

# Pandemics and Health Issues

## Airports

Eric Feron

Ecole Nationale de l'Aviation Civile

Toulouse, France



# Core message

Human health (other than induced by flight safety) is closely linked to air transportation system

Airports is the nexus of problems and solutions.

# Facts

- Airport noise linked to heart disease in neighboring communities – October 2013.
- Peking's airport was shut down because of massive air pollution - October 2013.
- H7N9 avian influenza A results in stepped up activity at many asian airports – Spring 2013

# Airports and pandemics

The screenshot shows a Mozilla Firefox browser window with the title 'avian flu airport - Google zoeken - Mozilla Firefox'. The address bar contains the URL 'https://www.google.nl/search?q=avian+flu+airport&ie=utf-8&oe=utf-8&rls=org.mozilla:en-US:official&client=firefox-a&gws\_rd=cr&ei=jLmAUpij\_HM0AWEh4C'. The search results are for 'avian flu airport'. The first result is 'Update on avian influenza A(H7N9): Airport Health Screening – Asi...' from carlsonwagonlit.com, dated April 26, 2013. The second result is 'Some Asian governments tighten airport controls on bird flu fears ...' from reuters.com, dated April 25, 2013. The third result is 'Bird flu: Changi Airport briefs airlines on health leaflets' from straitstimes.com, dated April 13, 2013. The fourth result is 'NZ airports not screening China travellers for bird flu - National - NZ ...' from nzherald.co.nz, dated April 22, 2013. The fifth result is 'Flu screening at airports best done prior to travel - Health - CBC News' from cbc.ca, dated April 10, 2013. The sixth result is 'Avian Influenza or Bird Flu - Department of Agriculture, Fisheries ...' from daff.gov.au. The seventh result is 'Taiwan airports vigilant of bird flu | ETB News Australia' from etbnews.com.au. A yellow 'Taalinstellingen' button is visible in the top right corner of the search results area.

Update on **avian influenza A(H7N9): Airport Health Screening** – Asi...  
[www.carlsonwagonlit.com/.../20130426-update-on-a...](http://www.carlsonwagonlit.com/.../20130426-update-on-a...) ▾ Vertaal deze pagina  
Update on **avian influenza A(H7N9): Airport Health Screening** – Asia | 04:11 AM GMT, April 26, 2013. As reported via CWT Alerts, public health authorities in ...

**Some Asian governments tighten airport controls on bird flu fears ...**  
[www.reuters.com/.../us-birdflu-travel-idUSBRE93O0...](http://www.reuters.com/.../us-birdflu-travel-idUSBRE93O0...) ▾ Vertaal deze pagina  
25 apr. 2013 - BEIJING (Reuters) - Several governments in Asia have ordered tougher screening of air travelers from China in an effort to contain a possible ...

**Bird flu: Changi Airport briefs airlines on health leaflets**  
[www.straitstimes.com/.../bird-flu-changi-airport-brief...](http://www.straitstimes.com/.../bird-flu-changi-airport-brief...) ▾ Vertaal deze pagina  
13 apr. 2013 - Singapore is stepping up the fight against the H7N9 strain of **bird flu** and a deadly new Sars-like virus.

**NZ airports not screening China travellers for bird flu - National - NZ ...**  
[www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1...](http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1...) ▾ Vertaal deze pagina  
22 apr. 2013 - **Airports** in New Zealand will not be stepping up health checks for travellers from China despite the rise of confirmed H7N9 **bird flu** cases there.

**Flu screening at airports best done prior to travel - Health - CBC News**  
[www.cbc.ca/.../flu-screening-at-airports-best-done-pri...](http://www.cbc.ca/.../flu-screening-at-airports-best-done-pri...) ▾ Vertaal deze pagina  
10 apr. 2013 - Screening people leaving a country where there's a serious flu outbreak ... to predict the spread of H1N1 **swine flu** that originated in Mexico, ...

**Avian Influenza or Bird Flu - Department of Agriculture, Fisheries ...**  
[www.daff.gov.au](http://www.daff.gov.au) > ... > **Animal Pests and Diseases** ▾ Vertaal deze pagina  
**Avian influenza** in birds does not easily cause disease in humans. There have been over 340 human deaths from H5N1 **avian influenza** in the world since the ...

**Taiwan airports vigilant of bird flu | ETB News Australia**  
[etbnews.com.au](http://etbnews.com.au) > **Taiwan airports vigilant of b...** ▾ Vertaal deze pagina

# Pandemic history

- 2002-2003: Severe Acute Respiratory Syndrome: China - Hong-Kong Toronto
- Spring 2013: H7N9 avian influenza A
- Spring 2009: H1N1 (& other) Swine Flu

Air transportation system is XXIst century's main vector for pandemics. All go through airports.

