Travel and Tourism under Pandemic Conditions

Review and Preparation Exercise

UNWTO Headquarters, Madrid, Spain
26-27 August 2009
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The World Tourism Organization wishes to express its deepest gratitude to the participants and presenters who took part in this exercise for their valuable contributions, which will undoubtedly be of great interest to the different readers from the private and public sectors all around the world.

We also wish to thank the following persons for their contribution to the organization of the exercise and the preparation of this publication:

Dr. Dirk Glaesser (Chief, Risk and Crisis Management), Ms. Sandra Carvao (Deputy Chief, Market Trends, Competitiveness and Trade in Tourism), Ms. Marina Diotallevi (Chief, Cultural, Social and Ethical Aspects of Tourism), Ms. Zoritsa Urosevic (Executive Secretary, Business Council), Ms. Anud Abbassi, Ms. Lorna Hartantyo, Ms. Ana Ilic, Dr. Monica Li, Ms. Krystel Oñaña from the Risk and Crisis Management Section, and Ms. Cora-Fee Dahmen, Ms. Katharina Holzfuss, Ms. Hannah Wirtz from the Publications Department.
In view of the current pandemic (H1N1) 2009, the World Tourism Organization hosted a two-day workshop on the 26-27 August 2009 on Travel and Tourism under Pandemic Conditions at UNWTO’s headquarters in Madrid.

Since the outbreak of the influenza virus in April, the travel and tourism sector has been extremely challenged. Fortunately, the mild character of the virus in most countries has caused only limited impact on the sector. However, an influenza pandemic is likely to span the entire planet and last for several months, with possible recurrence known as ‘waves’ within a year of the start of the pandemic.

The event was convened to best anticipate the challenges of the next months and to adjust the preparations of the travel and tourism sector. The workshop primarily aimed at the regions of Africa, Europe and the Middle East and gathered representatives of the tourism sector of Member States, Influenza Focal Points, Tourism Emergency Response Network (TERN) and International Organizations.

The workshop was designed in an interactive way to identify and discuss the following:

- The rapidly changing situation of the pandemic (H1N1) 2009 and the further spread pattern of the virus in the months to come, including pandemic risk factors, virus severity and vaccine access.

- Key challenges for the travel and tourism sector in response to the pandemic, including targeted communications, balance of information between warning and assurance, and cross-sectorial cooperation.

- Further repercussion of the pandemic on the travel and tourism sector as the situation evolves, including issues such as absenteeism, travel behaviour and state actions.

- Strategies to help limit the negative impacts on the travel and tourism sector and lessons learned since the onset of the pandemic.
UNWTO Secretary-General a.i., Dr. Taleb Rifai, launched the workshop by welcoming all the participants and by explaining the significance of this pandemic to the travel and tourism sector. Unlike the pandemics of 1918, 1957 and 1968, tourism nowadays is a widespread activity that plays an unprecedented role in the economies of many countries. Perceptions of uncertainty and fear that surround a virus might have a detrimental effect on tourism, as well as absenteeism and its consequences on such a labour-intensive sector.

The Secretary-General a.i. explained the objectives of this review and preparation exercise that revolved around identifying gaps, exchanging best experiences and correcting assumptions to better prepare for the next waves. He also thanked the experts who intervened with presentations at the event.

- Dr. David Nabarro – United Nations System Coordinator (UNUSIC)
- Dr. Guénaël Rodier – Director, International Health Regulations Coordination, World Health Organization (WHO)
- Mr. Donato Kiniger-Passigli – Senior Specialist, Strategic Partnerships and Crisis Response Coordination, International Labour Organization (ILO)
- Ms. Nancy Cockerell, Policy Advisor, World Travel and Tourism Council (WTTC)
- Dr. Gaya Gamhewage, Team Leader, Corporate Communications, World Health Organization (WHO)
The United Nations System Influenza Coordinator (UNSIC) Dr. David Nabarro addressed the participants through a video address. Dr. Nabarro explained that despite the low mortality rate that characterized the virus so far, especially in developed countries, there are some high risk groups. As the virus spreads into the southern hemisphere, he stressed the importance of protecting the populations of underdeveloped countries.

The virus is expected to return to the northern hemisphere with the beginning of the autumn season with a worsening of the degree of infection. He commended the preparedness work done by international organizations, built on the experiences of other infectious diseases such as SARS, and explained that being ready means being prepared for a worst-case scenario.

Although WHO has set the standards for the work of other organizations, he emphasized that all organizations are interrelated and should work together as a joint movement. Dr. Nabarro stressed the importance of looking beyond the health sector to deal with issues relating to unjustified panic and fear. He pointed out that communications, in the form of consistent messages with accurate and reliable information, is therefore vital and that it is now the time to correct assumptions and work on gaps. Dr. Nabarro cautioned that we have only seen the beginning of the pandemic and that coordinated work should continue in order to face the coming challenges.

Dr. Guénaël Rodier (WHO) provided a full overview of the current situation in relation to the emergence of the virus and its overall epidemiology, the disease outcome, vulnerability in Africa and other Least Developed Countries (LCD’s), vaccine production, the International Health Regulations (IHR) and the future’s uncertainty. For the full presentation see pp. 19-43.
Assistant Secretary-General Prof. Geoffrey Lipman brought in the tourism dimension, which is of high visibility, into the picture. He explained the history of the Risk and Crisis Management section at UNWTO, which was formed after the tsunami of 2004, and the relationship it has been building gradually with UNSIC and WHO.

Prof. Lipman indicated that although this pandemic is strictly a health matter, the Travel and Tourism Industry can play an important role within the overall coordination work to guarantee a common thinking. He presented the Tourism Emergency Response Network (TERN) as a network of networks and the role it plays in providing a consistent and coherent baseline message from the industry.

As he explained, the purpose of this exercise was to reassess our preparedness work, as it was done so far for a very different scenario, and to reinvigorate ourselves by sharing the results among Member States and TERN members and to learn from them.

Dr. Dirk Glaesser explained the framework and goals of the exercise and stressed the importance of understanding the assumptions of other relevant stakeholders for the next months of the pandemic.

While most of the activities of the first wave highly benefitted from the preparation work that was undertaken for a possible H5N1 pandemic, the different fundamentals of the current pandemic make it necessary to properly prepare against these different data. Therefore, the set-up of the review and preparation exercise into three different roundtables aimed at reviewing the fundamental data and identifying what went right and wrong during the first wave. The participants had first to primarily focus on the assumptions they had for the coming wave. This was to be done in three parallel roundtables concentrating on travel behaviour patterns, political and ethical dimension and operational challenges and business continuity. Based on these assumptions the last session of roundtables was designed to identify relevant and effective strategies and actions, which would help limit the impact on the travel and tourism sector.
The participants were divided into three separate roundtables to discuss simultaneously the experiences and lessons learned from the first wave of the pandemic, the key challenges for the travel and tourism sector in the months to come, and the strategies and actions to help limit the impact of this pandemic on the sector and the travellers. The discussion was brought back to the plenary in the form of presentations of the findings of each roundtable.

First Roundtable Session

**Topic**
Experiences and lessons learned from the first wave.

**Objective**
Identifying country and sector experiences from the first wave.

**Main Questions**
- **Country experiences:** How was travel and tourism affected, addressed and dealt with?
- **Sector experience:** What are the experiences from transportation, accommodation, recreation and entertainment, tour operators and travel agents, and travel services?
- What have we learned from the first wave?
- What major challenges have you encountered? How were these challenges addressed?

**Main Points**
- Complacency vs. overreaction
- Consistency
- Confidence
The discussions around this topic focused on the importance of messaging in dealing with this pandemic and the need for coordination among the different organizational levels in both the public and private sector. The fear factor was highlighted as well as the perceptions created by sometimes unbalanced media reporting and the effects of measures taken by some countries on travellers, such as quarantines. Existing safety guidelines and preparedness plans should be updated to deal with the current situation.

Points raised by the participants*

- Since viruses and pandemics are characterized by uncertainty, consistent communications were identified as essential for building confidence and trust in the sector. There is a need for simple, coordinated and well-disseminated messages. The message should focus on the importance of being prepared and on mitigation instead of containment.

- It is important to find a balance between the right preventive measures and encouraging travel.

- The responsibility of staying informed falls on three levels: personal, country towards its citizens and destination towards tourists.

- It is very important to have access to reliable information. Latest technologies must be used to share information and avoid duplication.

- There is a need for more cooperation between health authorities and travel operators in terms of exchange of information.

- For a sector as labour intensive as the tourism sector, work absenteeism due to illness has serious consequences on business continuity. Shortage of staff is a big challenge for the sector.

- It is difficult to distinguish between the effects of the economic crisis and the pandemic, as they are simultaneously affecting the sector.

- Travel cancellations in the future might be triggered by people’s fear of illness while on holidays.

- Cooperation between authorities within the country is often insufficient.

* The following points were raised by the participants and do not necessarily reflect the views of UNWTO. They are listed here to offer those who were not present at the event an insight into the discussions that took place.
During the roundtable discussions, concerns were raised that the simple use of the term “pandemic” is not to be recommended as it is often associated with a scenario different to the current mild virus.

Media reporting and the role it plays in travellers’ perceptions. At the early stages of the outbreak, media reporting caused panic as it was seen by travel cancellations and changes.

Other affected areas by the virus were not as negatively affected as Mexico as they received less media attention.

The role of media attention, or lack of it, can create concern or complacency among travellers. There is concern that the public won’t pay attention or would overreact to the second wave (crisis fatigue). Avian flu, as it doesn’t receive much attention anymore, is to some extent forgotten in the public opinion.

As the virus has spread more widely, people express less concern related to travel.

Staying healthy while travelling should be a general concern and should be stressed beyond the H1N1 pandemic.

The pandemic must be treated as a health issue and should not be used as a political tool. WHO is the main authority on the subject, but national guidelines are the ones that should be followed.

Measures taken by countries differ considerably, which makes the effect of the disease to vary significantly among them. Consistency is key: one procedure should apply to all.

The travel and tourism industry’s responsibilities include the dissemination of information, enforcement of an audit system and implementation of basic hygiene rules.

