Avian influenza
# Cases of Avian influenza in people

<table>
<thead>
<tr>
<th>Year</th>
<th>Strain</th>
<th>Country</th>
<th>Number of confirmed human cases</th>
<th>Number of confirmed human deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>A/H5N1</td>
<td>Hong Kong</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>1999</td>
<td>A/H9N2</td>
<td>Hong Kong</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2003</td>
<td>A/H5N1</td>
<td>Hong Kong</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2003</td>
<td>A/H7N3</td>
<td>Canada</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2003</td>
<td>A/H7N7</td>
<td>Netherlands</td>
<td>84</td>
<td>1</td>
</tr>
<tr>
<td>2003</td>
<td>A/H9N2</td>
<td>Hong Kong</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2003-2005</td>
<td>A/H5N1</td>
<td>Viet Nam, Cambodia, Indonesia and Thailand</td>
<td>116</td>
<td>60</td>
</tr>
</tbody>
</table>

Data up to end September 2005
Avian influenza from birds to humans

- Migratory water birds
- Domestic birds

- Hong Kong 1997, H5N1
- HK, China 1999, H9N2
- Netherlands 2003, H7N7
- Hong Kong 2003, H5N1
- Viet Nam and Thailand, 2004 H5N1
Highly pathogenic avian flu (A/H5N1) currently circulating in poultry in Asia

Strain of Avian flu has shown ability to transmit from poultry to people

Fear that humans infected with Avian flu could also be infected with ‘ordinary’ flu

Exchange of genes could lead to emergence of a potentially pandemic strain
Avian influenza

Alternatively

- Avian flu strain could evolve into a potentially pandemic strain with greater affinity for people and acquire ability to pass easily from person to person.
The world has changed

- Global population in 18th century was <1 billion vs. 6 billion today
- Intercontinental travel is in hours rather than months and in millions rather than hundreds
- Human crowding has increased
- Population health has improved
- Animal husbandry has changed
- Interdependence has increased
Opportunities for virus emergence and spread

- Modern pig and poultry production create conditions for mass animal influenza outbreaks
- Proximity of humans and animals in many markets create potential for virus recombination
- Human crowding and travel present opportunities for virus spread
Warning signs

- Experts from WHO believe signs of another pandemic are increasing:
  - Continued outbreaks of Avian H5N1 infection in poultry in Southeast Asia
  - Linked to human cases of Avian H5N1 flu
  - Raised concern virus may be adapting to infect people more readily