

The HEART Beat

Special Interest Articles:

- Knowledge is Power: Category A Agents; by Betsy Haggard
- An Outbreak of Tularemia in a Texas Town; by Dr. Jessica Gullion
- Sandi's Corner; by Sandi Wiggins

Volunteer Spotlight: Meet Patrice Dunn. She's a school counselor, wife, mother, and a Medical Reserve Corps volunteer. Thank you to Patrice for her hard work and MRC promotion.



Denton County Health Department
Health Emergency Alert Response Team
940-349-2909



Category A Agents

By: Betsy Haggard, M.S., C.H.E.S.

Denton County must be prepared to address various biological agents, including pathogens that are rarely seen in the United States. These high-priority agents, called category A agents, include organisms that pose a risk to national security because they: can be easily disseminated or transmitted from person to person; result in high mortality rates and have the potential for major public health impact; might cause public panic and social disruption; and require special action for public health preparedness.

Denton County Health Department is working hard to make sure Denton County is adequately prepared to respond to diseases caused by category A agents. We encourage residents and the medical community to become familiar with these disease causing agents and involved in planning for a possible response. The category A agents include: Anthrax, Botulism, Plague, Smallpox, Tularemia, and Viral Hemorrhagic Fevers. Here are some important facts about each:

Anthrax is an illness caused by spore-forming bacteria. There are 3 types of anthrax:

cutaneous (skin), inhalation (lungs), and gastrointestinal (digestive). Anthrax is not spread person to person and if caught early, it can be treated with antibiotics. There is a vaccine for anthrax, but only those who have a high risk of exposure receive the vaccine.

Botulism is a muscle-paralyzing disease caused by a toxin made from bacteria. There are 3 types of botulism: foodborne, infant, and wound. Botulism is another disease not spread person to person. It can be treated with an antitoxin, which reduces the severity of the symptoms.

Plague is a bacterial illness that can present in 3 forms: bubonic, pneumonic, and septicemic. There is not a vaccine for plague and it can be spread from person to person. Antibiotics are effective in treating plague, but need to be given within 24 hours from the beginning of symptoms.

Smallpox is a contagious, infectious disease that can be fatal. Smallpox was eliminated worldwide in 1980 so vaccinations are no longer routine. Smallpox is spread from person to person. There is a vaccine available in the case of a smallpox emergency. It is important to note that one case of smallpox is considered an emergency.

Tularemia is a highly infectious

bacterial disease common in animals, especially rodents and rabbits. Typically people are infected by the bite of ticks and deerflies that have fed on an infected animal or by handling sick or dead animals. It is rarely spread from person to person. Antibiotics can be used to treat exposures.

Viral Hemorrhagic Fevers (VHFs) are a large group of viruses including Ebola and Yellow Fever. VHFs attack blood vessels causing different organ systems to fail. VHFs are highly infectious, but are rare in the United States. VHFs are spread through infected rodents, mosquitoes, and ticks. Ebola, Marburg, Lassa, and Machupo VHFs can be spread from person to person.

For more information on category A agents, please log onto www.dentoncounty.com/heart and click on Health Information.



Continued on Page 2



An Outbreak of Tularemia in a Texas Town

By: Jessica Gullion, Ph.D.

One of the hallmarks of a possible terrorist attack that epidemiologists are trained to look for is a large animal die-off. In May of 2006, a USDA Wildlife Management employee found 20 dead rabbits along a 0.6 mile stretch of road just north an international airport in Texas. He alerted the local health department: *What caused this many rabbits to die? Could this be terrorism?*

Zoonosis investigators collected blood samples and ticks from the dead animals and the specimens were rushed to CDC labs. Within a day they had an answer to the first question. The lab has isolated *Francisella tularensis* in the specimens.

Tularemia has significant history in bioweaponry. During the germ warfare research era, many countries explored the possibility of weaponizing tularemia. There is some evidence that tularemia outbreaks affecting tens of thousands of Soviet and German soldiers during WWII may have been the result of an intentional release. In the 1950s and 1960s, the US military created weaponry that would aerosolize tularemia, and the bacteria was stockpiled for this use. As a countermeasure, they also developed vaccines and antibiotic prophylaxis and treatment protocols. Because of its history, tularemia is on the CDC list of Category A agents for bioterrorism.

The FBI was alerted to the airport event. Area healthcare providers and veterinarians received information from the health department on surveillance and treatment of cases, and the media assisted with a public information campaign.

More dead animals were found in a radius around the road. The trouble was in a field north of the airport, on airport property. It was closed and mowing of the field ceased, and investigator set out to collect more specimens. Over the course of the investigation, the health department determined this was a naturally occurring outbreak, facilitated by a recent explosion in the rabbit population.

There is still risk for human transmission in a naturally occurring outbreak. Tularemia may be spread by ticks, mosquitoes, and deer flies, as well as through direct skin contact with an infected animal. Tularemia may also be spread through contaminated food or water or by inhaling infected material.

To bring an end to the outbreak, responders engaged in mass rabbit reduction. More than 1300 rabbits were killed on the property. Since then there have not been additional cases of tularemia; however, local officials continue to monitor the area for new outbreaks.

Category A Agents (Continued from Page 1)

In a health emergency, such as a release or infection by a category A agent, where the public need overwhelms the local medication assets, the CDC sustains a national repository of medication and medical supplies, called the Strategic National Stockpile or SNS. The SNS can be sent to a health emergency through a request from the governor's office. In the event that the SNS were needed in Denton County, a Point of Dispensing site or POD site may be used to distribute the necessary medication or vaccinations. A POD site is a clinic administered by the health department and staffed mostly by Medical Reserve Corps (MRC) volunteers.

