

EMERGING ISSUES

Timeline of Events: ¹

1960s

- Equine piroplasmosis first reported in the United States.
- Duck virus enteritis outbreak first reported in commercial ducks in New York.

1970s

- Congress authorizes high-security quarantine center for animals imported from countries with FMD and other exotic foreign animal diseases.
- Outbreak of Venezuelan equine encephalitis (VEE) stopped in south Texas.
- Mexican double yellow-headed parrots from South America introduce exotic Newcastle disease into commercial poultry in southern California.
- Outbreak of cattle fever ticks found at Alice, Texas, far north of the border buffer zone.
- Cattle TB reactor rate drops to all-time low of 0.03%.
- Serious outbreak of exotic Newcastle disease in pet birds eradicated from 40 states and Puerto Rico.
- Cattle fever ticks again discovered in Puerto Rico.
- Contagious equine metritis (CEM) diagnosed in Thoroughbred horses in Kentucky
- Raccoon rabies jumps from the southeastern states to West Virginia and continues north.
- Lyme disease emerges. (2)
- "Farmer's lung" related to micropolyspora in cattle herds.
- Hong Kong human influenza pandemic cause by recombination of animal influenza viruses and not mutation of human virus.

1980s

- Largest outbreak of highly pathogenic avian influenza in Pennsylvania, Virginia, Maryland and New Jersey.
- Evidence of avian influenza viruses causing outbreaks of severe disease in mammals - pigs, seals, mink and whales.
- Cattle TB reactor rate drops to new low of 0.003%.
- USDA requires all swine moving in interstate commerce to be identified; concern is sulfa and other drug residues.
- Discovery of exotic ticks on imported ostriches prompts ban.
- PRRS emerges. (3)
- Vesicular stomatitis emerges in southwest.
- Human ehrlichiosis emerges.
- Neospora-like protozoal agent causing abortions in cattle emerges.

1990's

- Bovine TB recognized as serious problem in deer and elk.
- Acute PRRS reemerges.

- Chronic wasting disease of deer and elk.
- Acute Transmissible Enteritis in Turkeys. (4)
- Vesicular stomatitis reemerges in southwest.
- Raccoon rabies reaches all the way up the Atlantic Seaboard including Maine. (5)

Trends

- There will be new, emerging and reemerging animal and zoonotic diseases. This is due to ecological change and growing economic, agricultural and social forces that drive vast movements of hosts together. (1,6,7,8)
- Increasing international trade and regionalization based disease criteria, leading to increased global movement of animals, animal products and animal semen and embryos. (12)
- More intensive rearing of animals increases risks of disease and latent infections. (8)

Uncertainties For The Future

- Ability of the surveillance, detection and emergency management systems to effectively deal with emerging disease. (12)
- Role of novel, trendy meat production systems, such as ostrich farming, deer and elk farming, water buffalo farming and crocodile farming in development of emerging diseases.
- Role of changes in agricultural production, food production, processing, and distribution systems on development of emerging diseases. (8)
- Effects of climate changes (global warming) on infectious diseases. (9,10,11)

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