



## Influenza

Influenza is a viral, pandemic and respiratory disease with high morbidity particular and significant mortality rate amongst humans. WHO has counted that each outbreak of epidemic is costing between 10–60 million dollars to one million citizens and each year there are between 250.000 to 500.000 deaths caused by flu. Eight RNA segments of influenza A and B viruses and seven segments of the C viruses are independently encapsulated by viral nucleoprotein. The haemagglutinin is the most important protein of the influenza virus. All antigenic HA and NA subtypes of influenza A viruses are derived from birds. The pig trachea is the only known tissue that contains receptors for avian and human influenza viruses. Influenza occurs in two forms: pandemic and epidemic. Local symptoms such as pharyngitis, coughing, sneezing, discharge, are result from the direct action of the virus, or destruction of billions of cells of the respiratory epithelium. Systemic signs such as fever, malaise, myalgia, chilliness, headaches, occur because of induced and increased levels of cytokines by the virus. Vaccine is the best prevention against influenza. Immunity is achieved after two weeks of vaccination.

Velo P. Markovski

# Influenza

Epidemics and pandemics

Velo P. Markovski

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## **CONTENTS**

<b>1. Introduction</b>	<b>1</b>
<b>2. History and pandemics</b>	<b>3</b>
<b>2.1. Sero-archeology</b>	<b>4</b>
<b>2.2. Flu pandemics before year 1700</b>	<b>5</b>
<b>2.3. Pandemics in the 18th and 19th centuries</b>	<b>5</b>
<b>2.4. The pandemic from 1918 till 1920</b>	<b>8</b>
<b>2.5. The pandemic from 1957-1958</b>	<b>10</b>
<b>2.6. The pandemic from 1968-1970</b>	<b>10</b>
<b>2.7. The pandemic from 1977-1978</b>	<b>10</b>
<b>3. The structure of influenza virus</b>	<b>12</b>
<b>3.1. Antigenic types and subtypes</b>	<b>13</b>
<b>3.2. Viral genome</b>	<b>14</b>
<b>3.3. Viral proteins</b>	<b>15</b>
<b>3.3.1. Polymerase proteins (PB1, PB2, PA)</b>	<b>15</b>
<b>3.3.2. Hemagglutinin</b>	<b>16</b>
<b>3.3.3. Neuraminidase</b>	<b>17</b>
<b>3.3.4. Nucleoprotein (NP)</b>	<b>17</b>
<b>3.3.5. Matrix protein (M1)</b>	<b>18</b>
<b>3.3.6. Non-structural proteins (NS1, NS2)</b>	<b>18</b>
<b>3.3.7. Other proteins (HE, M2, M3, NB, CM2- ion channels)</b>	<b>18</b>
<b>4. Input of the virus</b>	<b>20</b>
<b>4.1. RNA transcript and replication</b>	<b>21</b>
<b>5. Genetic reassortment</b>	<b>22</b>

<b>5.1. Antigenetic: „drift, and „shift,</b>	<b>24</b>
<b>6. Nomenclature</b>	<b>26</b>
<b>7. Pathogenesis</b>	<b>26</b>
<b>8. Immunology</b>	<b>30</b>
<b>8.1. Cytokine response</b>	<b>30</b>
<b>8.2. Specific antibodies</b>	<b>31</b>
<b>8.3. Cell-mediated immunity</b>	<b>34</b>
<b>9. The influenza in deferent kinds</b>	<b>36</b>
<b>9.1. Avian influenza</b>	<b>36</b>
<b>9.1.1. Distribution of bird flu</b>	<b>37</b>
<b>9.1.2. Cases of people suffering from bird flu</b>	<b>37</b>
<b>9.1.3. Measures taken by the WHO</b>	<b>38</b>
<b>9.2. Swine influenza</b>	<b>40</b>
<b>9.3. Influenza in horses</b>	<b>41</b>
<b>9.4. Influenza in other animals</b>	<b>42</b>
<b>9.4.1. Influenza in weasels</b>	<b>42</b>
<b>9.4.2. Influenza in wheals</b>	<b>42</b>
<b>9.4.3. Influenza in seals</b>	<b>42</b>
<b>9.4.4. Other animals</b>	<b>42</b>
<b>10. Pathoanatomic features</b>	<b>43</b>
<b>11. Epidemiology</b>	<b>44</b>
<b>11.1. Transmision and persistence of virus in nature</b>	<b>44</b>
<b>11.2. Epidemic forms</b>	<b>45</b>
<b>11.2.1 Pandemic</b>	<b>45</b>
<b>11.2.2. Interpandemic period</b>	<b>47</b>
<b>11.3. Mortality during epidemics and pandemics</b>	<b>51</b>

