

# **BEST PRACTICE IN MANAGEMENT OF ONBOARD CASES OF SUSPECTED COMMUNICABLE DISEASE**

## **REPORT OF A WORKING GROUP**

### **Executive Summary**

Public health authority procedures for assessment of onboard cases of suspected communicable disease can lead to significant delays and disruption for both other passengers and the airline. At the request of Dr Tony Evans, Chief, Aviation Medicine Section, ICAO, a small working group was convened to assess the public health procedures and to identify / quantify those measures which would be likely to cause unavoidable delays.

The working group considered a situation where the information available indicated a possible need for public health intervention and therefore required further medical assessment of the suspect case. Two scenarios were examined to determine the minimum and maximum delays which should be expected.

The working group concluded that:

- In the best case scenario (notification of suspect case at least one hour before arrival and during normal working hours) there should be no delay to passengers or in returning the aircraft to service.
- In the worst case scenario (minimal advance notification of suspect case and incident occurring at night on a public holiday), any delay should not exceed one hour.
- Some currently recommended procedures for handling such cases are not practical because of other operational, security and legal restrictions.
- Operators and public health organisations may be required to manage the concerns of passengers, crew and ground staff in response to the incident.

### **Recommendations**

- The benchmark for the maximum delay to passengers and/or aircraft attributable to the public health authority management of a case of suspected communicable disease should be one hour.
- Aviation and public health authorities should review the procedures for assessment of onboard cases of suspected communicable disease, to ensure that these are practicable within operational, security and legal constraints.
- Public health authorities and operators should jointly review all incidents where the recommended benchmark standards are not achieved.
- Operators and public health organisations should jointly develop procedures to provide information and respond to any concerns raised by passengers, crew or ground staff in connection with the incident.

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### **Introduction**

1. Global air travel allows people to travel from virtually anywhere in the world and arrive at a destination in less than 24 hours. This may facilitate the spread of communicable disease, either as a result of individuals only developing significant symptoms after boarding the aircraft, or more commonly after arriving at their destination, or as a result of individuals with a disease travelling to another country to seek treatment or returning home before seeking treatment.
2. Procedures have been developed to enable cabin crew to identify suspected cases of communicable disease onboard and for such cases to be notified to the public health authorities at the destination airport.
3. Most cases of suspected communicable disease are due to minor illness with no significant public health implications.
4. Inappropriate or inefficient public health responses to incidents may create anxiety and cause significant delays and disruptions to other passengers and to the operators.
5. Article 43 of The International Health Regulations (2005) implies that significant interference with international traffic involves a delay of more than 24 hours, whereas delays considerably less than this can be disruptive to flight operations

### **Background**

6. The ICAO CAPSCA project seeks to encourage cooperation between public health authorities and the aviation sector and to develop and improve guidelines.
7. At a CAPSCA meeting in July 2012, Dr Tony Evans, Chief, Aviation Medicine Section, ICAO, discussed a proposal for a review of the procedures for public health assessment of an onboard case of suspected communicable disease, with a view to establishing a benchmark for the delay in returning the aircraft to service that could be reasonably expected in such a case.
8. Dr Nigel Dowdall, Head of Aviation Health Unit, UK CAA, established a small working group, which met on 28 Jan 2013. The members of the group were:
  - Dr Nigel Dowdall
  - Mr Tony Baldock, Environmental Health Manager, Crawley Borough Council
  - Mr Matthew Greener, Contingency Planning Manager, Gatwick Airport
  - Dr David Hagen, Health Protection Agency
  - Dr Gareth Holt, Health Protection Agency
  - Dr Tim Stevenson, Head of Medical Services, Virgin Atlantic

## Scenarios considered

9. The working group considered a situation where the information available indicated a possible need for public health intervention and therefore required further medical assessment of the suspect case. The scenario was not considered in the context of a known PHEIC, such as a pandemic or a SARS outbreak, where separate contingency plans would apply.
10. The situation was considered for two scenarios:
  - A best case scenario, in which notification of the suspect case via the air traffic services occurred at least one hour before arrival of the aircraft and during normal working hours.
  - A worst case scenario, in which there was minimal advance notification of the suspect case and the incident occurred at night on a public holiday.

