



# „The IHRs and airport preparedness for infectious disease pandemics“

**Helsinki Meeting  
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**Walter Gaber, MD**

Vice President Human Resources

Medical Director

Frankfurt Airport, Germany

(Fraport AG)





Coughs and sneezes.....

Tony Evans, ICAO, 2006

# **International Health Regulation**

## **- Purposes and Scope-**

- The purpose and scope of these Regulations are to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade

# Goal of Airports :

- **Keep the Airport running.....**

# **Goal of Public Health** **Services :**

## **Keep the Pandemic outside**





**Medical Impact**

(somewhere  
worldwide)

B  
A  
R  
R  
I  
E  
R



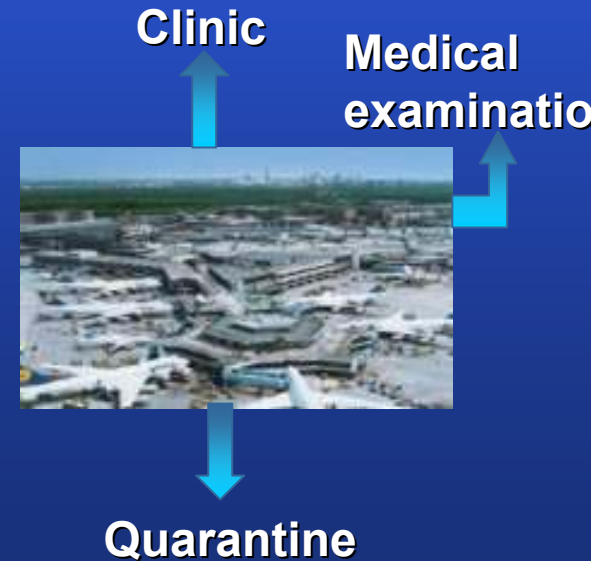
**Exit Airport**



**Exit  
Screening**  
(Exit Airport)



**Entry  
Screening**





**Landings within of 60 seconds !**



**36 x 250 Paxe = 9000  
Paxe/day**



# The next Medical Disaster

```
graph TD; A[The next Medical Disaster] --> B[Medical Impact]; A --> C[Economical Impact]; B --> D[Triggered]; C --> D; D --> E[Airport closure]
```

**Medical Impact**

**Economical Impact**

**Triggered**

- **Politicians**
- **Media**
- **Public Health Services**
- **WHO**
- **(board members, employees.....)**