Lessons learned from Avian Flu preparedness should be applied to the current pandemic. Preparation plans are available (IATA, WHO-guidelines etc).

Travel organizations should communicate the measures taken widely so that they send a reassuring message to the public. Measures taken by health and travel authorities (screening, etc.) can cause a certain burden for travellers but it can also give passengers confidence that the industry cares about the issues. Although WHO does not consider certain measures effective and reliable to detect illness (e.g. thermal scanners), these can build confidence among travellers.

Tour operators/travel providers cannot handle the pressures of the pandemic-related costs and ensure the safety of the travellers. Some insurance companies have included clauses to exempt H1N1 from coverage.
According to some statistics the number of travellers has decreased. Some travellers have had to undergo quarantines during travels to Asia and South America.

Improvements can be seen on three different levels:

- Governments: a more consolidated approach to the issue is needed and a better understanding of the International Health Regulations (IHR 2005).
- Travellers: should abide by health advice and be prepared for certain measures.
- Private sector: sharing of information is crucial with the public sector. The sector should continue to send out reassuring messages while continuing its preparations.
Second Roundtable Session

Topic
Roundtables on key challenges for the travel and tourism sector in the months to come.

Objective
Identifying the assumptions and challenges for the months to come.

Main Questions
On what assumptions is your government/organization/company currently basing its actions for the next wave of the pandemic?

The following assumptions were addressed:

- Severity of the virus
- Morbidity rate
- Mortality rate
- Duration of the pandemic
- Timeline for vaccine readiness
- Rate of absenteeism

Based on these assumptions, the participants were asked to identify the key challenges facing the travel and tourism sector from the perspectives of travel behaviour patterns, the political and ethical dimension and operational challenges and business continuity.

Points raised by the participants*

A. Travel behaviour patterns

Assuming that a second wave will reach its peak in the northern hemisphere in November, the participants suggested the following scenario for the purposes of their discussion:

- Low severity of virus
- High level of perception among travellers
- Medium/high morbidity rate
- Low mortality

* The following points were raised by the participants and do not necessarily reflect the views of UNWTO. They are listed here to offer those who were not present at the event an insight into the discussions that took place.
The role of the media and the perceptions that it creates among travellers will play a major role in people's travel behaviour in the months to come.

The healthcare system at the destination might become a decisive factor in deciding whether or not to travel, as travellers want to ensure that they are well taken care of in case they fall ill abroad.

Communication strategies will play a decisive role as travellers would want to have reliable, timely and transparent information readily available for them.

Different forms of travel are expected to be affected differently:
- Leisure travel: people might want to stay home or close to home so they might choose to travel domestically. A higher impact might be noticed on family travel.
- Business travel might be reduced to the necessary minimum.
- Visiting family and friends: people might be more relaxed.

Travellers generally perceive a higher risk when travelling by planes and cruise ships as they are seen as confined places.

Given the uncertainty surrounding the pandemic, late booking is expected to increase as people tend to postpone decisions regarding travel.

Reliability of travel operations and proper communications will be crucial during the second wave of the pandemic.

The southern hemisphere might be perceived as “low risk” destinations in the northern hemisphere’s winter season.

B. Political and ethical dimension

- Due to lack of information, participants found it difficult to determine the assumptions about the second wave.
- Complacency and crisis fatigue are expected as the pandemic stops making media headlines.
- Travel advisories are very damaging to the industry. Countries should only revert to them after consultations between the industry and the health authorities.
Travellers have a right to reliable and trustworthy information before, during and after a trip, as well as access to health services at their destination.

There are many factors that affect tourism. Challenges caused by the pandemic are only second to the current economic crisis that has been affecting the sector.

Tourism can be seen as an income generator to finance health.

The practical implementation of the IHR is a challenge as some grey areas exist. Health and tourism roles must be clearly defined.

Insurance coverage must be addressed to cover cases of cancellations, obtaining medical attention abroad and involuntary prolonged stays.

Fast and sincere reporting by destinations on the situation at hand is very helpful and should be encouraged despite fears of repercussions on tourism and travel.

Messages and actions are constantly changing as the situation develops. This builds up more uncertainty. Messages should reach everyone and care should be taken in order to avoid misinterpretation. Messages must be simple and honest.

C. Operational challenges and business continuity

Assumptions should be considered on the characteristics of the virus and of people’s perceptions of it.

The number of companies that actually have business continuity plans is unknown and expected to be quite limited. Nevertheless, businesses should be prepared and have plans in place.

Preparedness plans and guidelines have to be flexible in order to respond to change, as the situation continues to evolve.

The issue of staff shortages is decisive for business continuity in the travel and tourism sector. Cross training can be considered to deal with increased absenteeism rates due to the pandemic. Some essential tasks, however, cannot be easily substituted as in the case of airline pilots.
• Travel and tourism businesses should determine the minimum number of staff necessary for safety and business continuity reasons.

• Some measures such as social distancing, used to limit the impact of the virus, might be difficult to be implemented by the tourism industry.

• The issue of travelling while being sick was discussed. Whether it should be left up to the traveller’s personal responsibility or whether countries should implement official guidelines and recommendations.
Third Roundtable Session

Topic

Roundtables on strategies and actions to help limit the impact of this pandemic on the travel and tourism sector and travellers.

Objective

Identifying from a public and private sector's perspective strategies and actions that help limit the impact on the travel and tourism sector and travellers.

Main Questions

What strategies and actions can be recommended to help limit the impact?

Especially in view of:

- Responsible (recovery) marketing.
- Effectiveness and feasibility.
- Sustainability.

Points raised by the participants*:

- Given the high degree of uncertainty surrounding this pandemic, there is an urgent need for coherent contingency plans and access to reliable information.

- From a marketing perspective, destinations should highlight normality but at the same time provide transparent and factual health information to travellers in order to build confidence and trust. Social media campaigns can be launched using webcams, personal reports and user opinions.

- Responsibilities and duty of care were highlighted. Practical information should be provided for travellers at their destinations, preferably in different languages, on how to

* The following points were raised by the participants and do not necessarily reflect the views of UNWTO. They are listed here to offer those who were not present at the event an insight into the discussions that took place.
Agreements with insurance companies must be revised to ensure that the unforeseen costs relating to the pandemic are not exempted from coverage.

To ensure business continuity, protocols, training, back-up plans, and agreements with local authorities need to be developed. This is especially the case for small and medium sized establishments. There is an urgent need for cooperation and sharing of information on valid and up-to-date pandemic and business continuity plans.

Linkages between relevant existing networks should be strengthened and cooperation between businesses put in place. This could be done by identifying key partners at all levels (national, international, public-private) and establish two-way-communications between them.

Fast and sincere reporting from destinations as well as trustworthy and reliable communications are very important and should be encouraged.

Experts should ensure that their messages are easy to understand by the general public. Tourists need to be informed prior to travelling, while at their destination and if and when someone falls sick.

It was suggested that UNWTO should build a group similar to TERN to include the public sector and to divide it according to regions for distribution and sharing of information in a defined system.

The need to have a common message among the industry persists, as well as to giving regional and sector differences a consideration.

The sector should be ready to provide facts and figures. It should make proper use of the latest technologies in communicating and learn to adapt to the new communication trends. SOS.travel provides an ideal platform for this purpose.

Suggestion to UNWTO to narrow down its data base to the right contact person in order to avoid information overload and repetitions.

There is a need for determining the right flow of information in a systematic approach. Providing true and balanced information to the public and following WHO’s and national recommendations is essential.

The importance of close collaborations especially between Ministries of Health and Ministries of Tourism was highlighted.
Conclusions and Recommendations

The purpose of this exercise was to reassess, re-envision and reinvigorate the sector’s response to the challenges presented by the H1N1 pandemic. The recommendations and conclusions which were reached at this workshop are important for the tourism sector but also for other social and economic activities depending on travel and tourism.

Nowadays, travel and tourism is a widespread social and global phenomenon that affects many more sectors than when the last pandemic occurred, more than 40 years ago. Thus, even if the virus continues to be as mild as it currently is, when combined with the economic crisis and the next wave of the pandemic, the sector will have to deal with more challenges in terms of business continuity. The sector, therefore, needs to stay vigilant and monitor the situation closely.

Drawing from the rich discussions of this workshop, the following points were highlighted, which should help the sector in further improving the management of this situation.

• There was a wide consensus that travel restrictions and border closures are not to be recommended. The participants coincided with the assessment of the World Health Organization (WHO) on this issue. Such restrictions would have little or no effect on containing the spread of the virus, which is virtually present in all countries of the world, but would carry with it enormous economic and societal consequences.

• The need to increase preparedness was constantly pointed out. It seems that the predominantly mild character of the virus so far has caused complacency in several subsectors. The lessons learned from the extensive preparedness work for a possible Avian Flu (H5N1) Pandemic have benefitted the sector at large in its initial coordination and communication efforts facing the H1N1 pandemic. However, as a second wave of the pandemic is expected to commence, coinciding with the beginning of the flu season during the Northern Hemisphere’s autumn, countries are expected to face new and different challenges especially in terms of numbers of affected persons and businesses. It is therefore essential to use the available time to prepare as best as possible.

• The cases studied and discussed at the workshop underlined that determined, transparent, consistent and timely action by health administrations had been beneficial for the travel and tourism sector. Responsibility and credibility paired with balanced information are cornerstones of a successful management of pandemic challenges.

• The need for regular and timely exchange of information both at the horizontal level, e.g. across health and tourism officials, and at the vertical level, e.g. national and regional administrations, is important to reduce the uncertainty while planning and acting and to guarantee the relevance of actions. As new H1N1 virus-related information is emerging constantly and as we are dealing with a highly communicative issue, two-
way communications, through telephone or video conferences, prove to be very efficient for communication and coordination. In this regard, participants welcomed the regular exchanges within the Tourism Emergency Response Network (TERN) convened by UNWTO.

- As vaccines for certain segments of countries’ populations are only expected to be available towards the end of the year, it is necessary to consider additional methods relating to business continuity, to minimize the impact of the pandemic on the sector. The discussions extensively touched upon plans addressing both operational feasibility and personal protection for guests and personnel. Some guidelines for hotels and restaurants, in which practical steps are described, are now available on www.unwto.org/rcm.

