

Harrison Carter
JOMC 50
24 March 2004

A LOOK AT SEVERE ACUTE RESPIRATORY DISEASE (SARS) MORE THAN A YEAR AFTER IT ALL BEGAN

There was almost no escaping hearing the words SARS in the summer of 2003. I certainly could not escape it. Everyday I came to work in a newsroom in Miami, Florida, I flipped on the monitor to my computer to an open CNN.com and turned on the eight inch television monitor playing 24 hour news that sat next to the computer in my cube. On both devices there was a constant flow of information about SARS. It was the peak of the spread of a new infectious disease that would affect eight thousand and ninety-eight people and result in the deaths of seven hundred and forty-four around the world.(CBC) Many more healthy people felt the fear as thousands shuttled through international airports wearing surgical masks and millions more watched them closely on television. The last of the cases were reported in the fall and SARS seems all but forgotten now after its constant media coverage, but what was SARS? What do we need to know about it now? Is it going to return? I thought it would be interesting to do an article about an illness that more than its fifteen minutes of fame.

SARS was first noted in an official Chinese health document in February of 2003. It is believed that the illness first affected people in the Guangdong Province of China in November of 2002. (Kamps 1) This is a very new illness. Emergence of new Microbial Disease is something that has been studied for over a decade. It has been determined that Microbial adaptation as well as human interference and human health breakdowns are

some of the causes can bring about new forms of illness.(IOM) The problem that arises with completely new diseases is that it requires a completely new set of research. Scientists will have to analyze all the facets of the new threat. This is a process that takes a long time. This research must be done in order to have the basic knowledge of the virus in order to aid in early detection, prevent misdetection and find ways to treat it.

(LaMontagne)

Severe Acute Respiratory Syndrome(SARS) is caused by a coronavirus. A coronavirus is a virus that replicates the cytoplasm of animal host cells. This coronavirus, however is unlike any other coronavirus. It seems to be an adaptation to the known lineage of coronaviruses.(Kamps 2) That means to the average person that you will get very sick. The symptoms of SARS include a fever over 100.4 degrees and a dry cough. An infected person may also have trouble breathing and could develop pneumonia. Other symptoms can accompany the common signs including headache, stiffness, confusion, rash, and diarrhea.(CBC) SARS is spread through close contact with infected persons. According to the CDC “close contact” can be considered caring for or living with the infected, or having direct contact with bodily secretion by way of physical contact, sharing or conversations within 3 feet. (CDC)

The summer was full of fear, and that fear disappeared, but according to experts SARS may not be gone for good. It is believed that SARS may run in cycles like influenza. There may be no SARS cases right now because of the lack of human contact with infected animals this time of year. The disease may return, but the hope is that it will not catch anyone by surprise and the preventative measures now in place in high risk areas like China will prevent the outbreak from affecting as many people as it did last

summer. The Chinese Ministry of Health is taking the advice of researchers and are monitoring closely the possibility of a SARS return.(Reappearance)

If SARS returns, will you be ready? The United States was not one of the countries that contended with the worst of the SARS spread, but it felt like we were. The international attention to the illness caused the US health organizations to take notice. During the outbreak, the entire country and its airports were monitored so SARS would not begin a full scale outbreak in this country. If SARS were to return in the future it is the hope of the leading infectious disease authorities the CDC, that we will be ready. The CDC developed a US preparedness plan in November of 2003 that has since been updated in January. (CDC) This plan is to prepare health officials, doctors, and hospitals for a return of SARS or other similar new microbial illnesses. (Landers 7)

The plan is over 170 pages, but the message is simple. The CDC says that in a culture where you may stay home sick only a day, we need to take respiratory illnesses seriously. (Landers 12) President Bush also put SARS on the list of illnesses for which in the event of a breakout quarantine is authorized. (Landers 19) The plan lays out how the US would deal with a large scale SARS outbreak. The hope is that if the proper safety measures and precautions are taken then the outbreak can be controlled to a minimum number of people affected. The goal of the CDC report is to let people know they are ready and feel like they themselves and health care workers are ready.

This service learning look at SARS could be useful in web format. The information that is contained in the annotated bibliography contains links to the world's leaders in SARS information. When there is no outbreak, like now, the information may only be useful for the purposes of academic research. If or when SARS begins to once

again affect the world's population, this information could be invaluable. People will most likely have forgotten most of the details from news broadcasts from summer of 2003, and some will panic. The information contained on a website containing this article and links to the research that I did, will allow people to get the latest information on the illness, what they should be doing, and the latest SARS news bulletins from around the globe.