**Airport closure**



**Deserted Airports**  
**Passenger volume plunged**



Jarnail Singh 2007

# What does this show ?

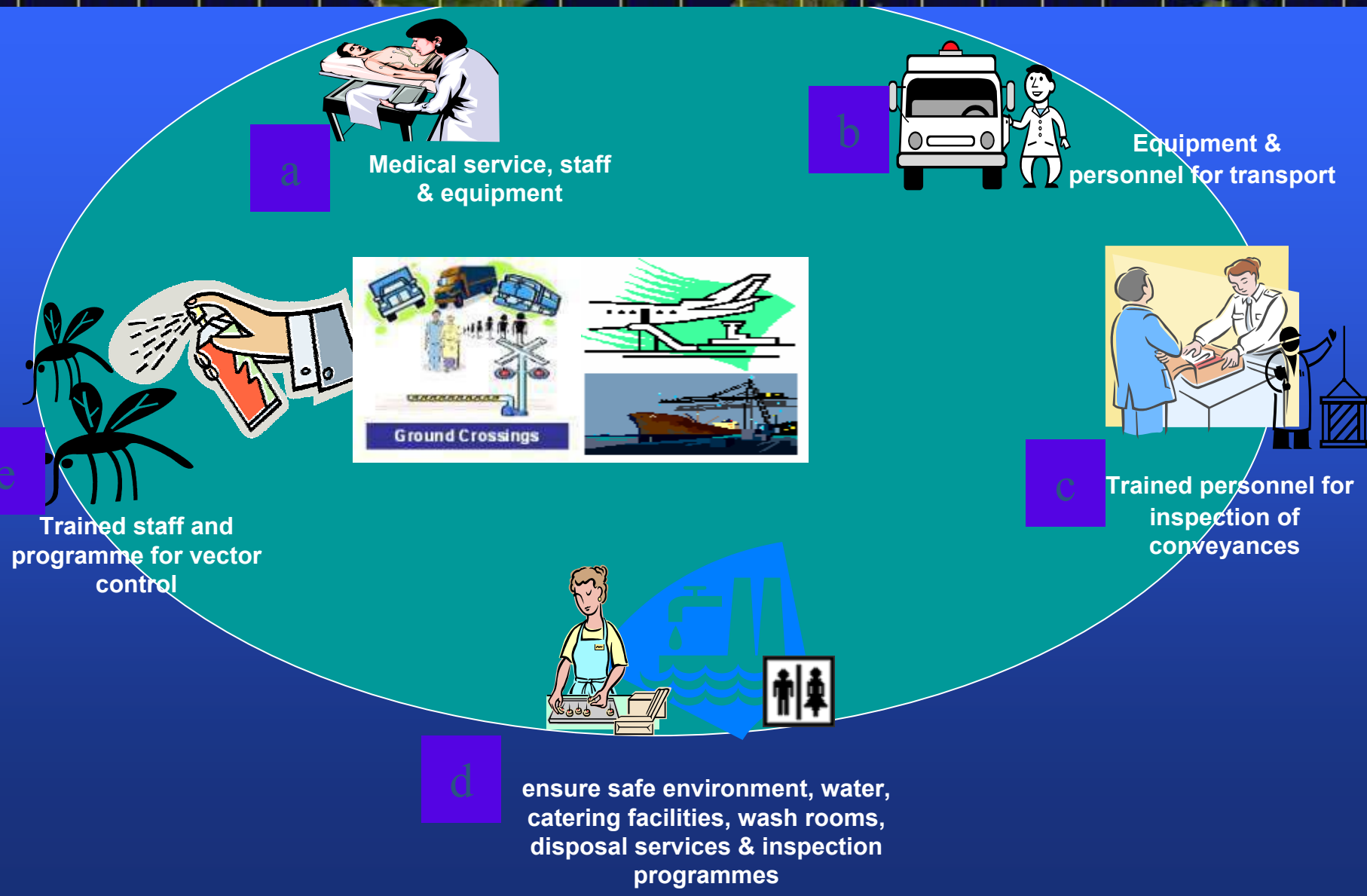
*The vulnerability of....*

*.... the aviation sector*

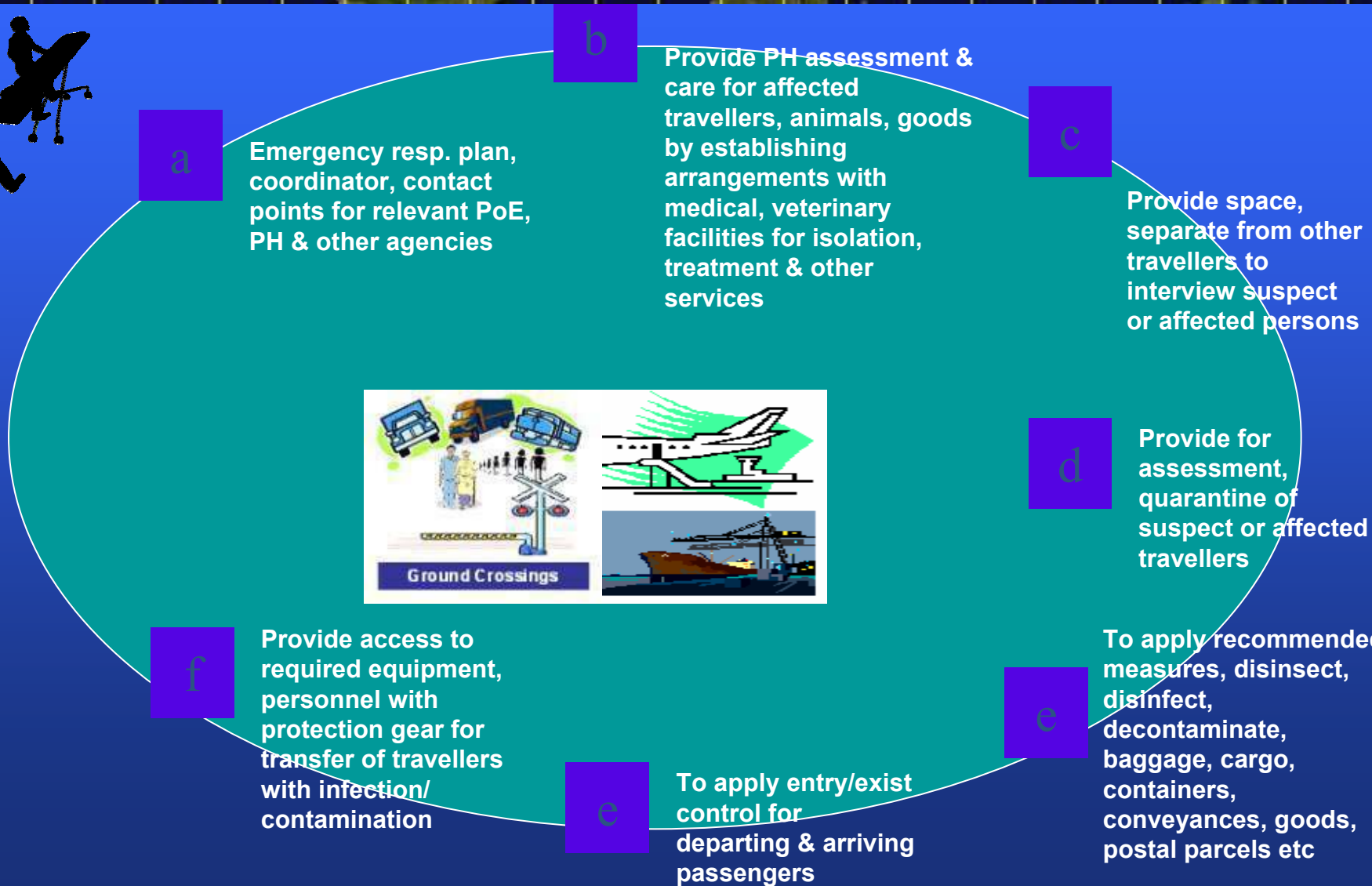
# and its impact on States



# Capacity at P.o.E at all times



# Capacity at P.o.E during P.H.E.I.C.





# Guidelines

- **WHO**
- **ICAO**
- **IATA**
- **ECAC**
- **EU**
- **CDC**
- **ECDC**
- **CAPSCA**
- **RAMT**
- **FAA**
- **ACI**
- **(EAGOSH)**

**Airports**

## Local German Authorities:

- **BMG**
- **BMV**
- **RKI**
- **States**
- **Public Health S.**
- **Center of Compet**
- **E.g.**