- Countries can minimize the impacts of the Pandemic, especially when tourism is pivotal for their economies, by including crucial functions of the travel and tourism sector among priority groups in their vaccination plans. As many destinations are heavily depending on air and sea transport, crucial functions to maintain those services should be added to those lists.

- It was felt that certain segments of the sector are affected more than others. Among these are business travellers and Meetings, Incentives, Conventions and Exhibitions (MICE) tourism.

- Inconsistencies, especially when affecting personal freedoms as in the case of quarantines, are very likely to attract media’s attention. They have a detrimental impact on the travel and tourism sector and need to be avoided by all means.

- Participants stressed that travellers should be responsible. Travellers should – in line with the recommendations of WHO – remain vigilant about their own health, stay informed and follow fundamental hygiene precautionary measures such as frequent hand washing and proper cough etiquette. Calling upon the responsibility of the traveller is important and serves the interest of everyone.

- As one of the main factors that travellers take into account when deciding on a trip relates to the attention that they would receive if they fall ill due to the influenza A(H1N1) virus while abroad, it was highlighted that procedures and help lines used to communicate with travellers and used by them to receive assistance when falling sick should be easily accessible for them and clear for all those involved in the process.

- It was also emphasised that travellers should ensure that their travel insurance will cover unforeseen flu-related expenses in the event they fall sick away from home. Travellers should take medical advice in the event they experience flu symptoms immediately before, during or after a trip.

- Marketing efforts should send messages of normality without downplaying the pandemic. The exercise showed clearly that there is neither need nor place for panic.

This review and preparation exercise is just another step in the line of continuous preparedness efforts. The travel and tourism sector should continue with its preparations and do its utmost to help limit the negative impacts of this Pandemic.
The Rapidly Changing Situation of Pandemic (H1N1) 2009 – Today and Tomorrow

Dr. Guénaël Rodier
Director, International Health Regulations Coordination, WHO

Presentation outline

- EMERGENCE AND OVERALL EPIDEMIOLOGY
- DISEASE OUTCOME
- THE VULNERABILITY OF AFRICA
- VACCINE DEVELOPMENT
- INTERNATIONAL HEALTH REACTIONS AND TRAVEL
- UNCERTAIN FUTURE
EMERGENCE AND OVERALL EPIDEMIOLOGY

- DISEASE OUTCOME
- THE VULNERABILITY OF AFRICA
- VACCINE DEVELOPMENT
- INTERNATIONAL HEALTH REGULATIONS AND TRAVEL
- UNCERTAIN FUTURE
Timeline of events

- April 12, 2009: an outbreak of influenza-like illness in Veracruz, Mexico, reported to WHO

- April 15-17: two cases of a new A(H1N1) virus infection identified in two southern California counties in U.S.A.

- April 23: new influenza A (H1N1) virus infection confirmed in several patients in Mexico

Timeline of events (2)

- April 24: WHO declares a public health event of international concern (PHEIC) under the International Health Regulations

- April 27: WHO declares pandemic phase 4 (sustained community transmission in Mexico)

- April 29: WHO declares pandemic phase 5 (2 countries affected)

- June 11: WHO declares pandemic phase 6 (spread to 2 WHO regions)

- In 9 weeks, all WHO regions reporting cases of pandemic (H1N1) 2009
Main features, mid-August 2009

▶ More and more countries have stopped counting individual cases, particularly of milder illness, the case number is significantly lower than the actual number of cases that have occurred.

▶ It is apparent that rates of influenza illness continue to decline in the temperate regions of the southern hemisphere, except in South Africa where pandemic influenza H1N1 appeared slightly later than the other countries of the region.

▶ Active transmission is still seen in some later affected areas of Australia, Chile and Argentina even as national rates decrease.

▶ Areas of tropical Asia are reporting increasing rates of illness as they enter their monsoon season, as represented by India, Thailand, Malaysia, and Hong Kong, four places in the region which have active surveillance programs. Tropical regions of Central America, represented by Costa Rica and El Salvador, are also seeing very active transmission.
Main features, mid-August 2009

- In the northern temperate zones, overall rates are declining in both North America and Europe though the virus is still found across a wide area throughout both regions and pockets of high activity are being reported in 3 U.S. states and a few countries of Western Europe.

- It has been noted throughout the temperate zones of the southern hemisphere, which are now passing out of their winter season, that the relative importance of seasonal strains, represented by H3N2 in nearly all countries, rapidly diminished and pandemic H1N1 has become the dominant strain.

- Many countries including Australia, Canada, New Zealand, and the U.S. have noted that their indigenous peoples appear to be at increased risk of severe disease related to pandemic influenza.

- 12 isolated cases of oseltamivir resistant virus have arisen in different parts of the world (Japan 4, USA 2, Hong Kong SAR China 2, and 1 in Denmark, Canada, Singapore and China).

Pandemic (H1N1) 09 virus characteristics

- All viruses to date are homogeneous antigenically and react well with antisera raised against California/4/2009 and California/7/2009

- To date, no recognized genetic markers associated with virulence
  (Viruses isolated from severe cases do not show sequence differences)

- Virus replicates more in lungs and causes more severe pneumonia in animals (ferrets, mice, primates) than seasonal H1N1 (unpublished)
Travel and Tourism under Pandemic Conditions

Distribution of cases by age group

Laboratory-confirmed cases (Chile, EU and EFTA, Japan, Panama, Mexico)

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Percent of cases</th>
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<tbody>
<tr>
<td>0-9</td>
<td>20%</td>
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<tr>
<td>10-19</td>
<td>35%</td>
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<td>20-29</td>
<td>25%</td>
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<tr>
<td>30-39</td>
<td>15%</td>
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<tr>
<td>40-49</td>
<td>10%</td>
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<tr>
<td>50+</td>
<td>5%</td>
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Pandemic (H1N1) 2009 and seasonal influenza viruses co-circulation

- Pandemic A (H1N1) 2009 and seasonal viruses have co-circulated at varying levels over time in multiple countries
  - Implications for vaccination in upcoming northern hemisphere winter

- Pandemic A (H1N1) 2009 (as % of isolates) in:
  - Chile: ~90%; USA: > 98% (since mid-June)
  - Victoria, Australia: ~67%; South Africa: < 1% earlier but now increasing

International Health Regulations Coordination
The Rapidly Changing Situation of Pandemic (H1N1) 2009 – Today and Tomorrow
Initial spread in large cities
(Source: Australia Dept. Health and Aging website)

Weekly reporting sequence

<table>
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<th>Date</th>
<th>Metropolitan</th>
<th>Regional</th>
<th>Melbourne Medical Deputising Service</th>
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<td>30 Apr</td>
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Confirmed Cases in Argentina by date of onset

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International Health Regulations Coordination
World Health Organization
Epidemiology: Summary

► High but variable transmissibility in countries
► 5-45 years old people most commonly affected
► Hospitalization rates and case-fatality in young adults higher than during seasonal influenza
  (Groups at risk for severe illness similar to those seen in seasonal influenza but also many in previously healthy)
► Co-circulation of seasonal and pandemic viruses in some countries
  (Case selection bias makes somewhat difficult to interpret H1N1 dominance)
► Difficulty in monitoring course highlights need for standard surveillance reporting. Role of large urban centres.

International Health Regulations Coordination

EMERGENCE AND OVERALL EPIDEMIOLOGY

DISEASE OUTCOME

THE VULNERABILITY OF AFRICA

VACCINE DEVELOPMENT

INTERNATIONAL HEALTH REGULATIONS AND TRAVEL

UNCERTAIN FUTURE
Severe outcomes

**Majority of cases have uncomplicated influenza** illness that resolves without antiviral treatment.

- **50-80% of severe cases have underlying conditions**
  - Pregnancy, asthma or other lung disorders, cardiovascular, diabetes, immunosuppression, neurologic disorders
  - Obesity may be newly recognized risk factor but needs more study
- **Majority of deaths caused by severe viral pneumonia**
- **Severe cases and deaths** have occurred in young and previously healthy adults and less often children

Complications - Severe cases
pooled data (*)

- **Diagnosis:** Primary influenza pneumonia
- **Complications:** Mechanical ventilation, secondary pneumonia
- **Antiviral treatment in severe cases:**
  - (After 7 days of initiation of symptoms: worse evolution; Within 1 – 3 days of initiation of symptoms: better outcome)

Source: Dr. Luis Sepúlveda State. Hospital General de Mexico

(*) Source: Mexico, Chile, USA, Canada, Dominican Republic
Outcomes in Pregnant Women

- Risk ↑ with duration of pregnancy; highest in 3rd trimester
  - ~ 3 - 5 fold ↑ rates than non-pregnant during season

- Risk ↑ further if co-morbidities
  - ~ 2 - 5 fold ↑ rates than healthy pregnant and ~ 3 - 8 fold ↑ rates than non-pregnant with co-morbidities

- Prior pandemics (USA)
  - 1918: 27 to 45% mortality; 52% pregnancy loss
  - 1957: up to 1/2 of deaths in women of reproductive years

- Pandemic (H1N1) 2009 (USA)
  - Among 20 pregnant women, 3 hospitalizations and 1 death
  - Reports of spontaneous abortion, premature labor

**Disease outcome: summary**

- Most persons do fine with no treatment as such.
- A small percentage of persons will get sick (some are very sick).
- Pregnancy is a risk factor (other risk factors may be emerging).
- At this point, no very reliable clinical or diagnostic tools to distinguish those who will do well from those who won't.
- Do NOT wait for diagnostic testing, or test results, before starting oseltamivir.

