

SNS COLLEGE OF TECHNOLOGY



(An Autonomous Institution)
COIMBATORE-35

Accredited by NBA-AICTE and Accredited by NAAC – UGC with A++ Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

UNIT IV: HUMAN DISEASES



TOPIC: Influenza



19GET277/ Biology for Engineers/ R.Vijayakumar/ AP / EEE





TOPIC OUTLINE





INTRODUCTION



Influenza, commonly referred to as the flu, is an infectious viral disease caused by RNA viruses of the family Ortho-myxoviridae (the influenza viruses), that affects birds and mammals.

Common symptoms are <u>chills</u>, <u>fever</u>, <u>sore</u> <u>throat</u>, <u>muscle pains</u>, <u>severe headache</u>, <u>coughing</u>, <u>fatigue and general discomfort</u>.

Although confused with other influenza-like illnesses, especially the common cold, influenza is a more severe disease.



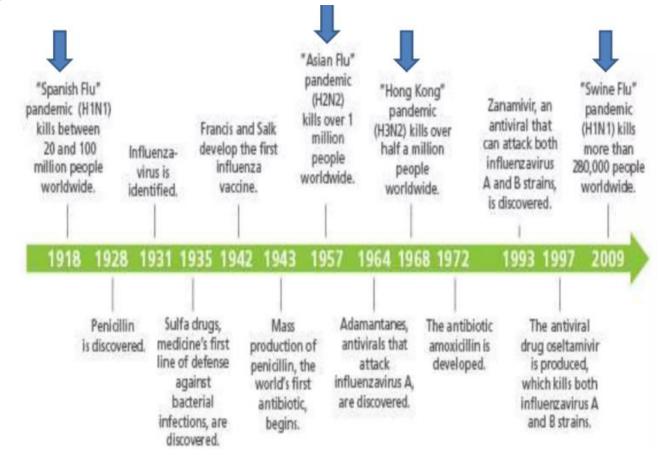


DEFINITION

WHO: Influenza is a viral infection that affects mainly the nose, throat, bronchi and, occasionally, lungs. Infection usually lasts for about a week, and is characterized by sudden onset of high fever, aching muscles, headache and severe malaise, non-productive cough, sore throat and rhinitis.









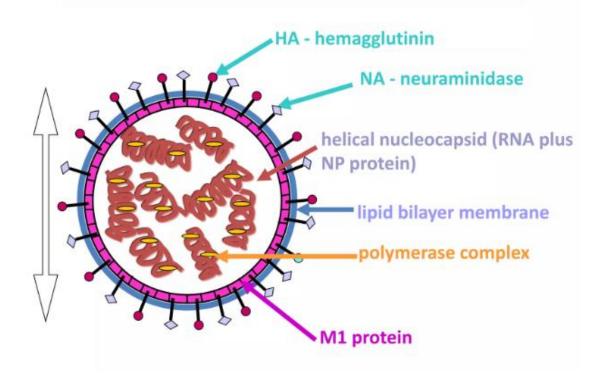








STRUCTURE OF VIRION







Feature	Influenza A	Influenza B	Influenza C
Host Range	Humans, pigs, horses, birds, marine mammals	Humans only	Humans and pigs
Epidemiology	Antigenic shift and drift	Antigenic drift only	Antigenic drift only
Clinical Features	May cause pandemics with significant mortalities in affected young people	Severe disease, generally confined to elderly or high-risk, pandemics not seen	Mild disease, common in children, without seasonality
Genome	8 gene segments	8 gene segments	7 gene segments
Structure 8/15/2016	10 viral proteins M2 unique	11 viral proteins	9 viral proteins HEF unique





HOST FACTORS



19GET277/ Biology for Engineers/ R.Vijayakumar/ AP / EEE





HUMAN MOBILITY

This is an important factor in the spread of the infection.









...THANK YOU