# Legal responsibility and consequences

**Public Health  
Service**



**Airports**

# Public Health Service

**Airport closure**



1 minute 6088 €

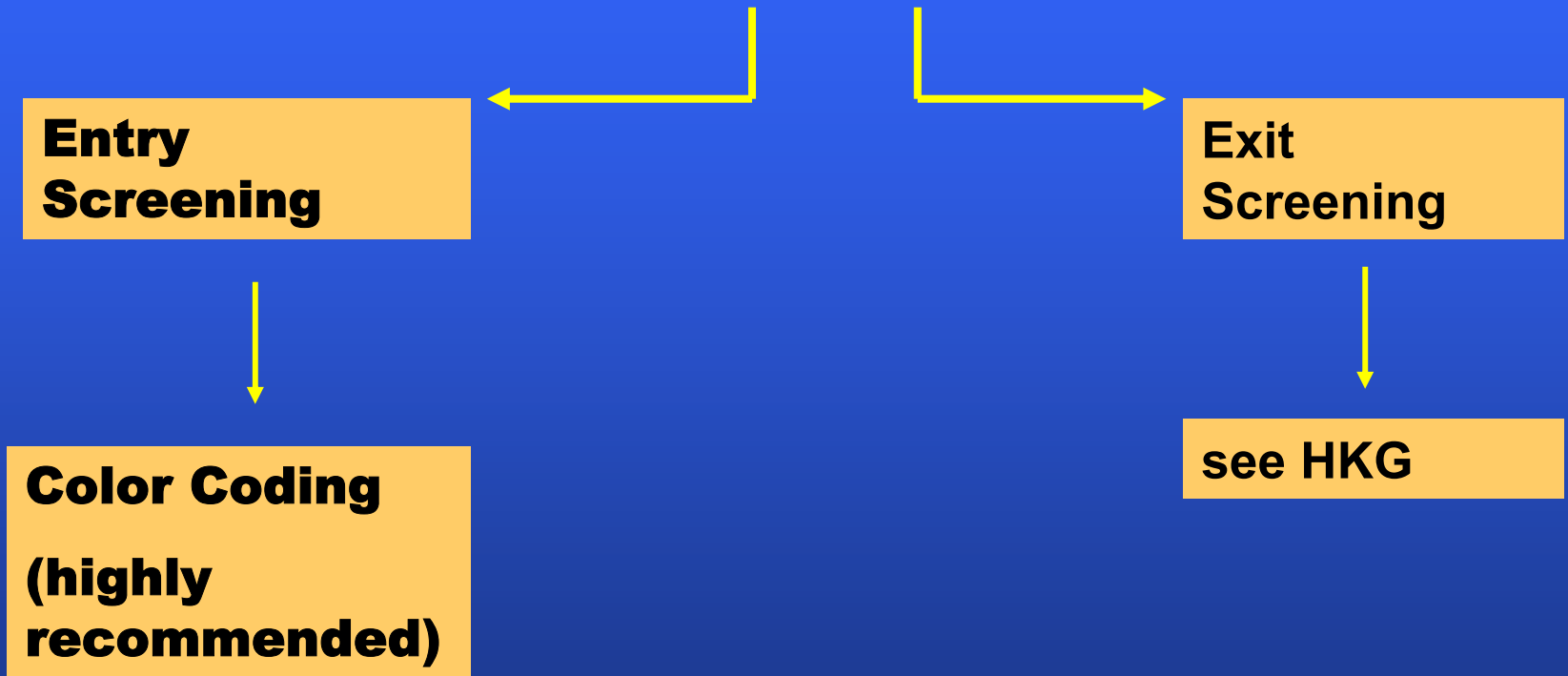
1 hour 365.280 €

**24 hours 8.766.720 €**

**Airlines:**

**(?)**

# WHO (IHR 2005)



# Goal

- **cooperation Public Health Services**
- **cooperation WHO (IHR 2005)**
- **take the leadership**
- **.....we know the process (!)**
- **implement color coding**