---

**International Health Regulations Coordination**
33

Introducción

La artesanía y la cultura material local como generadora de carga visual para la caracterización de los espacios públicos y turísticos

33

Introducción

The Rapidly Changing Situation of Pandemic (H1N1) 2009 – Today and Tomorrow
EMERGENCE AND OVERALL EPIDEMIOLOGY

DISEASE OUTCOME

THE VULNERABILITY OF AFRICA

VACCINE DEVELOPMENT

INTERNATIONAL HEALTH REGULATIONS AND TRAVEL

UNCERTAIN FUTURE

Tile and Tourism under Pandemic Conditions

International Health Regulations Coordination

World Health Organization

Mapping of all potential influenza A(H1N1) 2009 Vaccine Manufacturers
Pandemic vaccine baseline capacity was estimated at 94.5M doses per week

**Estimated H1N1 Vaccine Capacity**

- At 1:1 yields, most dose-sparing formulation, full capacity

<table>
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<tr>
<td>Annual</td>
<td>4,918 M</td>
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**Assumptions / Methodology**

- Survey sent to 36 potential influenza vaccine manufacturers
  - 100% response rate
  - All 21 current influenza vaccine producers responded
  - 28 manufacturers that intend to produce pandemic vaccines
  - Includes LAIV and one recombinant vaccine capacity

- Survey assumes
  - 1:1 H1N1 to seasonal yields
  - Most dose sparing formulation for each manufacturer
  - Use of full production capacity

---

*Capacity may become available by November in the best case, but may not materialize before April 2010*

**Surplus H1N1 Capacity Available from High-Income Country Facilities**

- Assuming 1:1 yields and no 2010-11 seasonal production

<table>
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<th>Total Doses Produced</th>
<th>Surplus Doses to July 2010</th>
<th>Date Contracts Met</th>
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**Source:** WHO survey

1 Assumes all facilities switch to H1N1 production at the end of July (however, in reality, some facilities are converting earlier)
A lower yielding vaccine would considerably push back the timelines

Surplus H1N1 Capacity Available from High-Income Country Facilities
Assuming 1.2 yields and no 2010 seasonal production

<table>
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</table>

Source: WHO survey
1 Assumes all facilities switch to H1N1 production at end of July (however, in reality, some facilities are converting earlier)

WHO-SAGE recommendations on pandemic (H1N1) 2009 vaccines - 7th July 09

- Health-care workers as a first priority to protect the essential health infrastructure
- SAGE suggested the following groups for consideration (countries need to determine their order of priority based on country-specific conditions):
  - Pregnant women
  - Above 6 months with one of several chronic medical conditions
  - Healthy young adults of 15 to 49 years of age
  - Healthy children;
  - Healthy adults of 50 to 64 years of age and
  - Healthy adults of 65 years or above.
- Post-marketing surveillance of the highest possible quality
- Promoting production and use of vaccines formulated with oil-in-water adjuvant and live attenuated influenza vaccines.
The International Health regulations

Art.2 Purpose

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
Travel and WHO recommendations

7 May 2009 (originally posted on 1 May 2009)

Is it safe to travel?
Yes. WHO is not recommending travel restrictions related to the outbreak of the influenza A(H1N1) virus.

Today, global travel is commonplace and large numbers of people move around the world for business and leisure. Limiting travel and imposing travel restrictions would have very little effect on stopping the virus from spreading, but would be highly disruptive to the global community.

Influenza A(H1N1) has already been confirmed in many parts of the world. The global response now focuses on minimizing the impact of the virus through the rapid identification of cases, and providing patients with appropriate medical care, rather than on stopping its spread internationally.

...

The International Health regulations

Art. 43 Additional health measures

3 A State Party implementing health measures ... which significantly interfere with international traffic shall provide to WHO the relevant public health rationale and scientific information for it. WHO shall share this information with other States Parties ... For the purpose of this Article, significant interference generally means refusal of entry or departure of international travellers, baggage, cargo, containers, conveyances, goods, and the like, or their delay, for more than 24 hours.
Trade and travel measures related to influenza A(H1N1)
06 May 2009, WHO ISE/IHR

Public Health Measures - DAILY TREND: 15 more countries
• There are now a total of 140 countries implementing public health measures which include:
  ✓ Screening travellers from affected regions for flu-like symptoms
  ✓ Scanning travellers with thermal scanners
  ✓ Cancellation of vacation tours to Mexico
  ✓ Travel advisories
  ✓ Distributing health information pamphlets to the public
  ✓ Establishing a toll free number for the public to call and obtain information about the outbreak
  ✓ Banning imports of pig and pork products
  ✓ Confirming antiviral stockpiles for possible use during the human swine influenza outbreak
  ✓ Suspending Visa entry for Mexican nationals
  ✓ Strict precautions at border checkpoints
  ✓ Putting medical doctors on flights

Travel Advisory - DAILY TREND: 14 more countries
• A total of 50 countries have now issued travel advisories.

Trip Cancellations - DAILY TREND: no changes
• A total of 16 airlines and 4 cruise lines have cancelled all trips to Mexico.
  • In England, Thomas Cook has cancelled its services to Cancun.
  • The Argentina Government has suspended, until 03 May 2009, all flights coming from Mexico
  • The Cuba Government has suspended all flights to Mexico.
  • The Ecuador Government has suspended all flights to and from Mexico.

WHO request for confirmation of additional measures and provision of public health rationale: 7 COUNTRIES
• Argentina
• Colombia
• Cuba
• Ecuador
• Peru
• Portugal
• Singapore

Public health rationale received
• China
3 Strengthen public health security in travel and transport

The risk of international spread of disease is minimized through effective permanent public health measures and response capacity at designated airports, ports and ground crossings in all countries.

❖ At all times
  • Access to medical service
  • Transport of ill travellers
  • Inspection of conveyances
    (e.g. Ship Sanitation Control Certificate)
  • Control of vectors / reservoirs

❖ For responding to events
  • Emergency contingency plan
  • Arrangement for isolation (human, animal)
  • Space for interview / quarantine
  • Apply specific control measures

Annex 1B

See guidelines on WHO Web site.
Some specific for H1N1

International Health Regulations Coordination

World Health Organization

Risk assessment: Mapping destinations of flights

International Passenger Departures from Mexico
March 1st to April 30th 2008

The BIO-DIASPORA Project St.
MICHAEL'S HOSPITAL,
UNIVERSITY OF TORONTO
www.biodiaspora.com

N Engl J Med 361 (2) 212-4 (July 9, 2009)
Risk assessment: Analysing minimum flight connections

**Ontario**

Global inbound connectivity in 20...

Network distance from Ontario, Canada to all other cities in the world with international airports

Minimum flight connections required to enter Ontario

0 1 2 ≥ 3

Data Source: Official Airline Guide (OAG), 2008

---

Risk assessment: Seasonal patterns of travel

**International Passenger Arrivals & Departures**

Historic Trends Among Canadian Cities

Monthly passenger arrivals & departures in millions

Historic trends in traffic among six major cities in Canada. Impact of 9-11-01 and SARS most visible in Toronto and Vancouver.
- **EMERGENCE AND OVERALL EPIDEMIOLOGY**

- **DISEASE OUTCOME**

- **THE VULNERABILITY OF AFRICA**

- **VACCINE DEVELOPMENT**

- **INTERNATIONAL HEALTH REGULATIONS AND TRAVEL**

- **UNCERTAIN FUTURE**

---

**Influenza season in the northern hemisphere**
- Relative proportion of pandemic strain?
- Speed of transmission?
- Similar to Southern hemisphere?

**Vaccine access**
- Production capacity? Vaccine yield? Adjuvant? Seasonal vaccine?
- First come first served? Equity?

**Virus changes**
- Reassortment with other influenza viruses? Severity?

**National pandemic preparedness plans**
- Status in resource-poor countries? Africa?

**Public perception**
- People's behaviour? Impact of travel?
Thank you
The Employment Perspective

Mr. Donato Kiniger-Passigli
Senior Specialist, Strategic Partnerships and Crisis Response Coordination, ILO

UNWTO Workshop on Travel and Tourism under Pandemic Conditions
Madrid, 26 August 2009

Business continuity in the face of the pandemic
The employment perspective

Donato Kiniger-Passigli
Coordinator of the ILO Task Force on Influenza and Pandemic Preparedness
Senior Specialist – Strategic Partnerships and Crisis Response Coordination

ILO/CRISIS Geneva

Effects of pandemic on business

Influenza Pandemic

- Involuntary absenteeism
- Decreased / Interrupted Supply and Demand
- Compulsory closures

Breakdown of Services
Economic and Social Disruption

Although we do not know how severe the pandemic might be, and the overall impact on economy and society...
...we can plan now to protect our business, employees, and public.

Effects of pandemic on business

Influenza A(H1N1) outbreak (April 2009)

- In the early days of the outbreak:
  sharp fall in travel and tourism stocks vs. rise in pharmaceutical stocks.

- Rush to stockpile essential goods, consequent inflation, followed by deflation.

- Based on reasonable assumptions, the current pandemic would:
  sicken 30% of the world’s population;
  result in involuntary absenteeism rates in excess of 40%;
  have an economic-financial impact on the World GDP of USD 2.5 trillions.

Effects of pandemic on business

some examples

SARS outbreak in East Asia (2003)

- Economic losses were estimated at 2.6% of GDP in Hong Kong.
- The travel and tourism sector was hit particularly hard.

Avian Flu (H5N1) outbreaks (since 2003)

- Poultry producers suffered billions of dollars of losses.
- Many small-holder poultry producers did not have the means to apply early detection, prevention and protection/biosecurity measures.
The ILO promoting influenza prevention and preparedness

The workplace is a major entry point for pandemic prevention and preparedness.

Since 2006, three consecutive ILO projects have been developed in South East Asia to:

- promote preventive practices to limit the spread of the disease in the workplace;
- encourage business preparedness for a possible pandemic.

Prevention and protection measures in the workplace

- better work conditions
- safer working environment
- improved productivity
- domino effect - benefits for the surrounding communities

ILO workshops and trainings on influenza prevention and pandemic preparedness

- to provide guidance and counseling at the workplace
- targeted farmers, SME managers and workers, workers’ and employers’ representatives, government officials
- based on ILO training manuals

Achievements to date:

- collective good practices were promoted and behavioural change was induced;
- awareness on safety and health standards was raised;
- advocacy programmes were conducted at enterprise level;
- interministerial cooperation was facilitated;
- social dialogue and union associations were promoted;
- advocacy programmes were conducted at enterprise level.
The ILO promoting influenza prevention and preparedness

H1N1 pandemic
• need for clear, consistent messages to avoid scaremongering
• ILO global communication campaign to raise awareness at the workplace

- Business Continuity Planning as a means to prepare for and respond to pandemics

The travel and tourism sector

The travel and tourism economy creates more than 230 million jobs.
80%-90% of all enterprises in the sector are SMEs, and employ about half of the labour force.

