

PolicyPennings by Dr. Daryll E. Ray

Building a wall of protection against the spread of disease

The recent outbreak of bird flu in Southeast Asia and a case of SARS in China coming on top of the cow found with Mad Cow Disease (Bovine Spongiform Encephalopathy – BSE) serve as a reminder that animal health issues cannot be considered apart from their potential impact on human health. In these and numerous other cases from small pox, to the 1918 influenza epidemic, to AIDS, diseases have been making their way from animals to humans. At present, worldwide control measures have shielded the U.S. from SARS and the current form of the bird flu.

To help control the spread of the H5N1 strain of the bird flu, officials in countries like Japan have banned the import of chickens from infected areas, Kentucky Fried Chicken restaurants in Vietnam are switching their menu to fish, Indonesia is embarking on a program to vaccinate all chickens, and the World Health Organization (WHO) is convening an international conference to determine what measures are needed to bring the disease under control. In addition, tens of millions of infected chickens across the region are being slaughtered to prevent the spread of the disease. At present, the disease can pass from fowl to humans but not from one person to another. The fear of officials is that the longer the flu circulates the greater the chance are that it will combine with the human influenza virus and mutate in such a way that it will be spread from person to person.

On the home front, measures regarding BSE were announced on Monday, January 26. The USDA announced that it had identified some of the herdsmates that came across the Canadian border with the BSE infected cow. Of the additional animals tested, none have been infected with BSE. Because of the lack of an animal identification and tracking system and because some of the herdsmates may have already been slaughtered, the USDA is doubtful that it will ever identify all 98 animals that were in the same herd as the infected cow.

The U.S. Food and Drug Administration (FDA) announced that it “intends to ban from human food (including dietary supplements) and cosmetics a wide range of bovine-derived material so that the same safeguards that protect Americans from exposure to the agent of BSE through meat products regulated by the USDA also apply to food products that FDA regulates.” The banned materials include: any material from downer cattle, any material from dead cattle, Specified Risk Materials (brain, skull, eyes, and spinal cords of cattle 30 months or older and a portion of the small intestines

and tonsils from all cattle), and product known as mechanically separated beef (but not meat obtained by Advanced Meat Recovery).

In addition the FDA announced four changes to the animal feed rule. First, mammalian blood and blood products may not be fed to ruminants as a protein source. In the past, protein from this source has been used as a calf milk replacer diverting the cow’s milk to the higher valued commercial milk market.

Second, the use of “poultry litter” will be banned as a feed ingredient for ruminant animals. This is to avoid cross-contamination because poultry feed may contain ruminant protein and spillage would allowed the banned material to be fed back to ruminants.

Third, “plate waste” will not be allowed to be used as a protein source for ruminant feed. “Plate waste consists of uneaten meat and other meat scraps that are currently collected from some large restaurant operations and rendered into meat and bone meal for animal feed.”

The fourth change will require “equipment, facilities or production lines to be dedicated to non-ruminant animal feeds if they use protein that is prohibited in ruminant feed.” In addition the FDA has indicated that it will step up its inspections of “all known renderers and feed mills that process products containing materials prohibited in ruminant feed.”

The goal of all of these regulations is to increase the safeguards protecting human and animal health, reducing the risk that a serious disease can pass from animals to humans. In light of our increasing knowledge of the development and spread of disease, we expect that over the years we will see additional regulations being implemented to protect human health. The human and economic consequences of not implementing prudent safeguards can be staggering. The estimated impact of the 1918 influenza epidemic ranges from 20 to 50 million lives. The toll of the AIDS epidemic continues unabated. In this context, WHO hopes to contain H5N1, and federal regulators hope to minimize the risk of BSE.

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