



PANDHUB

Prevention and Management of High Threat
Pathogen Incidents in Transport Hubs

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Background

- Transportation plays important role in the spread of various diseases
- Continuously increasing air travel facilitates the quick and sometimes uncontrollable spread of communicable diseases around the world, e.g. SARS, H1N1pdm09
- Surface mass transport may influence the spread of disease locally within communities due to high number of people, high contact rates and crowding especially during peak hours
- Threats can be natural or man-made

In 2015 there were 3.4 billion passengers in the world





Aims

PANDHUB aids transport operators and relevant actors in transport hubs in the development of their current pandemic and dangerous pathogen preparedness and response plans.



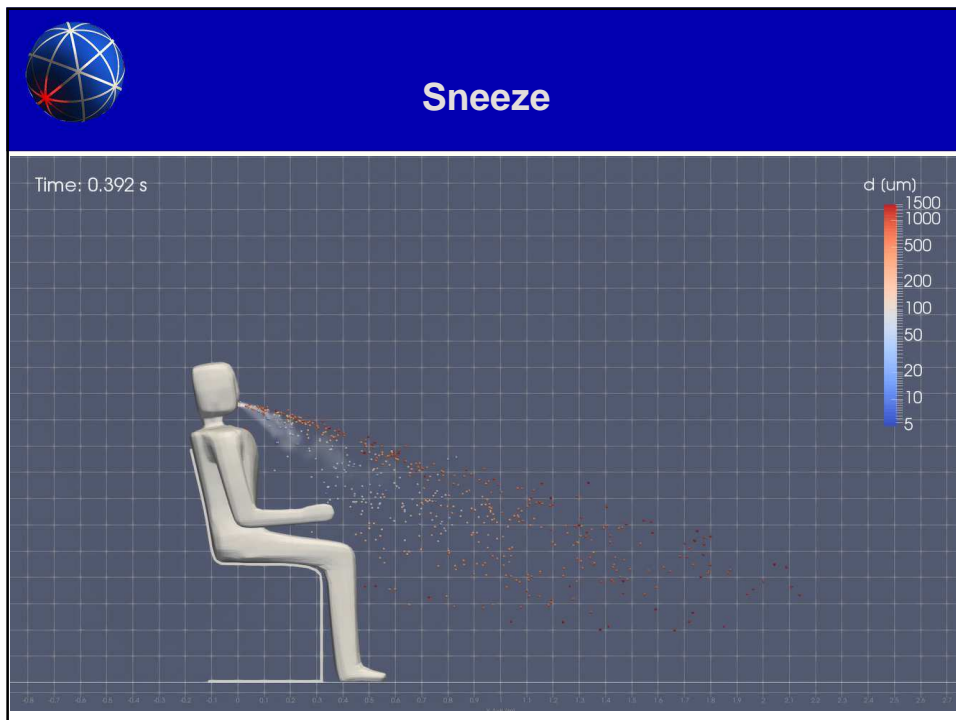
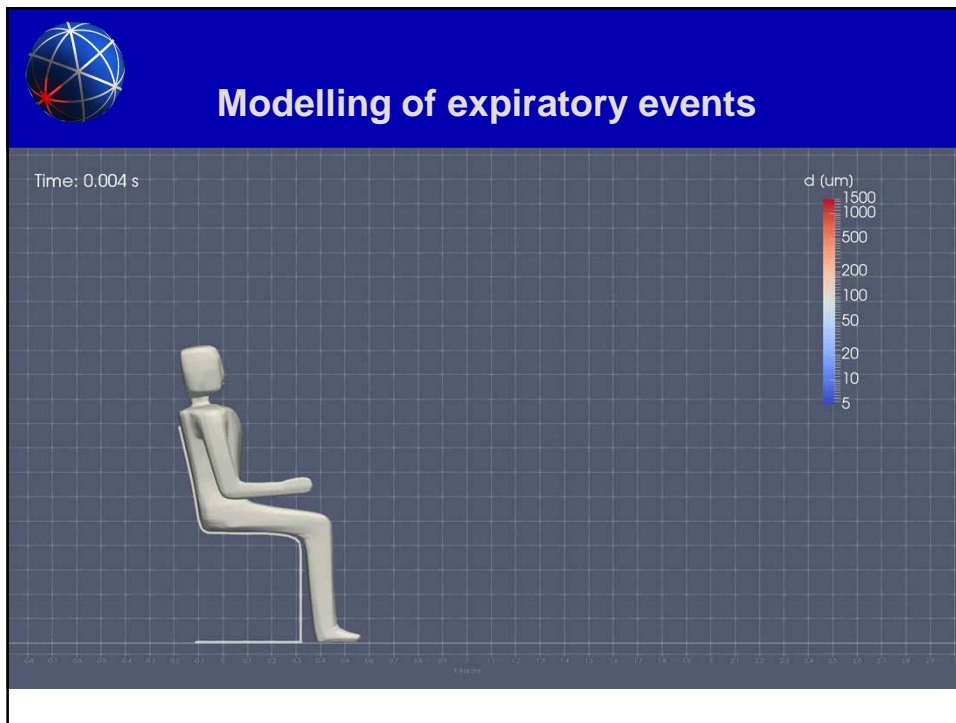
Scenario agents

