articulated
 Analyzes and interprets details, quotes, and examples, showing how they relate to the thesis
 Has clear, sophisticated organization; body paragraphs relate back to thesis
 Paragraph parts flow seamlessly
 Student has no grammatical errors and evidence of proof-reading is present

Rating

Needs Improvement Met Objective
 Needs Improvement Met Objective
 Needs Improvement Met Objective
 Needs Improvement Met Objective
 Needs Improvement Met Objective

3.3 Lesson Plan: Science

The Lasting Effects of First Response

(Note: This lesson focuses on the health impact on first responders who participated in the rescue and recovery efforts at the World Trade Center site in New York.)

GRADE LEVEL(s): Grades 8-12
Duration: 40-45 minutes

STUDENTS WILL ENGAGE IN: Independent Activities
X Project X Cooperative Learning

COMMON CORE STANDARDS:

Key Ideas and Details²⁸⁰

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.
Craft and Structure
4. Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas²⁸¹

5. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.
6. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.

OBJECTIVES:

Student Will Be Able To:

- Identify that there is a lasting health impact of the 9/11 attacks on first responders.
- Describe the health implications that may be a result of exposure to toxins during the response at the World Trade Center.
- Determine if there was a similar lasting health impact on the canine search and rescue dogs involved at the World Trade Center site.
- Choose a position on one side of the debate, form an appropriate argument, and present their persuasive argument to the class.

MATERIALS:

- New York City on the 9/11 Health and Compensation Act, http://www.nyc.gov/html/doh/wtc/html/health_compensation/health_compensation_act.shtm
- Background information sheets following this lesson—Health Impact and Canine Health Impact

²⁸⁰ "College and Career Readiness Anchor Standards for Reading" *Common Core State Standards Initiative* n.d. Web. April 9, 2011 <<http://www.corestandards.org/the-standards/english-language-arts-standards/anchor-standards-6-12/college-and-career-readiness-anchor-standards-for-reading/>>

²⁸¹ "College and Career Readiness Anchor Standards for Reading" *Common Core State Standards Initiative* n.d. Web. Page 35 April 9, 2011 <http://www.corestandards.org/assets/CCSSI_ELA%20Standards.pdf>

WARM-UP ACTIVITY:

Review the information provided by New York City on the 9/11 Health and Compensation Act http://www.nyc.gov/html/doh/wtc/html/health_compensation/health_compensation_act.shtml and the two background information sheets provided following this lesson.

PROCEDURE:

Read the summary of WTC-Related Health Findings as prepared for the Mayor’s WTC Medical Working Group 2010 Annual Report. Answers to the first two questions below can be found on pages 3 and 4 of this PDF. http://www.nyc.gov/html/doh/wtc/downloads/pdf/news/2010_mwg_annual_report.pdf. Question 3 is answered in the “Background Information on the Health Impact of September 11, 2001” sheet that follows this lesson. Question 4 is answered in the information sheet on the “Health Impact on Canine First Responders” information sheet that follows.

- 1) What are the physical health issues that have been identified by the WTC Medical Working Group as being related to the events on September 11, 2001?
- 2) What are the mental health issues that have been identified by the WTC Medical Working Group?
- 3) Are the health impacts limited to people in the New York City area? If not, why?
- 4) Have the canine members of the search and rescue teams that were involved at the World Trade Center been impacted in the same way as their human counterparts?

Brainstorm with the class the possibility that there is NO connection between the health effects experienced and the connection to the September 11th, 2001 events. Are there other explanations for the cause of the health problems?

ASSESSMENT:

Hold a class debate to discuss the health implications caused by being exposed at Ground Zero. Each half of the class will argue for or against the possibilities that exposure at Ground Zero is linked to ailments that first responders are suffering since the attacks.

