

## AVIAN INFLUENZA – GLOBAL EPIDEMIC PROBLEM

Avian influenza is a contagious disease of animals caused by viruses, members of the family *Orthomyxoviridae*, genus *influenzavirus A*. Influenza A viruses have 16 H subtypes and 9 N subtypes. Only viruses of the H5 and H7 subtypes are known to cause the highly pathogenic form of the disease. Wild waterfowl are considered the natural reservoir of all influenza A viruses. The role of migratory birds in the spread of highly pathogenic avian influenza is not fully understood. They have probably carried influenza viruses and they can introduce to poultry flock H5 and H7 viruses, which can mutate to the highly pathogenic form. Some migratory birds are now directly spreading the H5N1 virus in its highly pathogenic form. The widespread persistence of H5N1 in poultry population is dangerous for human health. In Hong Kong, H5N1 virus infected 18 people and killed 6 of them in 1997 and the second

time in early 2003 the virus caused two infections, with one death. The virus has appeared in Asia and from mid-December 2003 through early August 2004 the outbreaks in poultry caused by the H5N1 virus were reported in nine Asian nations. Russia reports its first H5N1 outbreak in poultry in late July 2005, Kazakhstan and Mongolia in early August. In October 2005, H5N1 was confirmed in poultry in Romania and Turkey. The H5N1 virus was the cause of death or destruction of about 5 billion (milliard) birds. In the current outbreak, laboratory-confirmed human cases were reported in four Asian countries: Cambodia, Indonesia, Thailand and Vietnam. The virus infected 126 people and killed 64 of them. According to WHO, FAO and OIE virus H5N1 appearing in many countries and expanding to the West, is a serious threat to human health.