



# H1N1: Looking Back

## Swine Flu and Its Vaccine

By Amarachi Eseonu

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The infamous combination of runny nose, fever, and sore throat that has caused thousands of individuals in the United States, including several Harvard students, to seek medical attention, constitutes the notorious H1N1 virus. Although most people make annual visits to their primary care physicians to receive vaccination for the infectious seasonal flu, the 2009-2010 flu season presented a serious deviation from the norm: the rise of a specific viral strain of influenza, called the H1N1 virus or “swine flu.” While the seasonal flu continued to spread as usual, the appearance of H1N1 gave rise to extraordinary societal hype about the H1N1 flu. Global media continuously reported H1N1 news; daily reports relayed information ranging from the symptoms of the virus to when the next vaccine shipment would arrive.

On April 17th 2009, medical officials at the Center for Disease Control and Prevention confirmed two

cases of swine flu (1). By September 20th, 2009, the H1N1 virus had been identified in almost 191 countries and territories (2). As a result, an escalating social panic began. Countless posters, articles, blogs, and websites emerged detailing methods of preventing the disease, from not going to the gym to ceasing to drink alcohol (3). Music videos were created, especially rap, to draw the attention of the younger crowd (4). Health maps and online monitoring of the virus emerged, allowing individuals to track areas that contained infected populations (5). Even at Harvard’s 2009 graduation ceremony, one could not escape the hysteria: signs and emails discouraged congratulatory hugs and handshakes to minimize interpersonal contact.

Walking down the street during the 2009-2010 flu season, one would inevitably notice people wearing medical masks. Hand sanitizing became ubiquitous, from building lobbies to

restaurant entrances, to foster a feeling of perpetual cleanliness and to reduce the chance of spreading H1N1. Meetings and classes were cancelled. As the hysteria grew, so too did the unscientific myths for fearing the disease. For example, some parents forbade their children from eating pork sandwiches during the “swine flu” season. People were scared. Why? Perhaps because headline after headline predicted the uncontrollable spread of the virus. By August 2009, reporters were even suggesting that approximately half the population could become infected with the virus and that it might result in 30,000 to 90,000 fatalities (6,7).

The real question is whether or not the H1N1 virus deserved this hype. Is it truly much worse than the typical seasonal flu?

The H1N1 virus is similar in many ways to seasonal influenza. Influenza infects the respiratory tract by transmission through air droplets or infected

bodily fluids such as saliva and mucus (8). Public health and medical professionals around the world, however, voiced particular fear of the H1N1 virus because, at the time of the early H1N1 outbreak, there was no vaccine for the virus. Traditional flu shots did not protect against the H1N1 strain of the virus (8). While the H1N1 virus arose in April, it was not until October that hospitals began receiving vaccines for the virus (9). There was also a serious concern that there might be mutations in the genes of the H1N1 virus

that could dramatically increase the severity of the virus (8). Furthermore, perhaps because the world of health care felt unprepared for the H1N1 pandemic, there was strong emphasis on educating the public to help thwart the proliferation and spread of the disease (8).

The Center for Disease Control and Prevention reported that from April to January there were approximately 57 million cases of the 2009 H1N1 virus in the United States alone, along with around 257,000 hospitalizations and 11,690 deaths (10). The seasonal influenza and complications associated with it kill, on average, just under 100 people per day (11). Now let us compare this to the H1N1 virus. If we take 11,690

deaths and divide this by the ten month span in which the CDC approximated its duration, we notice that this only gives us about 40 deaths per day, which is actually less than that of the seasonal

flu. Apparently and most ironically, the H1N1 virus was not especially severe. One 2009 review reports: “The clinical manifestations of the pandemic H1N1/09 virus to date have also been typical of seasonal influenza, with fever in 94% of patients and sore throat in 66%...the majority of patients infected with the pandemic virus worldwide continue to experience mild symptoms, recovering fully within 1 week, even in the absence of any medical treatment” (8).

Was the H1N1 virus over-hyped?

The answer to that question seems rather simple, and recently the medical community is realizing this as well. In April 2010, the World Health Organization admitted that they handled the H1N1 flu pandemic incorrectly, in that they overplayed the dangers of the virus (12). Was their mistake excusable? Perhaps yes, because it is better to be safe than sorry. However, as we restock our fridges with pork sandwiches, we should be wary of the power of the media and its ability to exaggerate events. The H1N1 scare marked only one instance of medical hype running far away from the truth. As mature citizens, we must remain educated and vigilant to prevent unnecessary turmoil over a fantastically popular but unwarranted scare. **H**

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