Tourism is a major job generator, especially for youth and women

there is potential for addressing employment and development challenges through ILO’s Decent Work agenda.

In 2007 an agreement on cooperation was signed between the ILO and the UNWTO to strengthen the respective capacities and activities.

(I) Effects of pandemic on employment in the travel and tourism sector

Disruption of security/safety

Direct effect on demand

Impact on employment in tourism and related industries

Possibility of significant job losses in the sector means Job creation and poverty alleviation at risk

(II) Effects of a pandemic on employment in the travel and tourism sector

Between 80% and 90% of SMEs in the sector

Labour intensive

High rates of youth employment

High rates of women employment

Specific working conditions intrinsically linked to this sector

Impact on communities

Often no established policy to protect employees in times of pandemic

High involuntary absenteeism rate could paralyze work

Higher risk of contracting Influenza A (H1N1)

Special family responsibilities

Close contact with people facilitates disease transmission

Changes in consumption patterns
Measures for pandemic prevention and preparedness

Employers and managers play a key role in the response to an influenza pandemic. Union associations should be invited to contribute to the solution.

Many practical actions can be taken to

1. Protect workers:
   - General precautions → follow common hygiene rules
   - Social Distancing Precaution → reduce or eliminate unnecessary close contact
   - Personal Protective Equipment → use appropriate PPE

2. Ensure continuity of operations:
   - Risk analysis
   - Risk reduction
   - Response actions
   - Communication
   Business continuity planning

Workplace exposure to influenza pandemic

Workplace with high potential for exposure to known or suspected sources of pandemic virus:
- Healthcare facilities
- Laboratory facilities

Workplace with high frequency contact with general population:
- High population density work environment
- Travel and tourism

Workplace with minimal occupational contact with general public and other co-workers:
- Office
Business Continuity Planning

A seven step process to prepare for the pandemic:

Step 1: KNOW YOUR BUSINESS PRIORITIES

Step 2: ANALYZE THE RISKS OF A PANDEMIC

Step 3: REDUCE THE IMPACT OF THE RISKS

Step 4: IDENTIFY RESPONSE ACTIONS

Step 5: DESIGN AND IMPLEMENT YOUR BUSINESS CONTINUITY PLAN

Step 6: COMMUNICATE YOUR PLAN

Step 7: TEST YOUR PLAN

The model guides SMEs on the path towards business preparedness and helps building resilience to the threats posed by a pandemic.

Identification of essential operations and critical resources

Identification of specific risks and reduction of their possible impact

Planning and policy-making

Communication

Higher preparedness = Higher capability to respond = Higher ability to recover
Pandemic preparedness in the travel and tourism sector

Early action from tourism authorities is essential to reduce effects on employment.

In consultation with the social partners, the following measures could be considered:

- Preparedness campaigns and behavioural change;
- Physical protection of employees and public from the risk of infection;
- Economic protection for all workers in case of involuntary absenteeism;
- Preparedness guidelines for SME employers and managers.

Employers are required to ensure the protection of employees from risks to their health in the workplace (ILO Convention No.155)

Amendments to national regulations might be necessary to respond to the specific issues posed by the disease.

Possible measures to be implemented by the Ministry of Labour:

- Labour and welfare protection
- Employment services
- Vocational training
Pandemic preparedness in the travel and tourism sector

Types of suggested interventions:

- Launch of education campaigns, revision of labour and social security laws and frameworks;
- Design of labour policies at national, regional and workplace level;
- Use of the workplace as a platform for reaching larger parts of the population in education and prevention programmes.

Social dialogue is essential for the successful implementation of policies and programmes.

To continue business during a pandemic ...

- **Prepare the workplace**
  
  *Promote prevention and preparedness measures and apply them*
  
  *Share the lessons learned with your business partners*

- **Develop a Business Continuity Plan**
  
  *Involve employees, union representatives and other stakeholders in the process*
  
  *Communicate the plan*
Business Continuity Planning

Back-up critical information and provide off-site storage.

Organize cross-skilling and cross-training for key employees.

If you cannot develop a flexible approach to your business, you might consider scaling down operations / closing / supporting other companies for a period of time.

Business Continuity Planning

Ensure all communication about pandemic preparedness is appropriate for your employees/clients/stakeholders so they can understand the arrangements.

Communicate with a single voice through your Communication Company Team.

...you could contact a bus company, or establish a car pool system, to ensure your personnel travel safely.
Preliminary Conclusions

- Avoid panic
- Plan ahead to protect businesses and workers (adhering to ILO conventions)
- Make use of our guidance for business continuity
- Organize simulation / training events and dedicated awareness workshop
- Inform the public with timely advice and consistent messages

For more information, please contact:
ILO Task Force on Influenza and Pandemic Preparedness
ILO/CRISIS, Geneva
www.ilo.org/influenza
Economic Impact Scenarios of the Pandemic (H1N1) 2009

Ms. Nancy Cockerell
Policy Advisor, WTTC

Economic Impact on Travel & Tourism of the H1N1 Influenza Pandemic: Scenario Analysis

25 August 2009

WTTC/Oxford Economics
Economic Impact Research

The swine flu epidemic so far

Swine flu epidemic so far

Reported cases ('000s)

200
180
160
140
120
100
80
60
40
20
0

Reported deaths

2500
2000
1500
1000
500
0

Cases LHS
Deaths RHS

Source: WHO updates, last data from FT 17 Aug
How could a Swine Flu Pandemic affect Travel & Tourism?

- The experience of SARS in 2003, followed by the Asia-wide avian flu outbreak, reminded the world of the active threat of serious global pandemics. This threat has again come to the fore following the global outbreak of swine flu which originated in Mexico in April.

- Apart from the potential for bio-terrorism, the main route by which many believe a serious pandemic could arise today is through the appearance of a new and virulent strain of flu.

- WTTC/Oxford Economics have undertaken scenario analysis to assess the impact of a contagious disease outbreak. Our latest results:
  - assume infection and death rates of 30% and 0.4% respectively
  - calibrate the likely drops in discretionary consumption and international travel using the experience of Asia’s SARS outbreak in 2003

Scenario I: a SARS-type case

- As happened in the case of SARS, this scenario assumes the eruption flares up in one of the world’s major trade and travel hubs

- However, the geographic impact of the epidemic is limited, affecting only neighbouring countries during a few months – though it has wider repercussions in terms of travellers’ sentiment

- A swift response of the public health authorities brings the outbreak under control. There are some losses in services exports, largely reflecting disruptions in travel and tourism activity as a result of the scare rather than actual loss of life
Different transmission channels:
via discretionary spending

- During the SARS outbreak, private consumption fell sharply in the region as consumers cut back on non-essential spending in order to avoid infection.
- Discretionary spending other than that which is already included in the Travel & Tourism effects (e.g. on clothing, consumer durables, etc) accounts for about a third of consumption.
- Our latest results assume a 30% cut in discretionary spending over a 6-month pandemic which corresponds to a 10% cut in consumption.
- This is larger than during the SARS outbreak given the higher infection rates currently being experienced.
**Other transmission channels: via labour supply**

- Death and illness dampen labour supply.
- The assumed mortality rate implies a 0.4% permanent shock to labour supply.
- If the ill stay at home for two weeks, the 30% infection rate corresponds to a 2.1% one-off shock to labour supply in the six month period of the pandemic.
- Although significant, this supply-side impact is likely to be relatively small compared to the demand-side shocks from lower travel and other discretionary spending.

**Transmission of pandemic shock via Travel & Tourism varies by region**

<table>
<thead>
<tr>
<th>Region</th>
<th>GDP T&amp;T economy as % total</th>
<th>GDP T&amp;T industry direct as % total</th>
<th>Visitor Export as % total</th>
<th>T&amp;T Personal Consumption as % private-expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribbean</td>
<td>15.4</td>
<td>4.7</td>
<td>16.4</td>
<td>5.1</td>
</tr>
<tr>
<td>Europe</td>
<td>9.7</td>
<td>3.3</td>
<td>6.1</td>
<td>9.6</td>
</tr>
<tr>
<td>North America</td>
<td>9.9</td>
<td>3.6</td>
<td>7.2</td>
<td>8.6</td>
</tr>
<tr>
<td>Asia/Oceania</td>
<td>9.5</td>
<td>3.1</td>
<td>4.5</td>
<td>8.8</td>
</tr>
<tr>
<td>Africa</td>
<td>6.1</td>
<td>3.3</td>
<td>7.7</td>
<td>5.1</td>
</tr>
<tr>
<td>Middle East</td>
<td>10.7</td>
<td>2.7</td>
<td>5.3</td>
<td>10.0</td>
</tr>
<tr>
<td>Latin America</td>
<td>6.8</td>
<td>2.4</td>
<td>4.7</td>
<td>5.5</td>
</tr>
<tr>
<td>World</td>
<td>9.8</td>
<td>3.3</td>
<td>5.8</td>
<td>8.9</td>
</tr>
</tbody>
</table>

*See annex for glossary of terms*

*Source: WTTC/Oxford Economics*
Globally, visitor exports would plummet 60% points vs. base forecast (or US$620bn)

<table>
<thead>
<tr>
<th>Worldwide impact of a flu pandemic on the T&amp;T industry</th>
<th>relative to base</th>
</tr>
</thead>
<tbody>
<tr>
<td>year of impact of pandemic</td>
<td>growth difference</td>
</tr>
<tr>
<td>Visitor Exports</td>
<td>-59.7</td>
</tr>
<tr>
<td>GDP T&amp;T industry (direct)</td>
<td>-53.1</td>
</tr>
<tr>
<td>GDP T&amp;T economy</td>
<td>-38.8</td>
</tr>
</tbody>
</table>

Source: WTTC/Oxford Economics

The epidemic also hits domestic tourism, causing losses to the industry beyond the fall in foreign visitors.

Scenario results: Impact on Travel & Tourism sector

Global T&T Economy GDP: Impact of flu pandemic

US$ trillions

Source: WTTC/Oxford Economics
Implications of a Swine Flu Pandemic for the Tourism Industry

- A global swine flu pandemic could disrupt the Travel & Tourism industry severely for a period of at least 6 months or so around the turn of the year. It could cause direct GDP losses to T&T providers of about US$1,073bn and a higher US$2,190bn to the global tourism economy (including the supply-chain and investment impacts).

