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# **The New Trends of Food Pathogen Calling Introducing HACCP System on Animal Farming**

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# **Epidemics of pathogen not only means great losses**

- Thailand Killed 10.5million in 3 months
- China Killed 9 million in two months and face trade ban of poultry products from 48 countries

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## **Epidemics of pathogen not only means great losses**

- **Lost of Consumer Confidence and Reputation**
- **Possibility of Lost of Lawsuit**
- **Burden of healthcare**

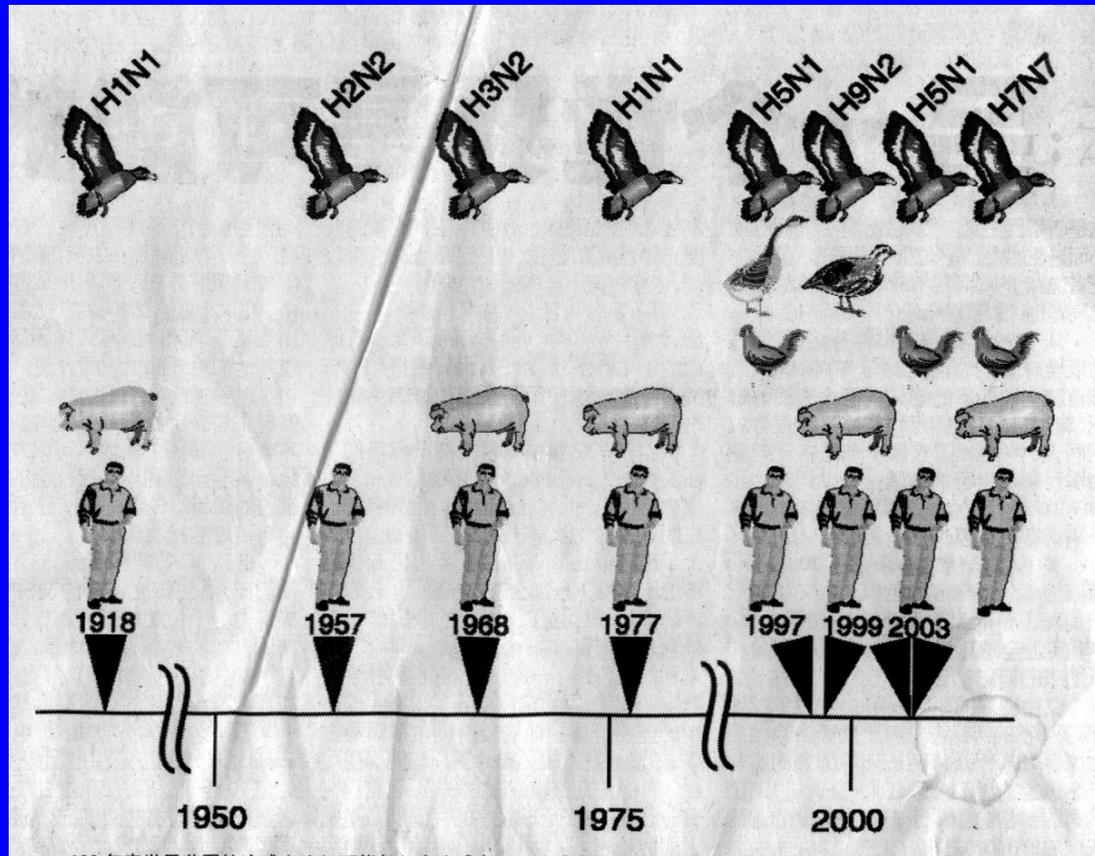
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# Avian Flu in the History



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# Suspected resource of SARS and Ebola Hemorrhagic Fever



**Masked palm civet**





# Most Common Founded Pathogens

Organism	Symptom	Animal recourse
Bacteria		
<i>Campylobacter</i>	Guilain-Barre Syndrome(paralysis)	Poultry, cat, dog and bird
<i>Clostridium perfringens</i>		Human, animals, rat
<i>Eshcherichia coli</i> O157:H7	Bloody diarrhea, kidney damage, hemolytic ureic syndrome	
<i>Escherichia coli</i>		
<i>Listeria monocytogenes</i>	Spontaneous abortion, stillbirth, blood infection meningitis	Animal and human
<i>Salmonella</i> species		Chicken
<i>Shigella</i> species	Dysentery	Human



# Most Common Founded Pathogens

<i>Staphylococcus</i> species		
<i>Vibrio</i> species	Chills fever	
<i>Yersinia enterocolitica</i>		All animal
Protozoa		
<i>Giardia lamblia</i>		
<i>Toxoplasma gondii</i>	Fever, swollen glands, liver and central nervous system complications, brain and eye damage in infants	
Virus		
Norwalk-like viruses		
Type A influenza H5N1		Poultry



## The Development of Modern Food Production

- Concentration and consolidation of production
- Long distances transportation
- Centralized processing from different sources
- Low dose of antibiotics and low fiber feed
- Population structure changing

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# New trend of Food Pathogen

- International transferred
- Increasing range of food
- Virulence
- Hard to treat

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# Calling a preventive Control system -- HACCP

- Preventive control system based on risk assessment
- The whole processing control

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# **The Gap Among IFOAM, Green Food & HACCP**

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# Calling a preventive Control system -- HACCP

New Development	Preventive Measure
Concentration production	More strict hygiene
Long distances transportation	Control of whole chain
Centralized processing from different sources	Same standard in different place

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# Calling a Preventive Control system -- HACCP

New Trend of Pathogen	Measurement
International transferred	Take the same standard internationally
Increasing range of food	Good management
Virulence	More secure
Hard to treat	Better control of processing

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