

# **Breathing Easier on Airliners with Oligodynamic Silver:**

## **Preventing the Most Serious Respiratory Track Infections**

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Respiratory tract infections that spread from air-traveler to air-traveler are a key concern of the World Health Organization (WHO).<sup>1</sup> By bringing along a small spray bottle of 10 parts per million (ppm) oligodynamic silver hydrosol with you as you board your airplane, you and your family may find yourselves adequately protected from a number of serious air borne infections.

“The U.S. Centers for Disease Control [is] now advising people with TB [tuberculosis] to avoid long flights on commercial airlines, so they don’t infect the rest of us,” notes airliner travel expert Diana Fairechild, author of *Jet Smarter: The Air Traveler’s Rx*.

The former flight attendant, whose book is must-reading for all frequent air travelers, adds, “The [Centers for Disease Control and Prevention] is . . . saying that 15 million people in the United States are now infected with TB. What would you do if someone next to you or behind you, God forbid, had a hacking cough? What about flight attendants who catch TB from passengers and then inadvertently spread it on their subsequent flights? I recently met another ex-flight attendant who told me that she caught TB on a flight but she could not prove it, and therefore could not collect compensation from her airline.”

Long ago the authoritative medical literature suggested oligodynamic silver was effective against TB infection,<sup>2,3</sup> and more recent research offers compelling evidence that when used appropriately it could amount to a superior preventative agent as well.<sup>4,5,6,7</sup>

Quite apart from TB, there are many other contagions to which airliner passengers may well be exposed while traveling. These would include severe acute respiratory syndrome (SARS), Avian Flu (H5N1), and other upper respiratory track infections (URTIs) in general. These kinds of infections are what chiefly concern federal agencies in their containment strategies to prevent pandemics. With international air travel being so common place, it is easy to imagine that a single international air passenger could easily spread in a matter of hours a life threatening URTI across much of the globe. Rentz has recently addressed the issue of SARS and oligodynamic silver, proposing this type of non-toxic silver would be a highly effective treatment.<sup>8</sup> Additionally, Gordon and Holtorf have documented the extraordinary value of oligodynamic silver in URTIs in general (especially Influenza A, B and C), suggesting it is a highly promising agent to combat Avian Flu (a sub-type of influenza A).<sup>9</sup>

### **Airliner Cabin Air Quality Still Not Adequate**

Since September 11, 2001, the Federal Aviation Administration has been working vigorously to protect passengers from hijackers and bombs. Yet, 15 years after the National Academy of Sciences first recommended that airline cabin air quality be evaluated, the FAA has done little to ensure that the air in cabins of commercial jets is safe to breathe. While we can all appreciate that protection from the dire threat posed by terrorists is of the utmost urgency, perhaps we should not completely discard the notion that safe flying should include safe air.

A National Academy of Science reports academy study issued in December 2001 pointed to poor air quality on planes as of particular concern for the elderly, infants and people who suffer heart or lung diseases. In fact, according to the NAS experts, more than a decade after the FAA banned smoking on all domestic airline flights, passengers and cabin crew still frequently complain that the air on planes is unpleasant and may be unhealthy.

The air in an airliner cabin is a mixture of outside and recirculated supplies, similar to that in many homes and offices. But the proximity of passengers to one another, the need for cabin

pressurization, low humidity, and potential exposure to common chemical and biological contaminants—all in an enclosed structure—makes the airline cabin environment unique.

The committee that wrote the report noted that the number of air passengers worldwide has nearly quadrupled in the last 30 years to about 1.5 billion annually. And concomitant with this increase, the number of older and younger passengers has gone up, including children, infants, and people with pre-existing medical conditions. And the number of potential infectious pathogens has also greatly increased.

Although recirculated air appears to be unlikely to spread infectious diseases, absent a system to monitor air quality routinely, however, nothing is certain. And we do know that the spread of illnesses is certainly due to passengers being crowded together.

In addition, evidence suggests that environmental factors inside commercial aircraft may be responsible for particular health complaints among passengers and crew, and that these chemicals may also impair immune function. Ozone pollution may cause respiratory problems and decreased oxygen pressure may present a health risk for people with certain pre-existing conditions, such as cardiac and respiratory diseases. Other toxic substances that may contaminate cabin air, such as engine oils, hydraulic fluids, de-icing solutions, and pesticides, have not been monitored adequately to assess potential health risks. Some of these substances clearly impair our immunity, making us even more vulnerable. The low humidity and accompanying dryness may also thin our protective mucous membrane linings, decreasing our immune system's effectiveness.

### **Oligodynamic Silver for Protection**

In a world concerned with the spread of virus and disease, aerosol oligodynamic silver is increasingly being tapped for its bactericidal properties and is used in treatments for conditions ranging from bacterial infections to Legionnaires' disease<sup>10, 11</sup> (Also see:

<http://www.silverinstitute.org/news/1f1999.html> and <http://www.silverinstitute.org/news/3a1999.html>).