- This compares to a much lesser impact of a SARS-type crisis over the same period: a global value added loss of about US$15.1bn directly to the industry providers and US$25.2bn to the wider tourism economy.

Impact on all sectors cuts world GDP by about US$2.2trn in the six-month pandemic or 3½% of 2009 GDP

Cumulated GDP loss
% of baseline 2009 GDP

<table>
<thead>
<tr>
<th>2009Q4</th>
<th>2010Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>-1.0%</td>
<td>-1.0%</td>
</tr>
<tr>
<td>-2.0%</td>
<td>-2.0%</td>
</tr>
<tr>
<td>-3.0%</td>
<td>-3.0%</td>
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<tr>
<td>-4.0%</td>
<td>-4.0%</td>
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<tr>
<td>-5.0%</td>
<td>-5.0%</td>
</tr>
<tr>
<td>-6.0%</td>
<td>-6.0%</td>
</tr>
</tbody>
</table>

Source: Oxford Economics
Risk remains significant that pandemic hits economy at vulnerable time – and so tips the world into deflation

**World GDP growth**

<table>
<thead>
<tr>
<th>% year</th>
<th>2009Q1</th>
<th>2010Q1</th>
<th>2011Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario 1: return to normal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario 2: deflation</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Oxford Economics

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**Annex: Key concepts of WTTC/Oxford Economics Tourism Satellite Accounting**

- **T&T Economy GDP**: the broadest measure of the economic contribution of the Travel & Tourism industry. It records the activity of traditional T&T providers (e.g., lodging, transportation etc.), plus tourism-related investment, public spending, and exports of goods (including both direct effects and the indirect effects via the supply chain of T&T spending)

- **T&T Direct Industry GDP**: a narrower concept that measures the value added of the traditional Travel & Tourism industries, excluding any indirect effects generated throughout the supply chain and tourism-related investment, public spending, and exports of goods

- **T&T Personal Consumption**: includes residents' travel and tourism spending both at home (domestic) and abroad (outbound)

- **Visitor exports**: refers to inbound tourism spending (i.e., spending by international visitors on goods and services)
Communication Challenges: How to Keep the Balance Between Warning and Assuring Messages?

Dr. Gaya Gamhewage
Team Leader, Corporate Communications, WHO

Communicating Risk: Balancing Act

Dr Gaya Gamhewage
Department of Communications/ Director General's Office
WHO

Evolution of Health Risk Communication

Stage 1: Ignore the public
Stage 2: Explain risk information better
Stage 3: Dialogue with the community
Stage 4: Include the public as a cooperating partner

Covello & Sandman, 2001
Definition of Risk

Risk is the probability that damage will occur as a result of exposure to a hazard.

Fundamental dilemma of health risk communication:

The risks that kill people and the risks that alarm people are completely different!

For purposes of risk communication...

Risk = Hazard + Outrage (values)
We don't understand risk the same way

- **Experts:** Risk is higher when hazard is big
- **Public:** Risk is higher when outrage is big
- **People** decide how risky something is based on their levels of outrage or fear
- The **media** does not produce outrage; the media harvests outrage
- In the middle of a **crises**, the **media** takes dictation from experts

Outrage ➔ Hazard perception

---

Risk is less acceptable to people if:

- Imposed involuntarily
- Manufactured or man-made
- Unfamiliar
- Dreadful or disastrous (even the probability is small)
- Unfair or targets a particular group
- Dangerous to children or future generations
- Poorly understood
- Could not be reversed
- Cannot be seen, smelt or sensed
- Imposed by a disliked individual or organization
- Does not respond to public concern
Perception is reality

Risk Communication building blocks:

- Technical information
- Values
- Trust
- Credibility
- Expression of caring

Trust in individuals and organizations is by far the greatest factor in communicating risk.
Risk Communication Strategies

- Precaution Advocacy
- Outrage Management
- Crises Communication
- Health Education and Stakeholder relations
Travel and Tourism under Pandemic Conditions

Outrage & Fear

- Outrage them to your levels of concern so that they take action
- Arouse emotions
- Required to prevent secondary crisis

WATCH OUT!

Hazard

Precaution Advocacy

Outrage & Fear

- Outrage management

- Listen, acknowledge truth
- Give facts about why there is no danger

"CALM DOWN.....respectfully"

Hazard

Risk Communication

World Health Organization
Communication Challenges: How to Keep the Balance Between Warning and Assuring Messages?

Outrage & Fear

- Explain what is happening
- Deal with emotions

WE ARE ALL IN THIS TOGETHER

Hazard

Crises Communication

Outrage & Fear

- Communications surveillance
- Identify and address outrage early on

Health Education; Stakeholder relations

Hazard
WHO Guidelines for OUTBREAK COMMUNICATIONS

- Trust
- Announcing early
- Transparency
- Listening (Communications Surveillance)
- Planning

Components of Trust

Trust is the public perception of your:

- Motives: Are responders acting primarily to protect my health and the health of my family?
- Honesty: Are the responders holding back or downplaying information?
- Competence: Are the responders capable of controlling the situation?
For each stakeholder, consider the following:

- **Technical information**: why, what, how, language?

- **Values**: what values do they have that effect their perception?

- **Trust**: How much trust in the message, messenger?

- **Credibility**: are the message and messenger credible?

- **Expression of caring**: have you left this out? Words, gestures, setting?
Risk = Hazard + Outrage
(values)

25 Crisis Communication Tips
Set 1: How bad is it?  
How sure are you?

- Don’t over-reassure
- Put reassuring information in subordinate clauses
- Err on the alarming side
- Acknowledge uncertainty
- Share dilemmas
- Acknowledge opinion diversity
- Be willing to speculate

Communication Challenges: How to Keep the Balance Between Warning and Assuring Messages?
### Set 2: Coping with the emotional side of the crisis

8. Don’t over-diagnose or over-plan for panic  
9. Don’t aim for zero fear  
10. Don’t forget emotions other than fear  
11. Don’t ridicule the public’s emotions  
12. Legitimize people’s fears  
13. Tolerate early over-reactions  
14. Establish your own humanity
### Set 3: Involving the public

15. Tell people what to expect  
16. Offer people things to do  
17. Let people choose their own actions  
18. Ask more of people
Set 4: Misimpressions and half-truths

19. Acknowledge errors, deficiencies, misbehaviours
20. Apologize for errors, etc
21. Be explicit about anchoring frames
22. Be explicit about changes in official opinion, prediction and policy
23. Don’t lie, or tell half-truths
24. Aim for total candor and transparency
25. Be careful with risk comparisons
Emergency management: preparation, imagination and courage

- Prepare people
- Prepare plans
- Prepare structures and processes
- Prepare lines of communication and command
- Prepare resources
- Prepare to be flexible and deal with the evolving situation

What lessons are useful as we go forward?

- Trust is everything and transparency is a way of achieving this
- Context shapes the message and political and public reaction
- Coordinated, centrally commanded communications essential
- Communications operations and structure must be put in place
- Information will be leaked
- Difficult to sustain motivation and resources
- Be imaginative, be courageous, be flexible and be fast
- Learn to listen, listen to learn
Introducción
La artesanía y la cultura material local como generadora de carga visual para la caracterización de los espacios públicos y turísticos

Communication Challenges: How to Keep the Balance Between Warning and Assuring Messages?
Conference Programme

26 August 2009

08:30 – 09:00  Registration of participants
09:00 – 09:20  Opening
   Dr. Taleb Rifai, UNWTO Secretary-General a.i.
   Dr. David Nabarro, UN System Influenza Coordinator via video address
09:20 – 10:30  The Framework
   The Rapidly Changing Situation of Pandemic (H1N1) 2009 – Today and Tomorrow
   Dr. Guénaël Rodier, Director, International Health Regulations, WHO
   Travel and Tourism in Perspective
   Prof. Geoffrey Lipman, Assistant Secretary-General, UNWTO
   Framework and Goals of the Exercise
   Dr. Dirk Glaesser, Chief, Risk and Crisis Management, UNWTO
10:30 – 10:45  Coffee break
10:45 – 12:00  Roundtables on experiences and lessons learned from the first wave:
   Country Experiences: How was Travel and Tourism Affected, Addressed and Dealt with?
   Sector Experience: What are the Experiences from Transportation, Accommodation, Recreation and Entertainment, Tour Operators and Travel Agents, Travel Services?
12:00 – 13:00  Conclusions of the roundtables: Reports and debate
13:00 – 14:30  Business lunch
14:30 – 15:30  Presentations on key challenges for the travel and tourism sector in the months to come
   The Employment Perspective
   Mr. Donato Kiniger-Passigli, Senior Specialist, Strategic Partnerships and Crisis Response Coordination, ILO
   Economic Impact Scenarios of the Pandemic (H1N1) 2009
   Ms. Nancy Cockerell, Policy Advisor, WTTC
   Communication Challenges: How to Keep the Balance Between Warning and Assuring Messages?
   Dr. Gaya Gamhewage, Team Leader, Corporate Communications, WHO
15:30 – 15:45  Coffee break
15:45 – 16:45  Discussion
16:45 – 17:00  Closing remarks

20:00  Departure of the bus for technical visit of S!lk & Soya

Restaurant services under pandemic circumstances, a systematic approach
(Place: Av. de la Ermita esquina Av. Olímpica – Alcobendas, Madrid)
Followed by dinner

23:00  Return of the bus to UNWTO headquarters

27 August 2009

09:00 – 10:30  Roundtables on key challenges for the travel and tourism sector in the months to come
Travel Behaviour Patterns
Political and Ethical Dimension
Operational Challenges and Business Continuity

10:30 – 10:45  Coffee break
10:45 – 12:00  Conclusions of the roundtables: Reports and debate
12:00 – 13:30  Business lunch
13:30 – 14:45  Roundtables on strategies and actions to help limit the impact on the travel and tourism sector and travellers
A public sector perspective
A private sector perspective

