



Influenza Update

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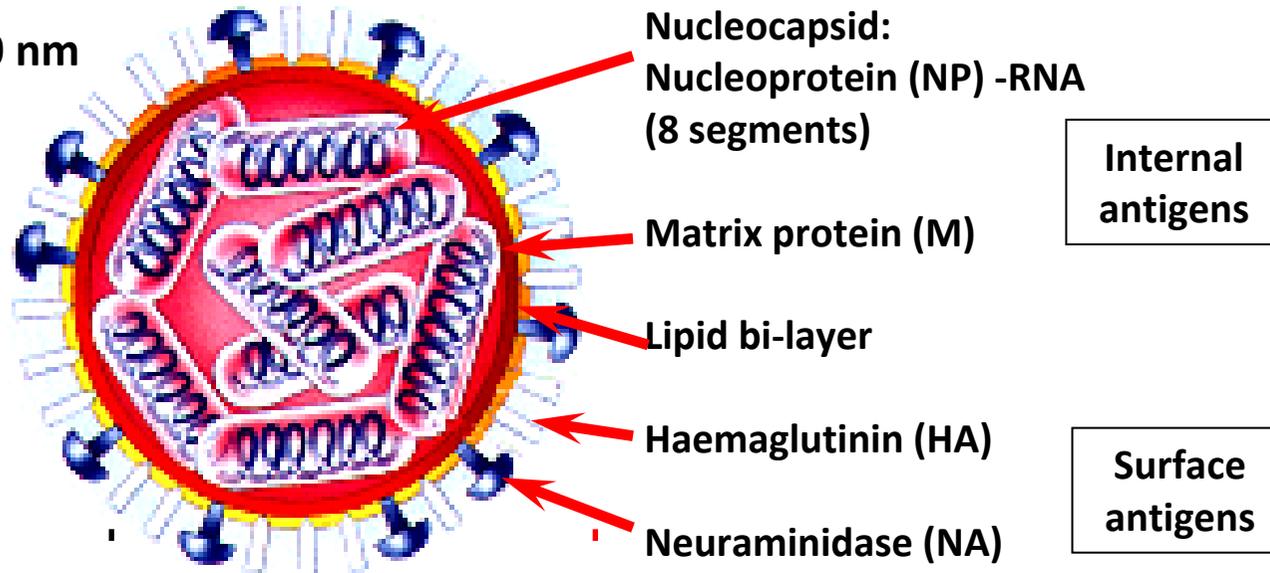


Scope

- **Influenza virus**
- **Epidemiology**
- **Influenza surveillance**
- **Neuraminidase inhibitor resistance**
- **Antiviral treatment**
- **Post exposure chemoprophylaxis**
- **Influenza vaccination**

Influenza virus

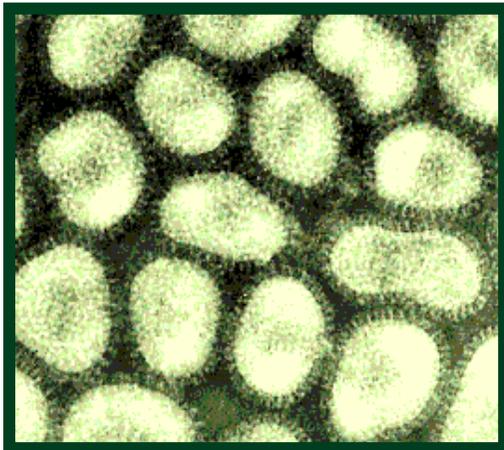
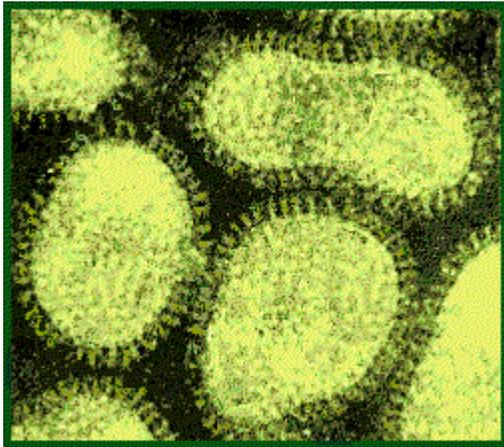
80 to 120 nm



Influenza A virus gene segments and encoded proteins				
RNA segment	Nucleotides	Protein	Amino acids	Molecules per virion
1	2341	polymerase PB2	759	30-60
2	2341	polymerase PB1	757	30-60
3	2233	polymerase PA	716	30-60
4	1778	haemagglutinin HA	566	500
5	1565	nucleoprotein NP	498	1000
6	1413	neuraminidase NA	454	100
7	1027	matrix protein M1	252	3000
		matrix protein M2	97	20-60
8	890	non structural protein NS1	230	-
		non structural protein NS2	121	130-200

*Kingsbury D. W., Virology, II nd edition
New York, 1990, 1076-87*

Influenza virus



Family : Orthomyxoviridae
Single-stranded RNA
Classified into 3 subtypes

Influenza A	Influenza B	Influenza C
Human, swine, equine, marines & mammals	Human only	Human & swine
Antigenic shift and drift	Antigenic drift only	Antigenic drift Only
Large pandemic with significant mortality in affected young people	Severe disease generally confined to elderly or high risk, no pandemic	Mild disease without seasonality

Reported Cases of Influenza per 100,000 Population, by year, Thailand 2000-2009

