

<b>Virus</b>	<b>Year of Emergence</b>	<b>Source</b>	<b>Death Rate</b>	<b>Symptoms</b>	<b>Number of Deaths</b>
COVID-19	2019	Evidence points to Covid-19 originating from animals – most likely horseshoe bats, and transferred via pangolins in wet markets where live and dead creatures (both wild and domesticated) are sold as food and slaughtered on demand.	0.07 - 16%	Fever, cough, difficulty breathing	370,000 to June 2020
Bird Flu – H7N9	2013	Wild birds are the natural hosts of bird flu viruses which can spread to chickens in intensive poultry farms where the virus can easily mutate and spread. Humans contract the virus through handling, eating or slaughtering infected poultry. Most H7N9 infections in people result from contact with infected poultry, by visiting wet markets or having contact with places where infected poultry have been kept or slaughtered. The virus is now ubiquitous in Chinese poultry.	30%	Headache, cough, diarrhoea, stomach pains, aches, bleeding nose and gums	600
MERS	2012	Caused by a coronavirus that jumped from bats to camels. Camels raised in high density systems for milk, meat, wool and for racing in the Middle East are thought to have been the source of human infection.	34%	Respiratory infection ranging from asymptomatic to severe pneumonia	>800
Swine Flu	2009	Swine flu is a new strain of H1N1 resulting from a reassortment of bird, swine, and human flu viruses, further combined with a pig flu virus. It is believed to have originated in an intensive pig farm. Millions of pigs infected with swine flu have been killed. Studies have shown that 30% to 50% of pigs in the US have been infected with swine flu.	0.02%	Flu like symptoms – fever, chills, runny nose, cough, fatigue, nausea	150,000-575,000
SARS	2002	Cave-dwelling bats passed the virus on to humans when they were captured and brought to markets.	10%	Pneumonia-like symptoms	774
Nipah Virus	1998	The virus normally circulates among specific types of fruit bats. Bats can transmit the virus through infected air droplets, saliva, and excrement.	78%	Fever, cough, headache,	398

		Animals can become infected by eating food contaminated by bats and can transmit the virus to humans. The emergence of Nipah virus in Malaysia in 1998 was linked to intensification of pig production at the edge of tropical forests where the fruit bats live.		shortness of breath, confusion	
HIV/AIDS	1981	Virus originated in non-human primates such as chimpanzees, and is thought to have made the jump to humans as the result of the hunting and eating of chimpanzees by humans.	3.7-16.3%	Weight loss, fever, pneumonia, sore throat, mouth ulcers, flu like symptoms, memory loss	32 million
Ebola	1976	Bats, monkeys and chimpanzees were the original source. Humans can become infected from handling and/or eating any of these infected animals.	25-90%	Fever, haemorrhage, vomiting, diarrhoea	>13,000
Hong Kong Flu – H3N2	1968	It descended from H2N2 through a genetic process in which genes from multiple subtypes reassorted to form a new virus. The new subtype arose in pigs infected with avian and human viruses and were soon transferred to humans. Pigs were considered the original intermediate host for influenza because they supported reassortment of subtypes. However, other hosts such as poultry appear capable of similar coinfection, and direct transmission of avian viruses to humans is possible.	0.5%	Chills, fever, muscle pain, weakness	2 million
Marburg	1967	African fruit bat is the reservoir host. Humans and primates can be directly infected. The first humans infected had been using African green monkeys for experimentation.	50% (average)	Severe haemorrhagic fever	470
Asian Flu – H2N2	1957	It originated from a mutation in wild ducks combining with a pre-existing human strain. These viruses can jump to humans either directly from birds or poultry, or through an intermediate host, such as a pig.	0.67%	Fever, body aches, chills, cough, weakness, loss of appetite.	2 million
Bird Flu – H5N1	1950's	Wild water-birds, such as ducks, geese, swans, gulls, terns and shorebirds are the natural hosts of bird flu viruses. The virus can spread to chickens in	60%	Flu-like symptoms	455

		intensive poultry farms, where the virus can easily mutate and spread in the flock. Humans contract the virus through handling, eating or slaughtering infected poultry.			
Spanish Flu	1918	Caused by the H1N1 influenza virus of avian origin. One theory is that the virus infected humans directly from birds before the pandemic and that it adapted or mutated in humans into the one causing the outbreak. In other words, it evolved via the mixing of bird and human viruses in human hosts. Another study suggests that the 'parent virus' went from humans to birds then back to humans in a more lethal form. Domestic poultry can easily be infected with the virus from wild birds.	23-71%	Typical flu symptoms	50 million
Influenza	14 <sup>th</sup> century or earlier	The influenza virus crossed the species barrier from ducks and waterfowl to pigs and from there to humans. Birds serve as a reservoir for a vast diversity of flu viruses to which all the major human pandemics trace their origin. The domestication of pigs was also a factor in the spread of the virus.	0.1%	Fever, cough, sore throat, runny nose, fatigue, aches and pains	650,000 per year
Measles	500-1100 AD	Measles virus emerged from rinderpest (cattle plague) as a zoonotic disease between AD 1100 and 1200. Measles (MeV) is thought to have evolved in an environment where cattle and humans lived in close proximity.	0.2%	Skin rash, runny nose, cough, fever, sore throat	200 million between 1855 and 2005