Assessment: Public Speaking/Debate Rubric

Criteria	Rating
Students drafted a persuasive argument	Needs Improvement Met Objective
Students clearly articulated defense	Needs Improvement Met Objective
Presentations were clear and concise	Needs Improvement Met Objective
Students worked cooperatively together	Needs Improvement Met Objective
Student discussion exhibits respect for others opinion	Needs Improvement Met Objective

Background Information on the Health Impact of September 11, 2001

As a direct result of the terrorist attack on the World Trade Center (WTC) in New York, there has been a lasting health impact for the people who were living and working in that area on September 11, 2001. The New York City Health Department provides a website (<http://www.nyc.gov/html/doh/wtc/html/home/home.shtml>) with the latest information about scientific research and services for people who may be impacted.

Hundreds of thousands of people were exposed or potentially exposed to dust, particulates, and other environmental contaminants on that day, and endured or witnessed deeply traumatic events. Fires burned and smoldered at the site for months.²⁸² Many who lived, worked or attended school in the area found their lives upended and their livelihoods damaged or completely destroyed; thousands were temporarily displaced.²⁸³

In the hours and days following the attacks, rescue workers, volunteers, contractors, and others from across the country descended on Ground Zero to search for potential survivors.²⁸⁴ In late September, that search came to an end and efforts turned to an unprecedented recovery, cleanup, and restoration of New York City's infrastructure.²⁸⁵ Tens of thousands of responders and others worked at the World Trade Center, the Fresh Kills landfill, and related sites.²⁸⁶ The work took ten months and involved employees from dozens of city, state and federal agencies and the tireless efforts of responders, laborers, contractors, volunteers, and community organizations.²⁸⁷

Along with the death and devastation immediately wrought by the attacks, there was concern from the outset that the collapse of the Twin Towers could have consequences for the health of responders, clean-up workers, residents, office workers, school children, and others.²⁸⁸ By the evening of September 11th, the city's Departments of Health and Environmental Protection began to assess environmental conditions and what protections would be necessary.²⁸⁹

While the full scope of 9/11-related problems is unknown, a growing body of evidence suggests that significant health conditions have emerged that are associated with the disaster, in particular for those exposed during the collapse of the towers and those who participated substantially in rescue, recovery, and clean-up operations.²⁹⁰

"The health impact is not limited to the New York City metro area. While the New York/New Jersey area had the largest number of people affected, people from all over the country came to New York to help in the rescue and recovery effort. Ten thousand (10,000) WTC Health Registry enrollees (nearly 15% of the total) live outside the New York/New Jersey area. In fact, WTC Health Registry enrollees live in almost every Congressional district, reflecting the breadth of the nation's emergency response to the terrorist attacks, as well as the re-location of many Americans who were directly exposed to the WTC collapse. The WTC Health Program establishes a

²⁸² "Historical Context" *New York City Department of Health* n.d. Web. February 25, 2011.

<<http://www.nyc.gov/html/doh/wtc/html/background/background.shtml>>

²⁸³ Ibid.

²⁸⁴ Ibid.

²⁸⁵ Ibid.

²⁸⁶ Ibid.

²⁸⁷ Ibid.

²⁸⁸ Ibid.

²⁸⁹ Ibid.

²⁹⁰ Ibid.

nationwide network of providers to monitor and treat BOTH responders and survivors no matter where they live now.”²⁹¹

“Ongoing research is showing that problems sustained by WTC responders are not diminishing much in number or severity. Of the estimated 60,000 to 70,000 emergency responders, at least 6,500 suffered significant new or worsened respiratory symptoms, and after seven years, many workers still experienced abnormal lung function. More than 1,700 also suffered serious probable mental health issues, with some still affected up to five years later. Still others showed diminished chemosensory perception after three and a half years—a serious concern for these workers given that the ability to detect particular odors is a critical safety concern for emergency responders.”²⁹²

President Obama signed *The 9/11 Health and Compensation Act* on January 2, 2011. The \$4.3 billion bill guarantees healthcare and compensation for rescue and recovery workers at the World Trade Center who were sickened by toxins as a result of the recovery efforts. The full text of the law can be found here:

<http://www.gpo.gov/fdsys/pkg/BILLS-111hr847enr/pdf/BILLS-111hr847enr.pdf>

²⁹¹ “9/11 Health and Compensation Act” *New York City Department of Health* n.d. Web. February 25, 2011.