# Air Transportation in Pandemic Era



(USA)

# CDC Quarantine Stations by Jurisdiction



# Switzerland

## 5.6 Measures at airports

The federal government (FOPH), which is responsible for airside measures at Switzerland's borders, has developed a concept for airports which provide international scheduled services; following the SARS crisis in 1995 the concept was refined and expanded into an airport network for travellers' medicine (FNRM). The members of this network are the three national airports which have intercontinental flights – Basel-Mulhouse, Geneva-Cointrin and Zurich-Kloten – and the airports which provide flights within Europe – Berne-Belp, Sion-Sitten, St. Gallen-Altenrhein and Lugano-Agno. Basel-Mulhouse airport has a special status since it is located on French territory and is therefore subject to French legislation; however it is governed by binational customs legislation.

The Swiss airports are currently (2006) in the process of adapting their emergency planning to the new legal situation. The new legislation comprises the regulation of 15 December 2003 issued by the Federal Department of Home Affairs to prevent the introduction of new infectious diseases and the international health regulations resolved by the International Health Assembly in May 2005. Basel-



# *Business Continuity Plan for Pandemic*

*Walter Gaber*  
*Medical Director Fraport AG*  
*Frankfurt, Germany*  
*29.09.2010 (10 Uhr)*

**DRAFT**



# Fraport Pandemic Management Plan

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Strictly Confidential

	Airport Duty Officer	Airside (Airside Duty Manager)	Apron Control	Apron Supervision/Follow me	Traffic Data Center	Terminal Management (Terminal Duty Manager)	Terminal Facilities and Equipment	Callcenter/Fault Management	Passenger Services	Passenger Bridge Operation	Loading	Freight/Bus/ Tow/Check-In	Fire Brigade	Emergency Management	Parking Management	Technical Equipment Management	Maintenance and Repair	Cleaning	Technical Building Management	Technical Facility Management
1 Airport Operations (Airport Duty Officer)	10																			
2 Airside (Airside Duty Manager)		10	10	20																
3 Apron Control		10	10	10	10															
4 Apron Supervision/Follow me		10	10	10	10															
5 Traffic Data Center		10	10	10	10															
6 Terminal Management (Terminal Duty Manager)		20	10	10	10	10														
7 Terminal Facilities and Equipment		30	30	30	10		10													
8 Callcenter/Fault Management		30	30	30	10		10													
9 Passenger Services		30	30	30	10		10													
10 Passenger Bridge Operation		30	10	10	10		10													
11 Loading		30	30	10	30		10													
12 Freight/Bus/ Tow/Check-In		10	10	10	10		10													
13 Fire Brigade		30	10	20			10													
14 Emergency Management		20			20		10													
15 Parking Management							10													
16 Technical Equipment Management		30	30	30	30		10													
17 Maintenance and Repair							10													
18 Cleaning		30					10													
19 Technical Building Management		30	30	30	30		10													
20 Technical Facility Management							10													

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# Some ideas for Pandemic Management/Prevention

- Optimal ground resource management under highly degraded conditions
- Detailed understanding/models of illness propagation in confined areas.
- Passenger movement operations: avoid unnecessary mixing, eg transfer passengers vs. terminal, long time spent in high mixing areas.

# Toronto SARS (from Johanis, 2007)

- SARS in Toronto late February 2003 (Woman from Hong-Kong)
- 375 people sick in follow-up events
- Mid-March: WHO travel advisory. Mid April: includes Toronto.

“In accordance with the International Health Regulations of the World Health Organization, Contracting States should not interrupt air transport for health reasons. In cases where, in exceptional circumstances, such service suspensions are under consideration, contracting States should first consult with the World Health Organization and the health authorities of the State of occurrence of the disease before taking any decision as to the suspension of air transport services.”

- Advisory lifted following Canada’s discussion with WHO
- Mid May: New SARS outbreak. By mid August: 438 SARS cases, 44 deaths.

# Toronto SARS

- Well-trained airport (4<sup>th</sup> in north america)
- Took care of 3 outbreaks in previous decades
- Gaps identified and under resolution in 2003
- At SARS outbreak, whole community taken by surprise
- Initial inability to act because of massive procedural changes created by SARS
- Quarantine responsibilities in transition during outbreak: Massive shortage of business processes to handle crisis, lack of clear responsibility/resource co-location
- Outdated Quarantine legislation not adapted to speed of air transport (ships instead).
- Screening on international vs domestic legs, arriving vs. receiving?

# Toronto SARS (Ctd)

- Lack of coordination and authority delineation between local, provincial and national agencies
- Confusion among agencies at same level: Solution via authority in the hands of a doctor.
- SARS science in hands of Canada, airlines, countries of origin → multiple sources for interpretation and confusion

# Toronto SARS: Core lessons learned

- Airport is *critical infrastructure*.
- Is cause and means via which crises can appear and be managed
- Airport can endorse role that can largely exceed initial, transportation-centric mission; Nobody else can endorse airport's role.
- Special need to prepare for the unknown and the unexpected: "The clock is ticking, but no one knows what time it is"