14:45 – 15:00  Coffee break
15:00 – 16:00  Conclusions of the roundtables: Presentation and debate
16:00 – 16:30  Conclusions and next steps
16:00 – 16:15  Summary of the review and preparation exercise and next steps

Dr. Dirk Glaesser, Chief, Risk and Crisis Management, UNWTO

16:15 – 16:30  Closing

Prof. Geoffrey Lipman, Assistant Secretary-General, UNWTO

28 August 2009

10:00 – 11:00  Media Breakfast
List of Participants

Albania
Mr. Enton DIAMANTI
Head of Tourism Standard Department
Ministry of Tourism, Culture, Youth and Sports

Andorra
Ms. Jesús RAMÍREZ
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<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Position/Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>Ms. Andrea ASSMANN</td>
<td>Third Secretary, Embassy of Germany in Spain</td>
</tr>
<tr>
<td>Greece</td>
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<td>Administrator, Hellenic Civil Aviation Authority</td>
</tr>
<tr>
<td>Ireland</td>
<td>Ms. Joanne MURPHY</td>
<td>Marketing Executive, Tourism Ireland</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>H.E. Mr. Temirkhan DOSMUKHAMBETOV</td>
<td>Minister of Tourism and Sports, Ministry of Tourism and Sports</td>
</tr>
<tr>
<td>Malta</td>
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<td>Deputy Permanent Representative of Malta to UNWTO, Parliamentary Secretariat for Tourism</td>
</tr>
<tr>
<td></td>
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</tr>
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</tr>
<tr>
<td>Netherlands</td>
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</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>Poland</td>
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</tr>
<tr>
<td>Portugal</td>
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</tr>
<tr>
<td>Romania</td>
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<td>Director, Romanian National Tourism Office in Spain</td>
</tr>
<tr>
<td>Sao Tome and Principe</td>
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</tr>
<tr>
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</tr>
</tbody>
</table>
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eXCellenium

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Dr. Monica LI

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Ms. Hannah WIRTZ
Annex 1 –
Background Information and Key Terms

Influenza

- Influenza viruses are grouped into three types, designated A, B, and C.
- Of greatest concern are the influenza A viruses. They have characteristics that make influenza A one of the most worrisome of all the well established infectious diseases. These viruses mutate much more rapidly than type B viruses, and this gives them great flexibility. In addition to humans, they infect pigs, horses, sea mammals, and birds.
- As a result of their unique features, influenza A viruses regularly cause seasonal epidemics in humans that take a heavy toll in morbidity and excess mortality, especially when pneumonia is a complication. At recurring yet unpredictable intervals, influenza A viruses cause pandemics.
- Scientists describe these viruses as sloppy, capricious, and promiscuous. Their labile and unpredictable nature is notorious. As they lack a proof-reading mechanism, the small errors that occur when the virus copies itself are left undetected and uncorrected. As a result, influenza A viruses undergo constant stepwise changes in their genetic make-up. This strategy, known as antigenic drift, works well as a short-term survival tactic for the virus: the speed with which slight variations develop keeps populations susceptible to infection.
- Influenza viruses circulate year-round in tropical and subtropical areas.
- Regular epidemics are rare but recurring events because flu viruses frequently make small changes in viral proteins (antigens) recognized by the human immune system. Consequently, a person’s immune-system response that combats influenza one year provides incomplete protection to next year. Occasionally, a human influenza virus appears that contains large antigenic changes.
- Worldwide pandemic containment or mitigation usually consist of three main factors: vaccination, travel restrictions, therapeutic and prophylactic use of AV drugs.
- Additional strategies consider non-pharmaceutical interventions, such as quarantine, early isolation of infectious individuals, school and workplace closures.

(Sources: WHO, PLoS Medicine)

Key terms

<table>
<thead>
<tr>
<th>Avian (or bird) Flu AI</th>
<th>Caused by influenza viruses that occur naturally among wild birds. Low pathogenic AI is common in birds and causes few problems. H5N1 is highly pathogenic, deadly to domestic fowl and can be transmitted from birds to humans, with no human immunity and no vaccine available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic tourism</td>
<td>Residents of the given country travelling only within this country.</td>
</tr>
</tbody>
</table>

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(Sources: WHO, PLoS Medicine)
<table>
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<tr>
<th><strong>Epidemic</strong></th>
<th>An epidemic is the occurrence in a community or a region of cases of an illness, specific health-related behaviour or other health-related events clearly in excess of normal expectancy.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inbound tourism</strong></td>
<td>Non-residents travelling in the given country.</td>
</tr>
<tr>
<td><strong>Incidence rate</strong></td>
<td>The probability of developing a particular disease during a given period of time; the numerator is the number of new cases during the specified time period and the denominator is the population at risk during the period.</td>
</tr>
<tr>
<td><strong>Infection rate</strong></td>
<td>Percentage of the population from which a specific infectious pathogen is isolated.</td>
</tr>
<tr>
<td><strong>Morbidity rate</strong></td>
<td>The number of cases of a given disease occurring in a specified period per unit of population. An inexact term that can mean either the incidence rate or the prevalence rate.</td>
</tr>
<tr>
<td><strong>Mortality rate / case fatality rate</strong></td>
<td>Is the ratio of the number of deaths from a given disease to the total number of cases of that disease.</td>
</tr>
<tr>
<td><strong>Outbound tourism</strong></td>
<td>Residents travelling in another country.</td>
</tr>
<tr>
<td><strong>Pandemic</strong></td>
<td>A pandemic is an epidemic occurring worldwide or over a wide area crossing international boundaries, and affecting a large number of people. The WHO global influenza preparedness plan includes six phases in a pandemic scale, divided into three periods: the interpandemic period, the pandemic alert period, and the pandemic period. (These phases are defined in order to propose a framework for pandemic preparedness planning activities; the proposed phases may not all be detectable in sequence).</td>
</tr>
<tr>
<td><strong>Pandemic influenza</strong></td>
<td>At unpredictable intervals, due to the segmented nature of the influenza virus genome, circulating human influenza virus A strains also can acquire new genes from an avian or other animal influenza virus. If the reassortant virus can efficiently spread into the human population, a worldwide pandemic can occur, as was the case in 1918, 1957 and 1968.</td>
</tr>
<tr>
<td><strong>Prevalence rate</strong></td>
<td>The number of people in a population who have a disease at a given time; the numerator is the number of existing cases of disease at a specified time and the denominator is the total population.</td>
</tr>
<tr>
<td><strong>Quarantine</strong></td>
<td>The restriction of the movement of healthy persons who have been exposed to a suspected or confirmed case of infection with a highly communicable disease during the likely infectious period.</td>
</tr>
<tr>
<td><strong>Resident</strong></td>
<td>A resident has lived for most of the past year in that country or he has lived in that country for a shorter period and intends to return within 12 months to live in that country.</td>
</tr>
<tr>
<td><strong>Seasonal flu</strong></td>
<td>A respiratory illness that can be transmitted person to person; most people have some immunity, and a vaccine is available.</td>
</tr>
<tr>
<td><strong>Secondary attack rate</strong></td>
<td>Reflects the risk of someone being infected with a disease by an ill close contact (for example, a family member, classmate or coworker).</td>
</tr>
<tr>
<td><strong>Social-distancing measures</strong></td>
<td>A range of community-based measures to reduce contact between people (e.g. closing schools or prohibiting large gatherings). Community-based measures may also be complemented by adoption of individual behaviours to increase the distance between people in daily life at the worksite or in other locations.</td>
</tr>
<tr>
<td><strong>Tourist</strong></td>
<td>A visitor who stays at least one night in a collective or private accommodation in the country or place visited.</td>
</tr>
<tr>
<td><strong>Visitor</strong></td>
<td>Any person travelling to a place other than that of his/her usual environment for less than 12 months and whose main purpose of the trip is other than the exercise of an activity remunerated from within the place visited. The term visitor is further divided into the two categories “tourists (overnight visitors)” and “same-day visitors”.</td>
</tr>
</tbody>
</table>
Lessons from the three pandemics of the last century

1. Pandemics behave as unpredictably as the viruses that cause them. During the previous century, great variations were seen in mortality, severity of illness, and patterns of spread.

2. One consistent feature important for preparedness planning is the rapid surge in the number of cases and their exponential increase over a very brief time, often measured in weeks. The severity of illness caused by the virus, which cannot be known in advance, will influence the capacity of health services, including hospitals, to cope, but a sudden sharp increase in the need for medical care will always occur.

3. Apart from the inherent lethality of the virus, its capacity to cause severe disease in non-traditional age groups, namely young adults, is a major determinant of a pandemic’s overall impact. Milder pandemics are characterized by severe disease and excess deaths at the extremes of the lifespan (the very young and the elderly).

4. The epidemiological potential of a virus tends to unfold in waves. Age groups and geographical areas not affected initially are likely to prove vulnerable during the second wave. Subsequent waves have tended to be more severe, but for different reasons. In 1918, the virus mutated, within just a few months, into a far more virulent form. In 1957, schoolchildren were the primary vectors for spread into the general community during the first wave. The second wave reached the elderly, a group traditionally at risk of severe disease with fatal complications.

5. Virological surveillance, as conducted by the WHO laboratory network, has performed a vital function in rapidly confirming the onset of pandemics, alerting health services, isolating and characterizing the virus, and making it available to vaccine manufacturers.

6. Over the centuries, most pandemics have originated in parts of Asia where dense populations of humans live in close proximity to ducks and pigs. In this part of the world, surveillance for both animal influenza and clusters of unusual respiratory disease in humans performs an important early warning function.

7. Some public health interventions may have delayed the international spread of past pandemics, but could not stop them. Quarantine and travel restrictions have shown little effect. As spread within countries has been associated with close contact and crowding, the temporary banning of public gatherings and closure of schools are potentially effective measures. The speed with which pandemic influenza peaks and then disappears means that such measures would probably not need to be imposed for long.

8. Delaying spread is desirable, as it can flatten the epidemiological peak, thus distributing cases over a longer period of time. Having fewer people ill at a given time increases the likelihood that medical and other essential services can be maintained and improves capacity to cope with a sharp increase in demand for care.