<b>12. Clinical findings</b>	<b>54</b>
<b>12.1 Uncomplicated influenza in adults</b>	<b>55</b>
<b>12.2. Differential diagnosis</b>	<b>57</b>
<b>12.3. Influenza in children</b>	<b>58</b>
<b>12.4. Influenza in risk groups</b>	<b>59</b>
<b>12.4.1. Influenza in elderly</b>	<b>59</b>
<b>12.4.2. Cardiomyopathies</b>	<b>59</b>
<b>12.4.3. Diabetes mellitus</b>	<b>60</b>
<b>12.4.4. Pregnant women</b>	<b>60</b>
<b>12.4.5. Neurological disorders</b>	<b>61</b>
<b>12.4.6. Immunosuppression</b>	<b>61</b>
<b>12.5. Complications of influenza</b>	<b>61</b>
<b>12.5.1. Respiratory complications</b>	<b>61</b>
<b>12.5.1.1. Acute bronchitis</b>	<b>62</b>
<b>12.5.1.2. Pneumonia</b>	<b>62</b>
<b>12.5.1.3. Other respiratory complications</b>	<b>65</b>
<b>12.5.2. Neurological complications</b>	<b>66</b>
<b>12.5.2.1. Patients with convulsions</b>	<b>68</b>
<b>12.5.2.2. Patients with influenza associated encephalitis and encephalopathy (IAEE)</b>	<b>68</b>
<b>12.5.2.3. Reye's syndrome</b>	<b>69</b>
<b>12.5.3. Cardiac involvement</b>	<b>69</b>
<b>12.5.4. Hemathological disorders</b>	<b>70</b>
<b>13. Diagnosis</b>	<b>71</b>
<b>13.1. Isolation of the virus</b>	<b>73</b>
<b>13.2. Detection of antigens</b>	<b>74</b>

<b>13.2.1. Immunofluorescence</b>	<b>75</b>
<b>13.2.2. Immunoassays</b>	<b>75</b>
<b>13.2.3. Ready quick diagnostic kits</b>	<b>75</b>
<b>13.2.4. Detection of viral RNA</b>	<b>76</b>
<b>13.3. Serological tests</b>	<b>77</b>
<b>13.3.1. Test of complement fixation</b>	<b>77</b>
<b>13.3.2. Inhibition of haemagglutination - HAI tests</b>	<b>77</b>
<b>13.3.3. Enzyme immunoassays</b>	<b>78</b>
<b>13.3.4. Reaction of neutralization</b>	<b>78</b>
<b>13.4. Electron microscopy</b>	<b>79</b>
<b>14. Therapy</b>	<b>80</b>
<b>14.1. Inhibitors of ion channel</b>	<b>80</b>
<b>14.1.1. Amantadine</b>	<b>80</b>
<b>14.1.2. Rimantadine</b>	<b>81</b>
<b>14.2. Neuraminidase inhibitors</b>	<b>82</b>
<b>14.2.1. Zanamivir</b>	<b>82</b>
<b>14.2.2. Oseltamivir</b>	<b>83</b>
<b>15. Prevention of influenza</b>	<b>85</b>
<b>15.1. Chemoprophylaxis</b>	<b>85</b>
<b>15.2. Vaccines</b>	<b>85</b>
<b>15.2.1. Composition of the vaccine</b>	<b>87</b>
<b>15.2.2. Types of vaccines</b>	<b>89</b>
<b>15.2.2.1. Vaccines produced on chicken egg</b>	<b>89</b>
<b>15.2.2.2. Vaccines produced on vero cells</b>	<b>92</b>
<b>15.2.3. Vaccination in Children</b>	<b>92</b>
<b>15.2.4. Side effects</b>	<b>93</b>

<b>15.2.4.1. Guillain-Baree syndrome</b>	<b>93</b>
<b>15.2.5 Global distribution of influenza vaccine, 2000- 2003 year</b>	<b>94</b>
<b>16. Planning pandemic</b>	<b>96</b>
<b>16.1. Tasks in planning pandemic at international level (WHO)</b>	<b>97</b>
<b>17. References</b>	<b>98</b>