Oligodynamic silver is the most studied and documented effective antiseptic yet discovered, and the number of known pathogen strains against which it is effective is truly impressive (i.e.,  $\geq 750$  as evidenced in the medical literature over the past 100 years). Its ability to decimate harmful pathogens without the side effects of antibiotics is especially useful when traveling by air and our immune systems are probably not at optimal function. With fine 10 ppm oligodynamic silver given as a spray, we can easily reach the areas of the nasal passages, oral cavity, throat and respiratory system in general where we are likely to be exposed to such contagions.

And when we land and are in a strange land and subject to exposure to infectious pathogens continued use of oligodynamic silver—as well as frequent hand washing and use of a quality probiotic/prebiotic—can further protect us.

### **Sound Advice**

#### ***Oligodynamic Silver Protocol for Air Travel***

During air travel, fully saturating the mouth with oligodynamic silver is easily accomplished by repeated spraying of 10 ppm oligodynamic silver two to three times per hour. Such doses are perfectly safe for any member of the family, according to comprehensive research published by the EPA.<sup>12</sup> This approach is an easy way to help thwart recirculating air cabin germs from gaining a foot hold in your respiratory passageways.

If you did not have oligodynamic silver when you were traveling and now find yourself with the sniffles, a sore throat or a cough, it is not too late. Your holistic physician can advise you to take small frequent oral doses of oligodynamic silver (up to 15 cc every hour on an empty stomach only), or

even prescribe hourly nebulized treatments (up to 15 cc per treatment) alongside oral ingestion of the oligodynamic silver.

For further information go to: [www.natural-immunogenics.com](http://www.natural-immunogenics.com)

## References:

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<sup>1</sup> See: [http://whqlibdoc.who.int/publications/2007/9789241580397\\_5\\_eng.pdf](http://whqlibdoc.who.int/publications/2007/9789241580397_5_eng.pdf)

<sup>2</sup> Searle, A B, *The Use of Colloids in Health and Disease*, (Quoting Henry Crookes), E. P. Dutton and Company, NY, 1919; p. 70.

<sup>3</sup> "Silver Floride, Silver Iodate, Silver Iodide, Silver Lactate, Silver Nitrate" Merck's Index, fourth edition, Merck & Co., Inc., Rahway, NJ, 1930; p. 460.

<sup>4</sup> Matsui Y., et al., Effect of Silver Carrying Photocatalyst "Hikari-Gintech" on Mycobacteria Growth in vitro, *Microbiol Immunol.* 2004;48(7):489-95.

<sup>5</sup> Cuin A, et al., Synthesis, X-ray structure and antimycobacterial activity of silver complexes with alpha-hydroxycarboxylic acids. *J Inorg Biochem.* 2007 Feb;101(2):291-6. Epub 2006 Oct 20.

<sup>6</sup> The Department of Clinical Sciences at the University of Cape Town has performed preliminary research under Professor Lafras Steyn confirming oligodynamic silver as an effective antimycobacterium agent. In vitro investigations revealed that oligodynamic silver was lethal to *Mycobacterium smegmatis* (an excellent model organism for correlation to human TB infection) as low as 1.6 ppm to 3.3ppm at the foci.

<sup>7</sup> Lin, Y. E., Stout, J. E., Vidic, R. D., McCartney, C., and Yu, V. L. "In Vitro Efficacy of Copper/Silver Ions in Killing *Mycobacterium avium*: A New Method for Disinfection of Hospital Water Distribution Systems." 96th General Meeting, American Society for Microbiology, New Orleans, LA, May 19-23, 1996.

<sup>8</sup> Rentz E, Viral Pathogens and severe acute respiratory syndrome: Oligodynamic silver" for direct immune intervention. *Journal of Nutritional and Environmental Medicine* June 2003; 13(2):109-18.

<sup>9</sup> Gordon E, Holtorf K. Promising cure to URTI pandemics including the avian flu (H5N1): Has the final solution to the coming plagues been discovered? Part II. *Townsend Letter.* 2006 April; #273.

<sup>10</sup> Moyasar, TY, et al., "Disinfection of Bacteria in Water Systems by Using Electrolytically Generated Copper, Silver and Reduced Levels of Free Chlorine," *Canadian Journal of Microbiology*, The National Research Council of Canada, Ottawa, Ont., Canada, 1990; p. 109-16.

<sup>11</sup> Stout JE, Yu VL. Experiences of the first 16 hospitals using copper-silver ionization for *Legionella* control: implications for the evaluation of other disinfection modalities. *Infect Control Hosp Epidemiol.* 2003 Aug;24(8):563-8.

<sup>12</sup> U.S. Environmental Protection Agency – Silver; CASRN 7440-22-4. Last revised – 1996 Dec 1.