

## **The Magic Bullet – Influenza 1918 - 2009**

Lauding the use of YouTube, Twitter, pod casts and other high tech modalities to disseminate information about the “swine flu” situation, newly sworn-in HHS Secretary Sebelius said, “Our administration believes in using new methods to engage the American people and ensure they can speak directly to their public officials.” Meanwhile, commenting on the capacity of local communities to respond to the situation, Dr. Richard E. Besser, the acting director of the federal Centers for Disease Control and Prevention, stated the public health system was in “a tough situation”. How well can the American public engage and speak directly to their public officials about the current situation or the next inevitable public health “surprise”?

Since the devastating influenza pandemic of 1918, nearly a century ago, advances in global disease surveillance, prevention, education, diagnosis, and treatment have been considerable and often greatly mitigated associated morbidity and mortality. We have many more, and better, magic bullets. However, as I discuss in my book, “De-Spamming Health - Reforming the Health System from the Bottom Up”, often the public’s basic response to major public health situations differs little than the 1918 response. I mention several examples, including our response to West Nile Virus and a 2001 meningitis outbreak in Alliance, Ohio. With an expectation of zero tolerance for disease and death, folks are initially shocked, distrust public health officials, and fixate upon experts quickly disseminating the magic bullet. As in 1918, and as will occur in the future, sometimes we draw blanks.

Also, as I also mention in my book, in 1983, Dr. Joshua Lederberg, a Nobel Laureate at Rockefeller University, in a piece entitled “Medical Science, Infectious Disease and the Unity of Humankind” wrote how the shock expressed by the public over a new epidemic like AIDS will be a common phenomenon until humankind comes to grips with its place in nature. Organisms, that view man as their host or enemy, will constantly change to overcome whatever protective or curative weapon systems humankind has devised. Until we devise a new magic bullet, e.g., vaccine, treatment, there will be severe illness

and death in such situations. Moreover, rushing such remedies can have its own negative consequences, as we witnessed by the last massive swine flu immunization venture.

As with natural disasters, when the next surprise occurs our early warning systems will likely assist local communities prepare sooner and better. However, absent a magic bullet, many of the public health and safety measures we will have at our disposal will not be markedly different than we had in 1918. How well we deploy them will depend upon the strength, training, competency, integration, and command and control capacity of local public health and safety officials. It will also depend upon the extent to which the public knows and trust them with whom to “speak” and “engage”. In that respect, as noted by Dr. Besser, in many communities we are in “a tough situation”

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