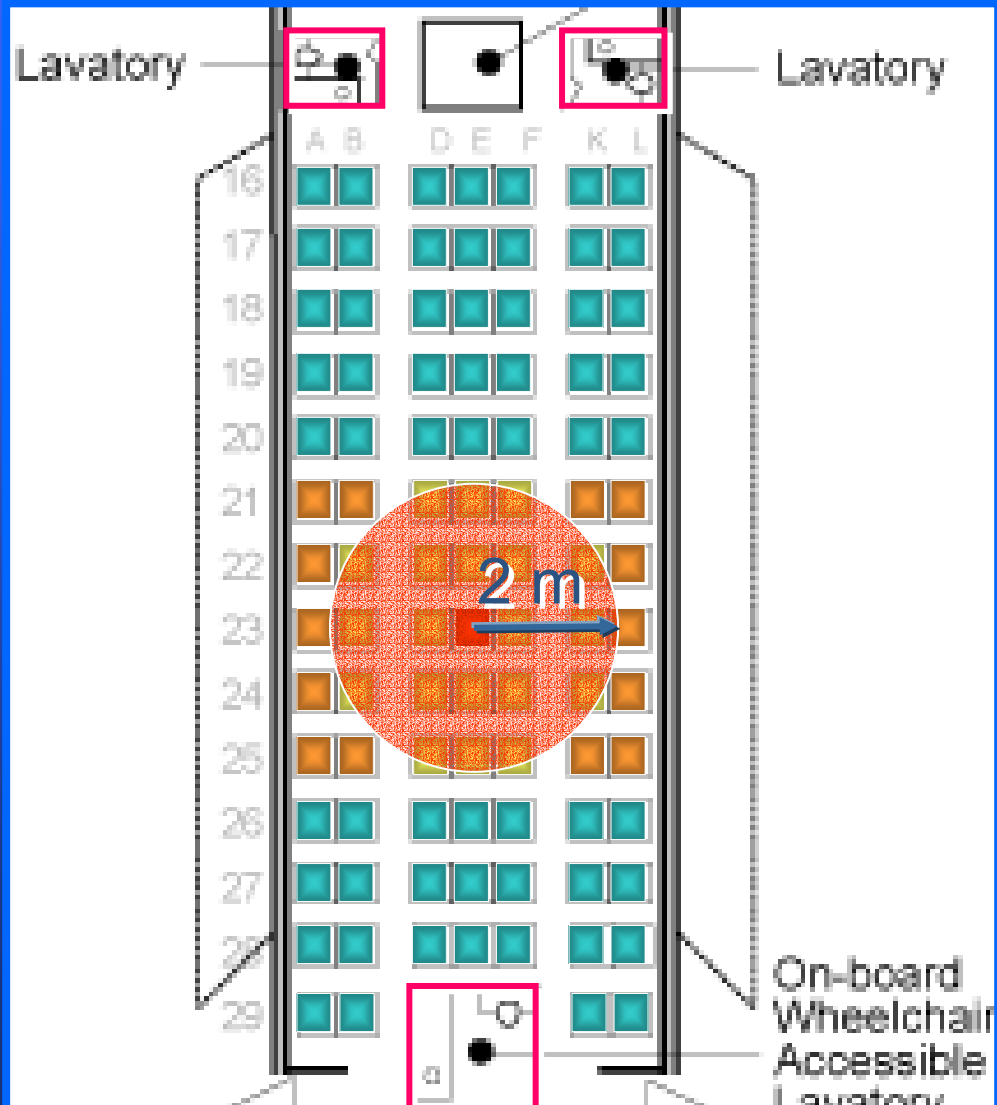
# Colorcoding

- ✓ **simple (KISS \*)**
- ✓ **cost effective**
- ✓ **being tested in HKG**

\* K eep it super simple

# **Entry-Screening**

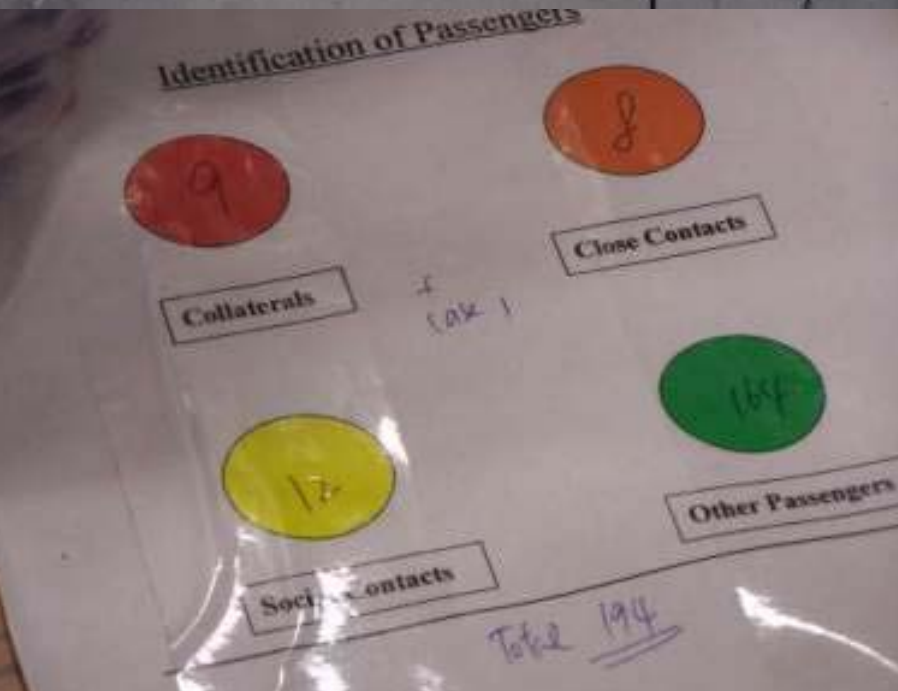
# Contact Patient in the aircraft (Contact/Index Patient )



## Procedure with 4 color coding in Hong Kong (SARS)

Four busses for the different categories

- Red (Index)
- Orange (close contact)
- Yellow (social contact)
- Green (ok)



# Entry-Screening(Draft)

- At the Apron before leaving the aircraft (inside the aircraft)
  - ➡ Personnel will check the passengers in every aircraft coming from affected or suspicious areas (medical staff and border police)
  - ➡ Subsequent Color Coding
- Subject to Coding\*
  - ▶ Pax is transmitted to designated medical services
  - ▶ Pax obtain medical information, further advices from the medical services or precepts
  - ▶ Pax proceed traveling (after obtaining personal data)