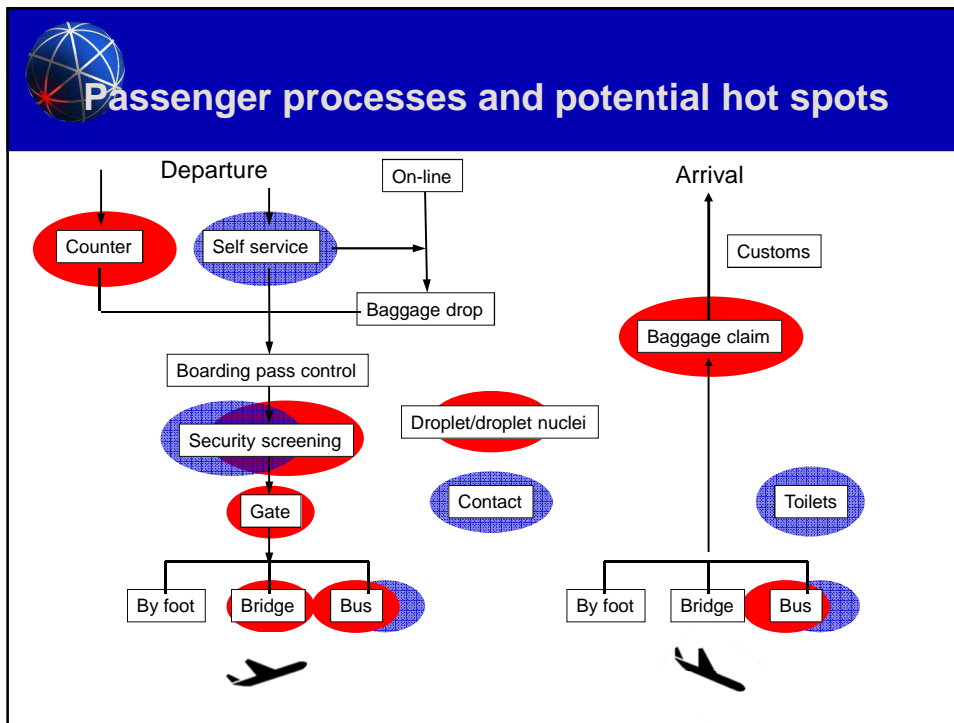
- Chosen to cover a wide range of health events, both natural and intentional
- Risk of disease transmission depends on several key factors
 - Survival of microbes on surfaces, in the air
 - Virulence of microbes
 - Susceptibility of the exposed person
 - Infective dose

Disease	Transmission mechanism				
	Airborne or aerosol ¹	Droplet	Direct contact	Indirect contact	Person to person transmission
Influenza	+	+	+	+	+
Ebola	-	+	+	+ ²	+
Pneumonic plague	+	+	-	-	+
Anthrax	+	-	-	-	-

¹ Includes deliberate use

² Major contamination of surfaces by body fluids or secretions of an ill patient

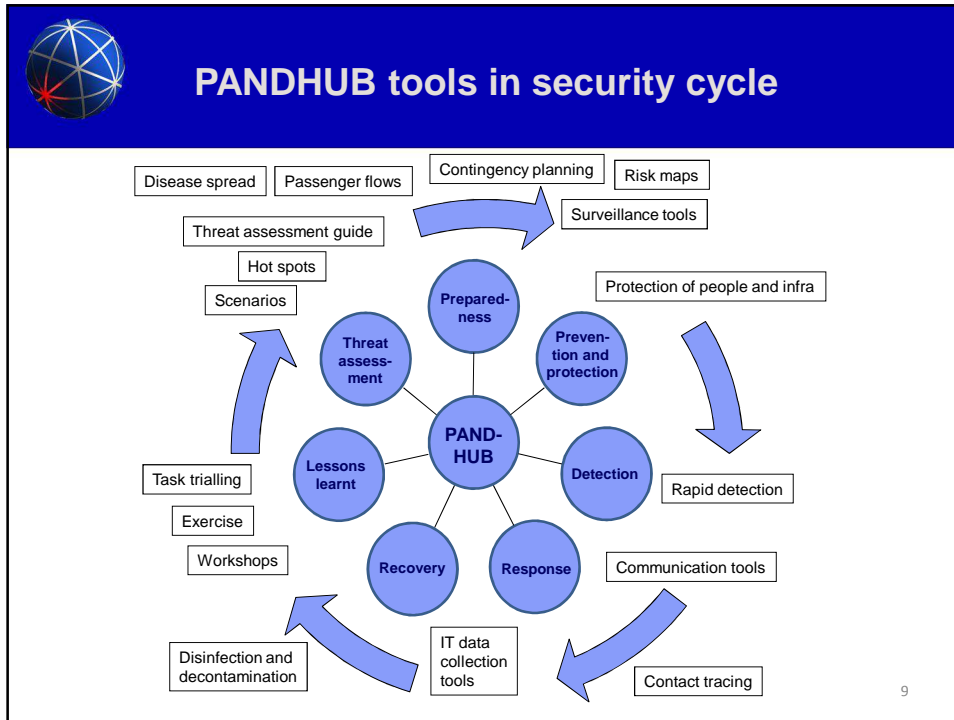




Examples of potential hot spots

- Toilets: doorknobs, flushing buttons** (Photograph of a public restroom hallway)
- Security screening: queues, boxes** (Photograph of a security screening area with queues and conveyor belts)
- Keypads in shops, touch screens** (Photograph of a person interacting with a computer monitor in a shop)
- Handrails** (Photograph of a person using a handrail in a public space)

A small airplane icon is located to the right of the bottom-right photograph.



Participants

The slide lists the following participants:

- VTT
- ASSISTANCE PUBLIQUE HÔPITAUX DE PARIS
- MEDES
- Public Health England
- UNIVERSITY OF EASTERN FINLAND
- The University of Nottingham (UNITED KINGDOM · CHINA · MALAYSIA)

<http://pandhub-fp7-security.eu/>