Annotated Bibliography

Institute of Medicine(IOM). Microbial Threats to Health. March 2003.
<<http://www.iom.edu/includes/dbfile.asp?id=6146>> (23 March 2004).

The Institute of Health is a non-profit organization that works under congressional charter to provide health policy advice. It came out with an original report on Microbial threats in 1992. This is a decade update on disease and shows particularly well the cause of new microbial concerns today.

Ed. Kamps, Bernard Sebastian and Ed. Hoffman Christian. SARS Reference. Third Edition. Online. Flying Publishers. 2003-2004.
<<http://www.sarsreference.com/>>(23 March 2004)

This online edition of a book about SARS. Has a huge amount of information spanning from a useful timetable from the time it was first seen in China through the summer of 2003. This has some very scientific information as well as information that is easy for anyone to take in.

LaMontagne, John R and Simonsen, Lone and Taylor, Robert J and Turnbull, John and The SARS Research Working group Co-Chairs. Severe Acute Respiratory Syndrome: Developing a Research Response. The Journal of Infectious Diseases. 28 January 2004.
<<http://www.journals.uchicago.edu/JID/journal/issues/v189n4/32183/32183.web.pdf>> (23 March 2004)

This Journal piece is a result of a group of researchers brought together by the National Institute of Allergy and Infectious Disease to point out what is lacking in SARS research and what is needed to be researched. It points out where the research should be headed. It points out that we don't yet have reliable methods of early detection. Information that is useful to a non-professional is limited, but there is some good information.

Landers, Susan J. "CDC outlines its battle plan for SARS." American Medical News. 10 November 2003.
<<http://www.ama-assn.org/amednews/2003/11/10/hll21110.htm>> (23 March 2004).

The American Medical News online is available through the UNC library database. Landers did many articles on SARS during the fall of 2003. This article outlines some of the highlights of a 170 page CDC SARS preparedness plan. The CDC plan is available online, but is a difficult read.

Information that is useful to a non-professional is limited, but there is some good information.

The Mystery Illness. CBC online. last updated 5 January 2004.

<http://www.cbc.ca/news/background/sars/>> (23 March 2004)

Radio Canadas in-depth look at the SARS phenomenon. Canada was at the forefront of the summer scare and this provides much of the basic information about SARS as well as SARS hygiene and the latest SARS news.

“Reappearance of SARS Highly Possible: Expert” The People Daily. The Peoples Daily Online. 15 December 2003.

<http://english.peopledaily.com.cn/200309/15/eng20030915_124294.shtml>(23 March 2004)

This is an article from the fall of 2003 published on the online version of a influential Chinese newspaper. This article speaks to Yang Weizhong a sars expert in China, and outlines the belief that that the control that appears to be had over SARS may be short lived, and sometime beyond this spring it will re-emerge.

Severe Acute Respiratory Syndrome(SARS). CDC. 21 January 2004.

<<http://www.cdc.gov/ncidod/sars/>> (23 March 2004)

The Center for Disease Control provides the United States with most of its infectious disease information. Their site provides much of the information that the average American needs to know about SARS. It is updated with current news about the topic, it was last updated the 21st of January. It also has a section called “What everyone should know” which is useful. Also, the full version of the CDC SARS preparedness plan can be accessed through the site.

Severe Acute Respiratory Syndrome. Medline Plus. Last updated 22 March 2004.

<<http://www.nlm.nih.gov/medlineplus/severeacuterespiratorysyndrome.html>> (23 March 2004)

This Medline Plus topic site contains great up to date links to the very latest SARS information from a variety of news sources like Reuters and various International Health Organizations. Great information regarding the very latest in fighting the SARS.

Severe Acute Respiratory Syndrome(SARS). WHO. last updated 8 March 2004.
<<http://www.who.int/csr/sars/en/>>(23 March 2004)

The World Health Organization is where the rest of the world turns for health information. This is the worlds mirror to the CDC page about SARS. It contains up to date information about SARS related research and other articles related to SARS. It also has links to travel guidelines and other pages about the topic, including the CDC and Health Canada.

Special Online Collection:The SARS Epidemic. Science Magazine. The American Association for the Advancement of Science.2004.
<http://www.sciencemag.org/feature/data/sars/> (23 March 2004)

This is a database that provide links to science magazine articles about all the scientific aspects of the SARS epidemic. There is no information that is immediately useful to the article on the homepage for the articles. However anything you ever wanted to know about the actual physical molecular structure or epidemiology, this is the right site.