\* Will be done inside the aircraft before deboarding



# Colour coding of Patients/Contacts

▶ **Red: Index patient**

▶ **Yellow: close contacts, i.e. family members, passengers sitting 2 rows around the sick passenger and crew member(s) taking care of the sick passenger**

- They might have been infected by the sick passenger but are unlikely to be infectious at that stage

▶ **Green: passengers and crew members w/o close contact to the index case**

- They would be given health education and information for contact tracing would be obtained from them in case they need to be put under active surveillance

## Possible Procedures (Entry and Exit Screening)

Thermo scanning and manual scanning  
In Hong Kong and Singapore for Entry  
and (!) Exit Passengers:  
Additional 2 employees per gate (!!).  
Temperature scanning also daily for  
Employees working at the airport.

(pictures being taken during the SARS program)





### Step 1

If Thermoscan is positive (37,5 degree C)  
Go to.....

### Step 2

Retesting 15min./30 min. under supervision  
If positive (38,0 degree C)  
Go to.....

### Step 3

Medical examination at the airport

Inside the Terminal  
Close to the first „control area“



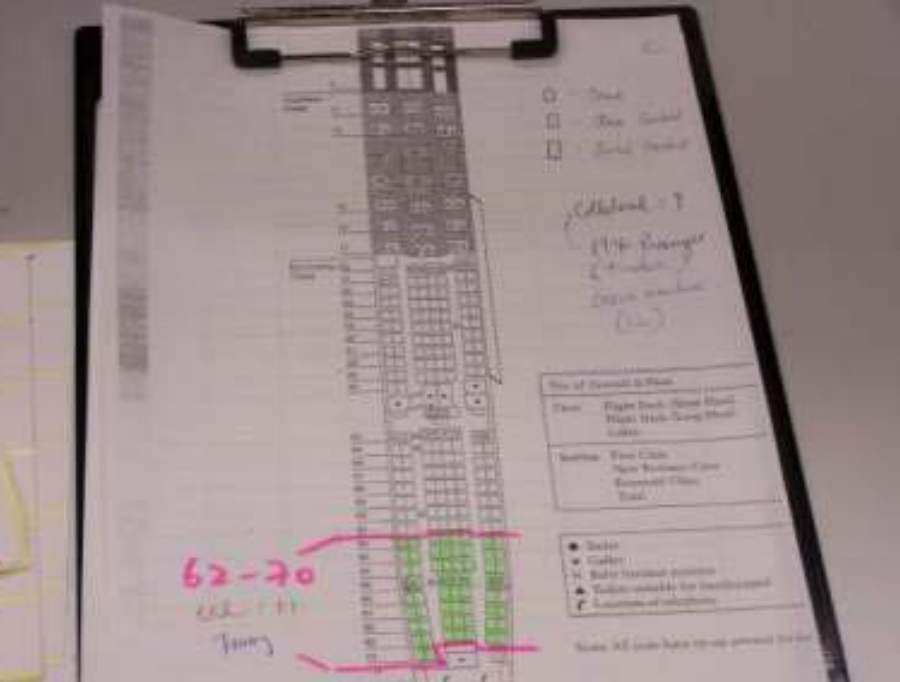
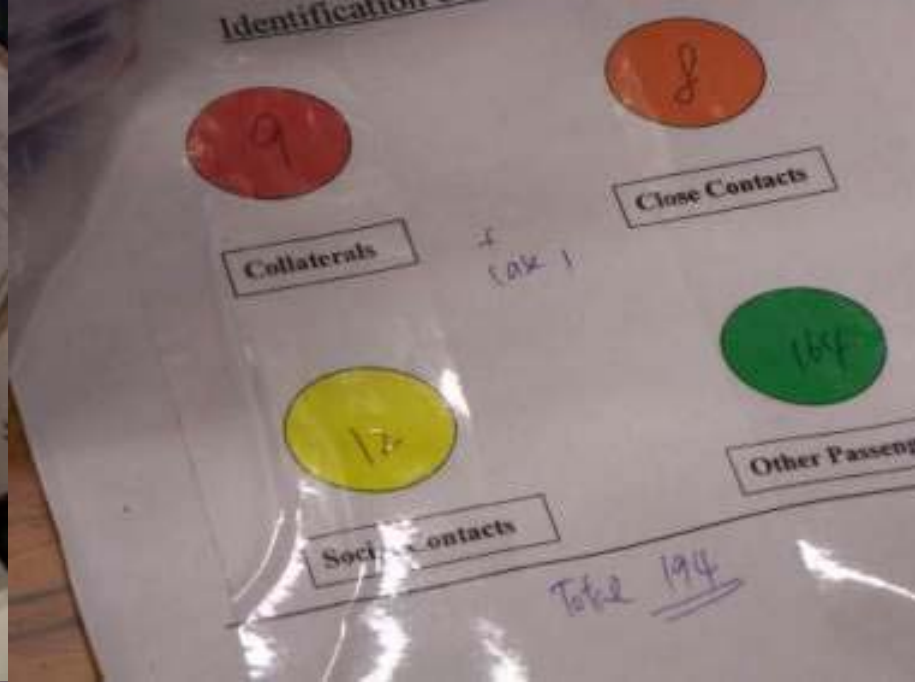
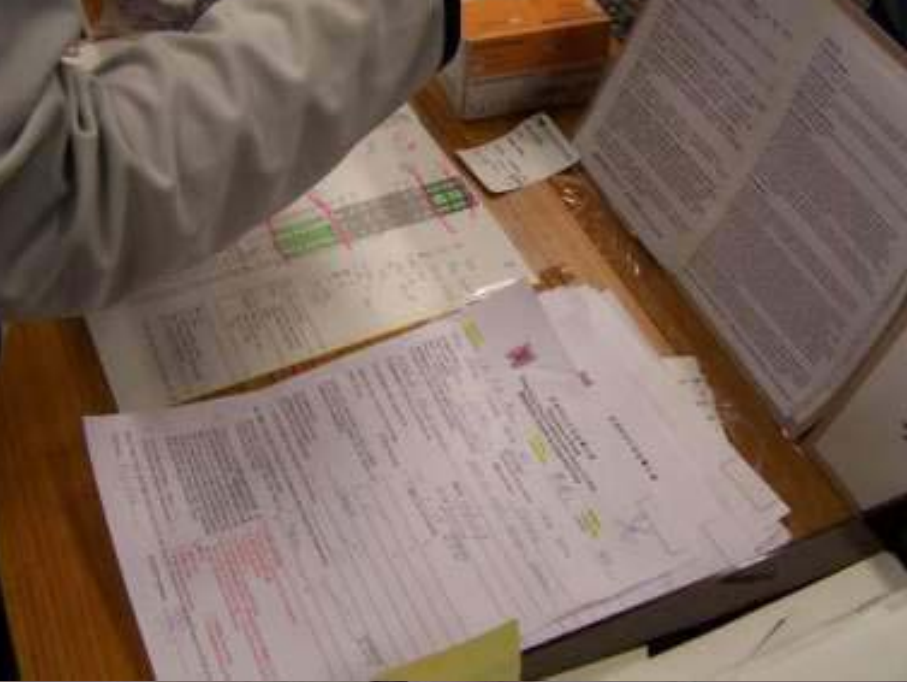


## Hygiene measurements (Hongkong Airport)

- At each elevator information about
- proper hygiene and
  - space for waste
  - Desinfection gel for self service











„Red“ passenger do get escorted to restricted area RED (Terminal)

There will be a documentation and a qualified information by a medical expert about the situation and the upcoming procedures.





Areas are separated

Medical Post and paramedics are available.

CX employees will support passengers if there are any questions.



