Communicable Disease and International Travel Policy

Communicable Disease Surveillance & Response

WHO, SEARO

Disclaimer: The boundaries shown on the above map do not imply official endorsement by the World Health Organization (This Disclaimer applies to the entire presentation)
Historical Perspective

The transnationalization of infectious diseases across geopolitical boundaries during European cholera epidemics catalyzed the evolution of the earliest multilateral governance of communicable diseases.

France convened the first International Sanitary Conference in 1851. Ten such conferences were convened in nineteenth century and eight sanitary conventions were negotiated on cross-border spread of cholera, plague, and yellow fever.

Within the Americas, the 1905 Inter-American Sanitary Convention imposed notification duties for cases of cholera, plague and yellow fever.

OIE was originally established by European countries in 1924 in Paris to control rinderpest which is now instrumental in regulating transboundary animal diseases.
International Tourist Arrivals, 1950-2020

Source: World Tourism Organization (UNWTO)
Inbound tourism by purpose of visit, 2007

- Leisure, recreation and holidays: 51%
- VFR, health, religion, other: 27%
- Business and professional: 15%
- Not specified: 7%
Inbound tourism by means of transport, 2007

- Air: 47%
- Road: 42%
- Water: 7%
- Rail: 4%
Inbound Tourism, 1990-2007

- International Tourist Arrivals (million)
- International Tourism Receipts (US$ billion)
Inbound Tourism by month

Source: Tourism Authority of Thailand

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Some facts and figures:

- Over 90% of world trade is transported by the international shipping industry.
- Today there are around 50,000 merchant ships that trade internationally and transport all types of cargo.
- The world fleet is registered in over 150 nations and manned by over one million seafarers of virtually every nationality.
- From 1970-2000, a WHO review of over 100 outbreaks associated with ships found that more than one-third were related to foodborne transmission.
Significant increase in Import and Export of livestock products

- Significant increase in Import and Export of livestock products over the years
- Increases the concern for export
- Increases the threat of importation of zoonotic diseases
- Avian Flu is the recent example affecting import and export of livestock and their products
The HIV/AIDS pandemic
... an emerging infection recognized in the early 1980s

- pandemics are not a scourge of the past
- global response not focused on border control
- major concern on global economic impact

The true cost of the HIV/AIDS epidemic stretches well beyond straightforward economic calculations »

Tony Barnett, of the London School of Economics,

Response focused on the disease (WHO Global Programme on AIDS) ... little attention to the occurrence of emerging communicable diseases control programme.

1996, 15 years after the emergence of AIDS, creation of WHO's Emerging Communicable Diseases control programme.

Adult (15-49) HIV prevalence rate (%), 2005
Summary of HIV situation related to international travel

A. Remain in force in some 63 countries, territories or areas

B. Do not protect the public health and may in fact impede efforts to protect it

C. Should be replaced by access to HIV programmes by all mobile populations, national and non-nationals alike, as part of efforts to achieve universal access

D. Restrictions that specify HIV, as opposed to comparable conditions, and/or are based on HIV status alone are discriminatory

E. Exclusion or deportation of HIV-positive people to avoid potential costs of treatment and support should be based on an individual assessment and should not override human rights consideration and humanitarian claims
F. Unreasonably restrict the participation of people living with HIV in major life activities as well as reduce their involvement in the response to HIV

G. Can interfere with key rights such as work, privacy, liberty, health and those of women and children

H. Should not result in the denial of the right to seek asylum and to be protected from refoulement

I. Require political will and leadership to be eliminated.
Key recommendation re. HIV

The International Task Team on HIV-Related Travel Restrictions urges all States with HIV-specific restrictions on entry, stay and residence, in the form of laws, regulations, and practices, including waivers, to review and then eliminate them, and ensure that all people living with HIV are no longer excluded, detained or deported on the basis of HIV status.
The plague cost the Indian economy over $600 million.

The Black Death revisited: India's 1994 plague epidemic.

World Resources Institute, Publications and Multimedia. 1996-97

Pneumonic plague, Surat, India, September 1994

...an epidemic-prone infectious disease re-emerges

- acute event
- revives collective fears
- inadequate response
- economic impact
- WHO called in

- 693 suspected cases
- 56 deaths (CFR ?%)
- Travel restrictions
- 45,000 trips to India cancelled

The Director General of WHO on an epidemic 

...serious concern of other countries and of the community at large.

...the economic impact

...travel restrictions

...WHO called in
It is imperative that we bring health considerations into the equation when we plan for international development, global trade, and population increases, to prevent disease from spreading and further undermining economic development.


- nosocomial infection
- fear of international spread
- major media coverage
- WHO at the centre, but barely prepared

Ebola, Kikwit, Zaïre, April 1995
largely amplified by poor hospital hygiene

WHO coordinates an international outbreak response:

US CDC, Atlanta; Pasteur Institute, Paris; Royal Tropical Institute, Antwerp; Swedish Institute for Infectious Disease Control; Médecins Sans Frontières; International Red Cross; OXFAM; others...
Health-care workers.

All guests except G and K stayed on the 9th floor of the hotel. Guest G stayed on the 14th floor, and Guest K stayed on the 11th floor.

Guest L and M (spouses) were not at Hotel M during the same time as index Guest A but were at the hotel during the same times as Guest G, H and I, who were ill during this period.

* Health-care workers.

† All guests except G and K stayed on the 9th floor of the hotel. Guest G stayed on the 14th floor, and Guest K stayed on the 11th floor.