## Public health response

11. The public health authority would be notified by contacting the person on duty for the Port Health Authority responsible for the airport. In the UK a duty person would be available on a 24/7 basis, but may not be a medical doctor, e.g. may be an Environmental Health Officer. The Port Health official would follow a standard protocol in assessing the public health risk and would always be able to obtain medical advice by contacting the duty public health doctor for the area/region.
12. It was considered that in the best case scenario there should be no delay attributable to contacting the public health authorities and conduct of the risk assessment. In the worst case scenario, it was likely that there could be some delay in contacting the duty staff and assessment of the risk, but that this should not normally exceed 30 minutes and the maximum delay should be one hour.
13. In both scenarios, the liaison between the airport/airline and public health would be through the handling agent for the aircraft. It would be usual practice for the aircraft to land and proceed to the pre-allocated stand. It is unusual for there to be a designated stand for such incidents, particularly as some aircraft types are limited in the stands that can be used. In some instances an aircraft may be diverted to an off-pier or even remote stand, but this would be a decision of the handling agency or airport operator and any consequent delays would not be attributable to the public health response.

## Risk assessment and actions

14. Most UK airports do not have medical services at the airport. If the risk assessment determines that the suspect case needs further medical assessment, an emergency ambulance would be requested to collect the person from the aircraft and take them to an NHS hospital. The working group could not envisage any scenario, including for example a case of possible viral haemorrhagic fever, which would call for a different response. The ambulance service would be informed of the risk assessment, such that they were able to take any appropriate precautions, but these would almost always be limited to routine 'universal precautions' measures.
15. The public health official may ask that passengers in adjacent rows fill in contact details in case of a need for subsequent contact tracing. This is likely to be feasible if

the information can be collected prior to landing, e.g. if the aircraft carries Passenger Locator Cards, but should not cause any delay. If details cannot be collected prior to arrival, the airline would normally be requested to provide any contact information available through accessing the seating and reservations systems.

16. Once the aircraft has arrived on the stand there should be no delay to passenger disembarkation, unless the medical condition of the patient is such that they require immediate emergency care and the ambulance crew are already at the stand. The time taken for the ambulance crew to remove the patient from the aircraft should cause minimal, if any delay, once all other passengers have disembarked.
17. Most airports do not have any facilities for holding arriving passengers once they have disembarked, so it is not feasible to collect any additional information, such as contact details, after disembarkation. In addition, security requirements dictate that arriving and departing passengers must be kept separate - it would not, therefore, be possible to disembark the passengers to the departure area at the gate. Finally, in the UK at least, it would not be legal to detain passengers involuntarily in this situation by, for example, taking them from the aircraft to a separate holding facility.
18. The working group reviewed the IATA guidelines for cleaning of aircraft following such an incident, but did not consider that there would be a public health requirement for anything other than routine aircraft turnround cleaning, except in a case where there had been spilled body fluids. All airlines should have procedures for dealing with spilled body fluids and there should be no additional delay due to public health requirements.

### **Other considerations**

19. The suspect case's hand baggage and other personal effects in the cabin will be taken to hospital with him/her. Any uncollected hold baggage will be dealt with by routine procedures at the airport and will not cause delay.
20. Some passengers, particularly those in the cabin section where the suspect case was seated, may be anxious about the risk to themselves and to other friends/family (particularly children) who they may be in contact with. Specific information will not be available until the suspect case has been assessed and a diagnosis made, but general information including what to do if they develop symptoms may be helpful. Such information would have to be generic, pre-prepared and offered by ground staff to all passengers on disembarkation.
21. Previous experience has shown that news of an incident can leak out, particularly if there is significant advance notification, and this may lead to reluctance by ground handling staff, such as baggage handlers, bus drivers and customer services staff, to approach the aircraft and deal with the passengers. Management should be prepared to respond to these concerns, with support from the public health authorities.

### **Conclusions**

22. The working group concluded that:
  - In the best case scenario (notification of suspect case at least one hour before arrival and during normal working hours) there should be no delay attributable to the public health response to either the passengers or in returning the aircraft to service.

- In the worst case scenario (minimal advance notification of suspect case and incident occurring at night on a public holiday), any delay should not exceed one hour.
- Some currently recommended procedures for handling such cases are not practical because of other operational, security and legal restrictions.
- Operators and public health organisations may be required to manage the concerns of passengers, crew and ground staff in response to the incident.

## **Recommendation**

23. The working group recommended that:
- The benchmark for the maximum delay to passengers and/or aircraft attributable to the public health authority management of a case of suspected communicable disease should be one hour.
  - Aviation and public health authorities should review the procedures for assessment of onboard cases of suspected communicable disease, to ensure that these are practicable within operational, security and legal constraints.
  - Public health authorities and operators should jointly review all incidents where the recommended benchmark standards are not achieved.
  - Operators and public health organisations should jointly develop procedures to provide information and respond to any concerns raised by passengers, crew or ground staff in connection with the incident.