

## 3.1 HUMIC ACID AND VIRAL DISEASE

### Today's Health Challenge

Over the past several centuries the world's population has gradually evolved from an agrarian society—thinly spread—to an urban, bundled society, living in closer proximity than at any time prior in human history. As a result, there is far more interpersonal contact—that is, interaction—within and between populations.

Because of the close proximity of large numbers of people in today's urban-focused society, contagious diseases are easily and rapidly spread. For example, influenza viruses are the result of “urban” agriculture—ducks and pigs raised together on family farms adjacent to villages and towns in China; or even in backyards within cities, for example, in Hong Kong and Taiwan. Ducks spawn the virus, pigs incubate it, and the farmer introduces it into the general populace.

In addition, world travel has greatly enhanced the spread of contagious disease. The epidemiology is clear: an infectious disease (for example, the 1968/69 Hong Kong flu) takes 6-8 months to circle the globe in today's world. The 1918 “Spanish” flu killed somewhere around 50-100 million people worldwide. Imagine if such an epidemic occurred today (for example, swine flu; or air-born Ebola). Yet we are no better prepared to deal with such an outbreak than we were in 1918.

The ease of transmission of viral diseases, coupled with the potential for their rapid spread, means that no matter where we are in the world we are all at risk.

### A New Answer: Humic Acid

On the optimistic side, modern pharmaceutical research continues to yield medications for a wide variety of illnesses; natural-product (nutraceutical) materials are often the source of inspiration behind new-drug development. Humic acid—a soil extract—is one of the newest, most-exciting such natural products to reach the nutraceutical marketplace in recent years. It offers far-reaching benefits for human health: when properly sourced and processed, it is transformed into Laub BioChem's VFI Humic Acid<sup>®</sup>, the world's first *all-natural, safe, broad-spectrum* antiviral.

### Global Potential

Clinical data (Sec. 4) have firmly established the broad-spectrum efficacy of Laub BioChem's VFI Humic Acid<sup>®</sup> against such diverse viral types as hepatitis C, herpes, hemorrhagic fever, HIV, and influenza viruses (see attached Research Briefs). The accompanying Table provides an overview of the potential applications of humic acid in combating human, animal, and fish viral disease.

On a commercial note, the world market for antiviral drugs, currently estimated at well over \$60 billion per annum, represents one of the most challenging yet most significant global opportunities in the twenty-first century.