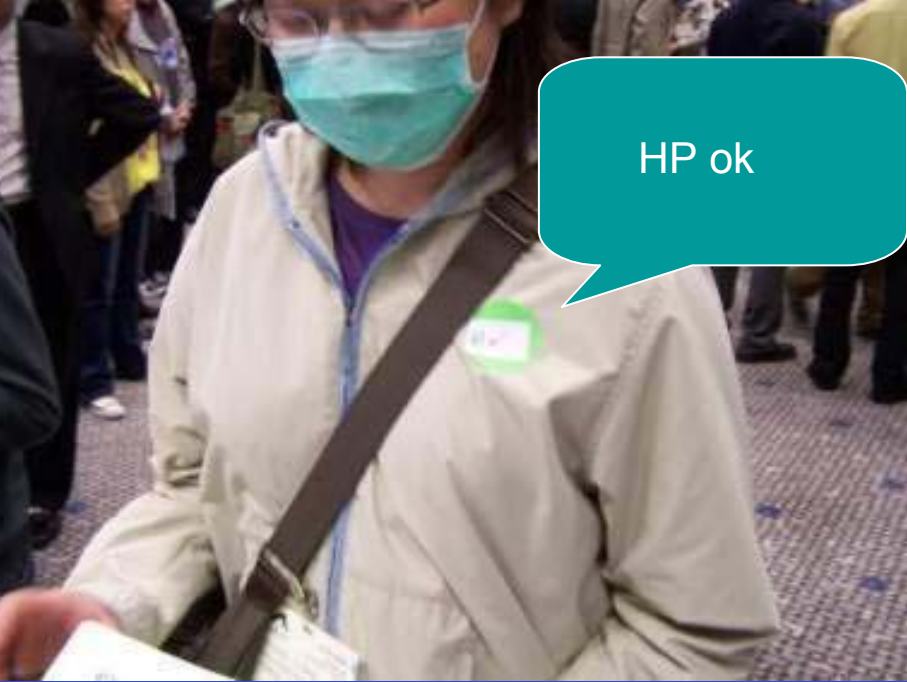




Passengers do get informed by a medical expert and (!) a PowerPoint presentation with information runs always in the background.

After filling out the public health declaration (PHD) the passengers will see the public health officer.





HP ok

HP ok

The pax will receive another patch after consulting with the public Health officer (pict. Left)

Paramedic service close to the different zones (red, yellow.....) (pict. below)



Avian Influenza (AI)  
禽流感

Other passengers and  
crew members

其他乘客及机组人员



# **Exit-Screening**

# Exit-Screening (Draft)

- At the Terminal before check-in (before entering the Building or within the building)

- ➡ Medical inspection/examination
- ➡ Questionnaire
- ➡ Temperature-Scanning
- ➡ ....

- In case of negative screening results:

- ➡ Coding for check-in (inside the building in designated area, see Hongkong)

- In case of **positive\*** screening results:

- ➡ Coding for medical services (nearby)

\* Escorted by police or security staff

# **International Health Regulation** **(IHR 2005)**

## **Questions to be answered**

- **Are you aware of IHR**
- **Legal Responsibility**
- **Designated Airports**
- **Trained Staff**
- **Equipment**
- **Training/Drill**
- **Tool Box**

## **To Do List**

- **Procedures**
- **Checklists**
- **Entry Screening**
- **Exit Screening**
- **Communication (national/int.)**
- **int. Network (ICAO,IATA)**
- **Modify present Emergency Pla**
- **Take over the „Leadership“**

**Support: ACI World; [dgamper@aci.aero](mailto:dgamper@aci.aero)  
Fraport AG: [w.gaber@fraport.de](mailto:w.gaber@fraport.de)**



## Our Service:

- ✓ White Paper „pandemic „for airports
- ✓ Draft – Pandemic Plan (Catalogue of Measures for highly infectious diseases)
- ✓ German Pandemic Plan (procedures at Frankfurt Airport)
- ✓ Emergency Procedures (defense against infectious diseases)
- ✓ Flowchart for high inf. diseases
- ✓ CAPSCA 1st Steering Committee Meeting
- ✓ Summary CAPSCA meeting Hongkong
- ✓ e.g.



<http://www.who.int/en/>



<http://www.iata.org/index.htm>



<http://www.icao.int/>



<http://www.ecac-ceac.org/>



[http://europa.eu/index\\_de.htm](http://europa.eu/index_de.htm)



<http://www.cdc.gov/>



<http://www.ecdc.eu.int/>

# **Acknowledgment:**

**Public Health Service HKG**

**Cathay Pacific Airlines**

**HKG Airport Authority**

**Public Health Service Frankfurt/M.**

# Let's work together.....



# .... to try and avoid this new spectre of death



Vielen Dank für die Aufmerksamkeit

Any Questions?

**Further information:**  
**lgamper@aci.aero**  
**w.gaber@fraport.de**

w.gaber@fraport.de