9. The impact of vaccines on a pandemic, though potentially great, remains to be demonstrated. In 1957 and 1968, vaccine manufacturers responded rapidly, but limited production capacity resulted in the arrival of inadequate quantities too late to have an impact.

10. Countries with domestic manufacturing capacity will be the first to receive vaccines.
11. The tendency of pandemics to be most severe in later waves may extend the time before large supplies of vaccine are needed to prevent severe disease in high-risk populations. The interval between successive waves may, however, be as short as a month.

12. In the best-case scenario, a pandemic will cause excess mortality at the extremes of the lifespan and in persons with underlying chronic disease. As these risk groups are the same as during seasonal epidemics, countries with good programmes for yearly vaccination will have experience in the logistics of vaccine administration to at least some groups requiring priority protection during a pandemic. While such a strategy can reduce excess mortality, sudden and large increases in morbidity, and a correspondingly high demand for medical care, should nonetheless be anticipated.

(Source: WHO)
Pandemic influenza vaccine manufacturing process and timeline
Pandemic (H1N1/09) briefing note 7

It takes approximately five to six months (in a best case scenario) for the first supplies of approved vaccine to become available once a new strain of influenza virus with pandemic potential is identified and isolated.

Activities at WHO Collaborating Centers

1. Identification of a new virus: The first step towards the production of a pandemic vaccine starts when a Centre detects a novel influenza virus that differs significantly from circulating strains and reports this finding to WHO.

2. Preparation of the vaccine strain (called vaccine virus): The virus is mixed with a standard laboratory virus strain and the two are allowed to grow together forming a hybrid that is more suitable to grow in hens’ eggs (Vaccine virus is grown in eggs because the flu virus grows well in them, and eggs are readily available). This takes roughly three weeks.

3. Verification of the vaccine strain: To guarantee the safety and suitability of the hybrid virus, it undergoes a testing process that takes roughly another three weeks. It is then distributed to vaccine manufacturers.

4. Preparation of reagents to test the vaccine (with reference reagents): In parallel, WHO Collaborating Centres produce standardized substances (called reagents) that are given to all vaccine manufacturers to enable them to measure how much virus they are producing, and to ensure they are all packaging the correct dose of vaccine. This requires at least three months and often represents a bottleneck for manufacturers.

Activities at vaccine manufacturers

1. Optimization of virus growth conditions: The vaccine manufacturer takes the hybrid vaccine virus that it has received from the WHO laboratories, and tests different growth conditions in eggs to find the best conditions. This process requires roughly three weeks.

2. Vaccine bulk manufacture: For most influenza vaccine production, this is performed in nine to twelve-days old fertilized hen's eggs. The vaccine virus is injected into thousands of eggs, and the eggs are then incubated for two to three days during which time the virus multiplies. The egg white, which now contains many millions of vaccine viruses, is then harvested, and the virus is separated from the egg white. The partially pure virus is killed with chemicals. The outer proteins of the virus are then purified and the result is several hundred or thousand litres of purified virus protein that is referred to as antigen, the active ingredient in the vaccine. Producing each batch, or lot, of antigen takes approximately two weeks, and a new batch can be started every few days. The size of the batch depends on how many eggs a manufacturer can obtain, inoculate and incubate. Another factor is the yield per egg. When one batch has been produced, the process is repeated as often as needed to generate the required amount of vaccine.

3. Quality control: This can only begin once the reagents for testing the vaccine are supplied by WHO laboratories, as described above. Each batch is tested and the sterility of bulk antigen is verified. This process takes two weeks.

4. Vaccine filling and release: The batch of vaccine is diluted to give the desired concentration of antigen, and put into vials or syringes, and labeled. A number of these are then tested for sterility, to confirm the protein concentration and for safety by testing in animals. This process takes two weeks.

5. Clinical studies: In certain countries, each new influenza vaccine has to be tested in a few people to show that it performs as expected. This requires at least four weeks. In some countries this may not be required as many clinical trials were done with similar annual vaccine preparation, and the assumption is that the new pandemic vaccine will behave similarly.
Activities at regulatory agencies - regulatory approval

Before the vaccine can be sold or administered to people, regulatory approval is required. Each country has its own regulatory agency and rules. If the vaccine is made with the same processes as the seasonal influenza vaccine, and in the same manufacturing plant, this can be very rapid (one to two days). Regulatory agencies in some countries may require clinical testing before approving the vaccine, which adds to the time before the vaccine is available.

The full process, in a best case scenario, can be completed in five to six months. Then the first final pandemic vaccine lot would be available for distribution and use.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 3</th>
<th>Month 4</th>
<th>Month 5</th>
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</thead>
<tbody>
<tr>
<td>At WHO Collaborating Centres</td>
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<tr>
<td>Identification of new virus</td>
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<tr>
<td>Preparation of vaccine strain</td>
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<tr>
<td>Verification of vaccine strain</td>
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<tr>
<td>Preparation of reagents to test vaccine</td>
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<td>At Manufacturer</td>
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<td>●</td>
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<tr>
<td>Optimization of virus growth conditions</td>
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<td></td>
<td>●</td>
</tr>
<tr>
<td>Manufacture of bulk vaccine</td>
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<tr>
<td>Quality control</td>
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<tr>
<td>Vaccine filling and release</td>
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<tr>
<td>Clinical trial (in certain countries)</td>
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<tr>
<td>At Regulatory agency</td>
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<td></td>
<td></td>
<td></td>
<td>●</td>
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<tr>
<td>Review and release</td>
<td></td>
<td></td>
<td></td>
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<td>●</td>
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</tbody>
</table>

Key: The arrows with dotted lines preceded by non-broken arrows indicate the time period required for the first time an activity is done (non-broken arrow line) that is then repeated (dotted arrow line). The solid lines signify that the activity takes place within a finite period.
### Annex 3 – Pandemic (H1N1/09): Timeline of Major Developments

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 18</td>
<td>The government of Mexico began reporting cases of ILI (influenza like illness) in the Federal District of Mexico.</td>
</tr>
<tr>
<td>April 23</td>
<td>The number of cases was rising steadily with more than 854 cases of pneumonia reported from the capital of Mexico. Other cases were reported in San Luis Potosi, in central Mexico and Mexicali, near the border with the United States.</td>
</tr>
<tr>
<td>April 24</td>
<td>The United States Government reported seven confirmed and nine suspect human cases of Swine Influenza A/H1N1 in the USA.</td>
</tr>
<tr>
<td>April 25</td>
<td>Upon the advice of the Emergency Committee called under the rules of the International Health Regulations (IHR), the World Health Organization (WHO) declared this event a <strong>Public Health Emergency of International Concern</strong>.</td>
</tr>
<tr>
<td>April 27</td>
<td>The second meeting of the Emergency Committee was convened as stipulated under the IHR. Following the Committee’s advice, <strong>WHO changed the level of pandemic alert from phase 3 to phase 4</strong>. This decision was based primarily on epidemiological data demonstrating human-to-human transmission and the ability of the virus to cause community-level outbreaks.</td>
</tr>
<tr>
<td>April 29</td>
<td><strong>WHO raised pandemic alert level to phase 5.</strong> WHO stated that all countries should immediately activate their pandemic preparedness plans.</td>
</tr>
<tr>
<td>May 7</td>
<td>WHO advised Pandemic H1N1 could affect at least one-third of the world’s 6 billion people within the next year.</td>
</tr>
<tr>
<td>June 1</td>
<td>WHO consulted with over 30 experts from 23 countries to consider countries’ needs and concerns and the steps needed to be taken when considering a move to Phase 6.</td>
</tr>
<tr>
<td>June 5</td>
<td>WHO convened the third meeting of the International Health Regulations (IHR) Emergency Committee. The purpose of the meeting was to update the committee on the global situation and seek advice on proposals to introduce severity assessments in any future announcements of pandemic phase changes.</td>
</tr>
<tr>
<td>June 11</td>
<td>The Emergency Committee concluded that the criteria for a pandemic have been met. <strong>WHO raised the level of pandemic alert to phase 6 and declared that “the world is now at the start of the 2009 influenza pandemic”</strong>.</td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>July 8</td>
<td>WHO said it would ask countries hardest hit by the pandemic to shift from testing of individual cases and towards collecting broader data about the disease.</td>
</tr>
<tr>
<td>July 13</td>
<td>WHO’s Strategic Group of Experts (SAGE) on Immunization emphasized the importance of striving to achieve equity among countries to access vaccines developed in response to the virus.</td>
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<tr>
<td>July 16</td>
<td>WHO decided to discontinue the publication of global tables showing numbers of confirmed cases for all countries, urging countries to focus on collecting broader data about the disease.</td>
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<tr>
<td>July 24</td>
<td>WHO reported that the average age of cases is appearing to increase slightly as the disease expands broadly into communities.</td>
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<tr>
<td>August 6</td>
<td>WHO advises the public that regulatory procedures for the licensing of pandemic vaccines, including procedures for expediting regulatory approval, are rigorous and do not compromise safety or quality controls.</td>
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</tbody>
</table>

(Source: WHO)
Responsible Travel

Today, global travel is commonplace and large numbers of people move around the world for business and leisure. Despite of the recently declared pandemic influenza phase 6, and the current World Health Organization’s (WHO) assessment of the severity of the influenza A(H1N1) virus as “moderate”, limiting travel and imposing travel restrictions would be highly disruptive to the global community and would have very little effect on stopping the spread of the virus. Travel restrictions are therefore not recommended.

While the world community continues its close monitoring of the current influenza A(H1N1) situation; travelers, individually, are cautioned to act in a responsible manner towards themselves, towards those around them and in the host communities of their destinations.

Personal responsibility is the most important step that people can take to protect themselves and others. People should familiarize themselves with the simple prevention practices that apply in daily life and while travelling such as hand-washing and normal cough etiquette. It is essential to stay informed as the situation evolves, especially while travelling. People who are ill should delay travel plans. Returning travellers who show influenza symptoms should contact their health care provider.

Travelers are responsible not only for their own well-being but for the well-being of those around them. Travelers should assume responsibility for themselves and those close to them by correctly identifying symptoms and in taking recommended steps for personal hygiene. It is crucial to realize that travelling when sick is not responsible - but that travelling when healthy is to be recommended.

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Valid as from 19th of May 2009