<http://www.nyc.gov/html/doh/wtc/html/health_compensation/health_compensation_act.shtml>

²⁹² “Emergency Responder Health: What Have We Learned from Past Disasters?” *Environmental Health Perspectives (Journal)* August 2010. 118(8): A346–A350 Web. February 25, 2011. <<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2920106/>>.

Canine Responders and the Resulting Health Impact

At the Pentagon:

In search and rescue and remains recovery in the aftermath of manmade or natural disasters, the FBI frequently employ teams of dogs and their handlers, usually bureau agents or law enforcement officers.²⁹³ The highly trained animals possess a keen sense of smell that allows them to locate body parts or even minute pieces of skin too small for the human eye to detect in the surrounding debris. Eighty-four dogs and handlers played an important role here, as well.²⁹⁴

Four days after the attack, on September 15th, Officer James Lugaila and his dog, from the D.C. Metropolitan Police Department's K-9 unit, accompanied an Urban Search and Rescue team into the building to search for remains.²⁹⁵ Lugaila suggested that other cadaver dogs be brought in to assist with remains recovery.²⁹⁶ Captain Eileen Roemer, an FBI employee who was also a naval reservist, kept and trained a cadaver dog.²⁹⁷ Roemer and Lugaila contacted their own cadaver dog networks and essentially became the day and night team leaders, respectively, of the handlers and their canines who came to work at the Pentagon.²⁹⁸ The dog teams assembled quickly.²⁹⁹ At 5:00 pm on Sunday evening, September 16th, Roemer and the first six dog teams checked in.³⁰⁰ The 29 teams in the search worked alongside members of the Army's 54th Quartermaster Company (Mortuary Affairs) and other volunteers under the direction of the FBI and FEMA.³⁰¹

Like the soldiers, the dog handlers wore protective suits, gloves, and face masks.³⁰² But because of the constant distractions and noise and the need to communicate with their dogs, the handlers didn't always cover their mouths with the breathing apparatus.³⁰³ The dogs did not take to their safety "uniforms" much better than their handlers or the soldiers; for them to get traction and scale the piles of debris safely, booties were placed over their paws.³⁰⁴ A team usually remained on the scene for an eight-hour shift, but often a dog could only work about 20 minutes before its concentration waned and it needed a break.³⁰⁵ Although dog teams sometimes participated in the search for remains inside, they spent most of their time searching the debris in North Parking.³⁰⁶ They uncovered numerous pieces of flesh and bone, internal organs, bloody clothing, or anything with traces of human protein.³⁰⁷ At the end of a shift, dogs and humans were decontaminated in a pair of tents.³⁰⁸ Volunteer veterinarians and technicians washed and checked out the dogs.³⁰⁹

²⁹³Goldberg, A. Papadopoulos, S., et al "Pentagon 9/11" Historical Office, Office of the Secretary of Defense n.d PDF. April 6, 2011 page 154-155 <<http://osdhistory.defense.gov/docs/Pentagon%209-11.pdf>>

²⁹⁴Ibid.

²⁹⁵Ibid.

²⁹⁶Ibid.

²⁹⁷Ibid.

²⁹⁸Ibid.

²⁹⁹Ibid.

³⁰⁰Ibid.

³⁰¹Ibid.

³⁰²Ibid.

³⁰³Ibid.

³⁰⁴Ibid.

³⁰⁵Ibid.

³⁰⁶Ibid.

³⁰⁷Ibid.

³⁰⁸Ibid.

³⁰⁹Ibid.

The searchers in North Parking carried out the work in stages.³¹⁰ First, to dampen the concrete dust, soldiers hosed down the debris heap.³¹¹ The dogs, working on leads held by their handlers, sniffed for human remains.³¹² When a dog signaled that it had found something by pawing, sitting up, or otherwise indicating the spot, investigators and mortuary affairs personnel raked through the rubble or placed it on sifting screens.³¹³ Remains were photographed and tagged with an identifying number, put in an evidence bag, and taken offsite for future identification.³¹⁴ For the final search, small frontend loaders spread out the debris to as little as a six-inch depth. Then the dogs went over it again.³¹⁵



Dogs and handlers in search and rescue operations.