Denton County Health Department is lucky to have many trained and willing volunteers to staff area PODs, but with our growing population, we need more. The MRC is composed of both medical and non-medical volunteers. Please encourage your friends, family, and coworkers to join the MRC today! Training is provided; willing hearts are needed!



Sandi's Corner

By: Sandi Wiggins, M.P.A.

The last several months have been extremely busy, (and travel filled for me) but we have made some significant strides towards achieving some goals that will carry us into the future. As we think about the impact that Category A agents could have on our community, you can easily understand why ensuring that our volunteers have been pre-screened, pre-trained and job assigned is so important to our overall preparedness. Our Medical Reserve Corps has already trained, screened and job assigned about 350 volunteers, but as Denton County continues to grow we recognize how much more critical each of you is in helping us meet one of our first targets of about 500 volunteers by the fall of 2008. Though I will continue to share what we are doing to grow our team, you remain our best advertisement and recruitment tool! No one is more effective than each of you in getting friends, family and co-workers to join our forces. As my way of saying thank you and to encourage you to continue with your "advertising" on our behalf, we are providing each of you with a new denim shirt that you can wear as you run errands and tend to business. *Denim shirt pick up will be on September 11, 2008 from 8:00 a.m. to 8:00 p.m. at the HEART office in the Denton County Health Department.*

We are matching our efforts with many of yours and over the last few weeks we have repeated our advertising campaign from last summer with a broader focus. This year, we have partnered with Collin, Dallas and Tarrant County to advertise the DFW Medical Reserve Corps on several local radio stations. Denton County is currently sponsoring the advertisement that you may have heard on KLTY (FM 94.9). To accompany these advertising efforts we are launching our first MRC television commercial this summer. This commercial will be aired on KDFW Fox 4 during some peak news and show times and will be Denton County specific. Our scheduled air dates are from July 1-27 so be sure to be watching. Our commercial will feature some of you (our MRC volunteers) and Emergency Services staff. We will also post it on our new dentoncounty.com/HEART web site for your viewing pleasure. Though this commercial will be aired this summer, we will use it for years to come to tell our story to a variety of partners including local businesses, other organizations, and state and local officials.

We are working hard to make the Denton County Medical Reserve Corps more visible throughout the community before our next disaster strikes. The news coverage of the flooding that is occurring in the Midwest underscores how quickly an event can turn disastrous. In addition to the efforts already mentioned, we will be launching a poster campaign targeting medical professionals and the general public. These posters have been professionally printed and will rival posters that might be used in a local franchise to advertise product. I will be calling on some of you this summer to help me strategically place our new MRC posters in key locations across the county.

Finally, I was recently appointed to a two year term on the Advisory Council for the National Association of City & County Health Officials. This is a wonderful format for me to both share what we are doing in Denton County and to "borrow" some great ideas from Medical Reserve Corps across the United States. We have the good fortune of having the only voice in our state and in our five (5) state region that has been asked to be a part of this advisory council so I am truly honored to have been asked to serve in this capacity. I have already attended some key meetings in Denver, Colorado and Washington, DC in this new position so my vantage point is being consistently adjusted. I am truly honored to have the chance to work with each one of you and I sincerely thank you for being willing to reach out to others by telling our story and making the Denton County Medical Reserve Corps better!

Other Tidbits

The Denton County Emergency Services office has partnered with us to ensure that our MRC badges are consistent with other county programs and will be easily recognized from any official location. If we have already taken your MRC badge photo, you will not need to do anything further, we will send you a new badge. If you have never taken a photo, you will be notified about when to come in to take a photo. I know that many of you have been concerned about your lack of badge but we are coordinating with the Emergency Services team to ensure that you get one as quickly as possible.

MRC Olympics date has been set for October 18th!



Volunteer Spotlight *Meet Patrice Dunn*



The Denton County Medical Reserve Corps has starting something new with this edition of our newsletter. We would like to use this corner to “spotlight” some of our outstanding volunteers. You will learn a little bit about these extraordinary people and how they have used their gifts and talents to make the MRC better. I hope you enjoy this small glance into the lives of a few folks and I hope these brief highlights inspire us all to go a little further.

This month, we would like to introduce you to Patrice Dunn. Patrice joined our Medical Reserve Corps in April 2008 and has already recruited 36 friends, family and co-workers to work along side her. Patrice is a Counselor at Griffin Middle School in The Colony and spends most of her time trying to positively change the lives of young people. She is an enthusiastic person with obvious passionate and natural leadership. Patrice will use these gifts to serve as a Counselor Coordinator for the MRC. I had the good fortune of meeting Patrice seven years ago when she taught at my daughter’s private Christian school so you can imagine how pleased I was to see her show up at a Medical Reserve Corps training years later. Her enthusiasm and zest for life have not diminished one bit, in fact I believe she is an even more animated passionate person. Patrice uses a picture of Tigger (from Winnie the Pooh) in the signature block of her e-mails and from what I have observed Tigger’s image is the perfect reflection of her quiet, focused energy and enthusiasm.

Patrice is the mom of Jordan 22 and Jonathan 18 years old. She has been married to her husband Troy for 14 years. She graduated from The Ohio State University with a B.S. in Health Education and she has taught elementary, middle, and high school. Patrice worked for 4 years as a health educator for LSU in the HIV/AIDS clinic. She also taught parenting to teens and sex education statewide in Louisiana. She has been an “official” counselor for 4 years and was believes that she was born to do that kind of work. When she is not busy with family and friends she enjoys going to movies and reading mysteries. “If I were to turn back the hands of time I would have been a profiler for the FBI. I am most thankful that God saw fit to use me to make a difference in this world to impact the kingdom.” Thank you Patrice for lending your hands, heart and most importantly your spirit to our team!



