Canine Courage

By Laura McClure

Why have 9/11 rescue dogs fared better than human workers?

After airplanes destroyed the World Trade Center on September 11, 2001, veterinarian Cindy Otto arrived in New York City, New York, with a small army—dozens of dogs trained to find missing people. The search-and-rescue canines quickly went to work, nosing their way through seemingly endless piles of steel and concrete.

Courtesy www.searchdogfoundation.org
A rescue dog named Billy helps an emergency worker search for survivors at the site of the World Trade Center collapse.

The air was thick with smoke, dust, and dangerous **toxins,** or poisonous substances. Many human rescue workers wore masks, but the dogs worked without protective gear. They needed their noses free so they could sniff out victims.

Even with masks, human rescue workers faced danger. Nearly 70 percent of the people who helped with the World Trade Center recovery efforts have reported new or worsened **respiratory**[1] symptoms between 2002 and 2004. Problems include asthma, persistent coughs, wheezing, and chest pain.

Otto feared that the dangerous rescue conditions would have similarly damaging health effects on canines such as Deja Vu, a German

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[1]**respiratory:** relating to the process of inhaling and exhaling; breathing.

shepherd from Pennsylvania. "The environment was so awful, I couldn't imagine they wouldn't have problems," Otto told *WR News.*

She organized a study to find out. More than five years later, Otto has surprising results: Many of the dogs remain healthy. In fact, the hardy animals are just as fit as search-and-rescue dogs that weren't involved in 9/11 recovery efforts.

Stay-Safe Secrets

Deja Vu and her handler, Pat Thompson, helped search for victims in the **debris,** or rubble, at a New York landfill. Thompson was concerned about what her dog was breathing in and walking through at the site. But "Deja Vu has remained in good health since 9/11," Thompson is happy to report.

Otto has three **hypotheses,** or theories, about why the dogs stayed healthy and the people didn't. First, she points out, the dogs spent less time at the recovery sites than human rescue workers did. Many of the people who now report breathing problems worked for months cleaning up after the attacks. The dogs in Otto's study were at the disaster sites an average of 10 days.

Trish Cartino
Joey trains with a handler.

Otto says dogs also are less **susceptible,** or vulnerable, to respiratory problems such as asthma. "When dogs have allergies, they tend to have skin problems," she explained. "But the owners haven't reported any skin problems."

Another reason may be the dogs' superior snouts. Scientists say a dog's nose, which is longer than a human's nose, can better filter air that goes to the dog's lungs. Even though the people and the canines breathed the same air, fewer hazardous particles may have reached the dogs' lungs.

Waiting Game

Despite the surprising study results, the dogs aren't in the clear yet, Otto says. Some diseases take years to materialize, including **mesothelioma,** a type of cancer caused by **asbestos** exposure. Asbestos is hazardous material once used to insulate and fireproof buildings, including the World Trade Center. Some of the material was released into the air when the twin towers were destroyed. Mesothelioma can take about five years to develop in dogs. "The next couple of years are our critical period," Otto said. "If we don't find anything, it's pretty impressive."

Learning how to keep the canines healthy is important, says Philip R. Fox, a veterinarian at the Animal Medical Center in New York City. "These animals are vital assets for state, local, and federal programs for disaster management," he told *WR News.*

Trish Cartino's Australian shepherd Joey searched for victims at the Pentagon in Washington, D.C., the site of another 9/11 terrorist attack. "Search-and-rescue dogs like Joey are just doing what they love to do," Cartino says. "It's our responsibility to keep them safe."

Hound Heroes

Search-and-rescue dogs aren't born with the ability to find missing people. They must train for at least 20 hours a week for about a year and a half to perfect their sniffing skills.

Most rescue dogs are German shepherds or Labrador retrievers, but any canine can fit the bill—if it meets certain requirements. A pup must be able to search for a hidden toy for long periods, tirelessly pursue someone, and track a toy despite distractions. Inquisitiveness, trainability, and energy are also pluses.

Veterinarian Cindy Otto says there are about 100 certified top-level search-and-rescue dogs in the United States. The canines are a precious resource, she says. "No piece of equipment can ever do the job that these dogs do," Otto told *WR News.*

Name: _____ Date: _____

1. What are hypotheses?

    A workers
    B theories
    C diseases
    D landfills

2. In the passage, the author compares and contrasts rescue dogs with human workers. Which statement below is true?

    A Many rescue dogs remained healthy after 9/11, but most human workers became sick.
    B Many human workers remain healthy after 9/11, but most rescue dogs became sick.
    C Both rescue dogs and human workers remain healthy after the 9/11 recovery efforts.
    D Both rescue dogs and human workers became sick after the 9/11 recovery efforts.

3. What can you conclude about veterinarian Cindy Otto after reading the passage?

    A She doesn't like being a veterinarian or working with rescue dogs.
    B She cares about rescue dogs and appreciates their work.
    C She thinks training rescue dogs is a waste of time.
    D She would rather be a medical doctor than a veterinarian.

4. Read this sentence from the passage: "'These animals are vital assets for state, local, and federal programs for disaster management,' he told *WR News.*"

In this sentence, the word **vital** means

    A harmful
    B friendly
    C essential
    D unnecessary

5. Which statement supports the main idea of the passage?

    A Rescue dogs fared better than human workers after the 9/11 recovery efforts.
    B German shepherds and Labrador retrievers are easy to train as rescue dogs.
    C Asbestos exposure is hazardous and can cause cancer in people and animals.
    D A dog's nose is superior to a human's nose in filtering air that goes to the lungs.

6. For how long must rescue dogs train before they are certified?

_____

_____

_____

7. Why are rescue dogs important? How do you know? Give specific examples from the text that support your answer.

_____

_____

_____

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Many human rescue workers wore masks _____ they were searching for survivors at the site of the World Trade Center collapse.

     A although
     B while
     C and
     D until

9. Answer the following questions based on the sentence below.

Cindy Otto conducted a study of 9/11 rescue dogs to find out if the dangerous rescue conditions would have similarly damaging health effects on the dogs as on the human workers.

Who? <u>Cindy Otto</u>

(did) What? _____

Why? _____

10. **Vocabulary Word**: respiratory: relating to the process of inhaling and exhaling.

Use the vocabulary word in a sentence: _____

_____

_____

Teacher Guide and Answers

Passage Reading Level: Lexile 1060

Featured Text Structure: Compare/Contrast – the writer presents similarities and differences between two or more objects, places, events, or ideas

Passage Summary: "Canine Courage" compares and contrasts how 9/11 rescue dogs and human workers fared after helping with the World Trade Center recovery efforts.

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Suggested answer: They must train for at least 20 hours a week for about a year and a half. [paragraph 13]

7. Why are rescue dogs important? How do you know? Give specific examples from the text that support your answer.

Suggested answer: Rescue dogs can work tirelessly, "nosing their way through endless" debris. [paragraph 1] They can also use their excellent sense of smell to "sniff out victims." [paragraph 2] According to Cindy Otto, rescue dogs are a "precious resource." [last paragraph]

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(did) What? **conducted a study of 9/11 rescue dogs**

Why? **to find out if the dangerous rescue conditions would have similarly damaging health effects on the dogs as on the human workers**

10. Vocabulary Word: respiratory: relating to the process of inhaling and exhaling.

Use the vocabulary word in a sentence: answers may vary.