In New York City:

On September 11, 2001, Dr. Cynthia Otto, a veterinarian at the University of Pennsylvania School of Veterinary Medicine and a member of Pennsylvania Task Force 1, deployed to the World Trade Center disaster site and spent nine days caring for the deployed Search and Rescue (SAR) dogs. In January 2002, Dr. Otto received funding to conduct a three-year study of the health and behavioral effects of the 9/11 disasters on the deployed SAR dogs.

³¹⁰ Ibid.

³¹¹ Ibid.

³¹² Ibid.

³¹³ Ibid.

³¹⁴ Ibid.

³¹⁵ Ibid.

In 2006, Dr. Otto optimistically reported that the search and rescue dogs that were deployed at the disaster sites had not suffered measurable health effects.³¹⁶ Although recent studies of human rescue workers at the World Trade Center have revealed an increased incidence of respiratory issues, similar problems have not been observed in the search and rescue dogs.³¹⁷

There are several possible reasons for this finding. First, human workers who were on site during the collapse were more severely affected, but the dogs in this study were coming from all over the country and the majority did not reach the disaster site until at least one day after the collapse.³¹⁸ Second, there are species differences that may have had a protective effect for the deployed dogs. Asthma is very uncommon in dogs, so they are less likely to experience the types of reactive airway disease affecting the human responders.³¹⁹ In addition, dogs' nasal passages are much longer than a human's, perhaps helping to filter out more of the particulate matter. The study was funded through 2010 and a major objective was to determine the long-term effects, respiratory or otherwise.

³¹⁶ Otto CM , et al. "Medical and behavioral surveillance of dogs deployed to the World Trade Center and the Pentagon: October 2001-June 2002". *Journal American Veterinary Medical Association* 225(6): 861-867, 2004

³¹⁷ "Emergency Responder Health: What Have We Learned from Past Disasters?" *Environmental Health Perspectives (Journal)* August 2010. 118(8): A346–A350 Web. February 25, 2011. <<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2920106/>>.

³¹⁸ Otto CM , et al. "Medical and behavioral surveillance of dogs deployed to the World Trade Center and the Pentagon: October 2001-June 2002". *Journal American Veterinary Medical Association* 225(6): 861-867, 2004

³¹⁹ Slensky K, Otto CM, et al . "Deployment morbidity among search and rescue dogs". *Journal of American Veterinary Medical Association*. 225(6): 868-873, 2004

3.4 Reflect: Who do you turn to when you have an emergency or personal crisis?

Describe a time when you encountered an emergency or personal crisis. Who did you turn to? Why did you choose that person in particular? What qualities did he or she possess that led you to believe that person would be a good choice in that situation?

Looking back on your decision, would you have done it any differently, engaged anyone else, or spoken to a different person now knowing the end result?

3.5 Renew: Write a thank you letter to a first responder

Your thank you letter may be addressed to a responder in your own community (local police, fire, EMS, etc.) or someone that responded to the events at the Pentagon. The following individuals have submitted either video or written interviews to be used in conjunction with this teachers' guide and their material is available through the database on our website <http://www.pentagonmemorial.org/learn/educational-materials>:

Sergeant James P. McMichael, *Arlington County Sheriff's Office* (video)

Arthur Castellano (Retired), *Arlington County Sheriff's Office* (video)

Chief Deputy Paul Larson, *Arlington County Sheriff's Office* (written statement)

Captain James Wasem, *Arlington County Police Department* (written statement)

Officer Isaac Ruiz, *Arlington County Police Department* (written statement)

Officer Scott Wanek, *Arlington County Police Department* (written statement)

Letters addressed to any of the first responders above can be sent to the Pentagon Memorial Fund and we will ensure their delivery to the appropriate person: Pentagon Memorial Fund, PO Box 3879, Gaithersburg, MD 20885.