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## 2003, Severe Acute Respiratory Syndrome (SARS)

- Vulnerability of the developed world
- International spread is real and can be fast
- Major economic cost
- Rapid international coordination does work

| Loss in demand and in business revenue, as measured by total final expenditure, is estimated at nearly US$60 billion » |

| WHO releases a **global alert** and recommends limiting the international spread of an emerging disease (e.g. Exit screening for international travellers; Traveller to consider postponing all but essential travel to certain areas) |

| 8098 cases, 774 deaths, 26 countries affected |

- For the first time WHO releases a **global alert** and recommends measures to limit the international spread of an emerging disease (i.e. Exit screening for international travellers; Traveller to consider postponing all but essential travel to certain areas) 


XXth National Epidemiology Seminar, 26-28 January 2009, Bangkok
In today’s economy, what would be the impact of closing movie theaters, shopping malls, and sporting events? What if restaurants were limited to take-out? If a large number of long-distance truck drivers were unavailable to drive for two weeks, for example, there might be difficulties in distributing items such as perishable food or components for just-in-time manufacturing. Equity and bond investments would suffer right at the moment they would be called upon to pay claims. »


- global vulnerability
- global concern
- will not stop at borders
- enormous cost
- urgent need for global preparedness and coordination

WHO coordinates the first major international effort for pandemic preparedness

1997 – 2008, H5N1 Avian Influenza and Pandemic Threat
Yellow fever is an important PH issue in both endemic and epidemic forms

Travel related aspects only a part of the picture of YF control activities
The IHR and Yellow fever

History – 1969 IHR

- Notification
- Infected areas
- Prescribed measures – vaccination certificates, disinsection
Currently – 2005 IHR

- Notification – according to the decision instrument
- Geographic risk
  - Area at risk of yellow fever transmission
  - Area where vector control measures are recommended for departing conveyances
- Prescribed measures – vaccination certificates, disinsection

Both measures: vaccination and disinsection raising safety concerns
The IHR and Yellow fever

Opportunity to match legal requirements with the assessed risk to public health in terms of:

- Vaccination recommendations for travellers
- Vaccination certificate requirements
- Disinsection practice

But moderated by country sovereignty and IHR Committee advice
Advise WHO on *practical* criteria for:

1. Defining areas for vaccine recommendation for visitors

2. Defining the areas/countries at risk of yellow fever transmission – triggers potential certificate requirements

3. Defining areas for vector control on conveyances with respect to yellow fever
"Emerging Infections: Microbial Threats to Health in the United States"

January 1992

The emergence of HIV disease and AIDS, the reemergence of tuberculosis, and the increased opportunity for disease spread through international travel demonstrate the critical importance of global vigilance for infectious diseases.

Institute of Medicine of the National Academies, USA

Followed in 2003 by "Microbial Threats to Health: Emergence, Detection, and Response"
Communicable diseases do not respect the geopolitical boundaries.

Communicable diseases, which could be contained as local epidemics, now have the potential to turn into global pandemics in a matter of weeks, e.g. SARS epidemic.

It is estimated that nearly one billion people move across international borders every year.

Population movements on the border especially those that involve illegal activities – Key factor for spread of communicable diseases across borders.
Globalization of travel and transportation has contributed to the rapid spread of communicable diseases.

It has highlighted the global connectedness of health.

The porous borders has facilitated the disease transmission.

Major challenges:

- Volume of travel by air and sea trade
- Cross-border migration in search of migration
IHR (2005) - An agreed international legal instrument to protect against, the international spread of serious risks to public health (irrespective of its origin or source), and to avoid unnecessary interference with international traffic and trade.”

Member States will have to;

✓ develop, strengthen and maintain capacity to detect, report and respond

✓ provide routine inspection and control activities at international airports, ports and some ground crossings

✓ notify WHO of all events that may constitute public health emergencies of international concern within 24 hours, irrespective of their origin or source (biological, chemical or radio-nuclear)
Effective public health measures at international airport/ports contribute to minimizing the risk of international spread of disease

The IHR core capacity requirements

- Surveillance and response (Annex 1A)
- Designated international airports, ports and ground crossings (Annex 1B)
At all times

- Access to medical service
- Transport of ill travellers
- Inspection of conveyances
- A safe environment for travellers
- Control of vectors / reservoirs

For responding to potential PHEIC events

- Public Health Emergency contingency plan
- Arrangement for treatment and isolation
- Arrangement for interview / quarantine
- Apply specific control measures (e.g. entry / exist control)
Cross-border collaboration

IHR(2005)
- Global perspective
- Rules for some activities between any two countries
- Must be flexible enough to allow local collaboration

X-border
- Local perspective
- Can agree on specific actions for local issues
- Must be consistent with IHR(2005)
IHR(2005) opportunities

- Ground crossing designation and capacity development
- Peripheral level capacity development
- National IHR focal point
- Competent authorities
Role of WHO

- WHO guidelines for the assessment of designated international airports, ports and ground crossings

- Technical advice on cross-border collaboration for communicable disease surveillance and response in the context of the IHR
• Under the IHR, the competent authority may require the application of appropriate control measures (disinfection, decontamination, disinsection, deratting) if evidence of a public health risk or clinical signs/symptoms/related information is found on board.

• The competent authority may implement additional appropriate measures, including isolation of the ship, as necessary to prevent the spread of disease.
Role of ship owners and operators

Under the IHR, conveyance operators shall facilitate:

a) inspection of the cargo, containers and conveyance
b) medical examinations of persons on board
c) application of other health measures under IHR provisions
d) provision of relevant public health information requested by the State Party, including the Maritime Declaration of Health
Lesson learnt

- IHR 2005 is business of every agencies in POE.

- Inter-agency communications and coordination is vital in preparedness and response for PHEIC.
Conclusion

- Cross-border collaboration has been identified as a major priority requiring urgent responses at regional, national and most importantly local levels.

- Cross-border collaboration needs to be institutionalized and action initiated at the local level.

- The paradigm of cross-border control of communicable diseases needs integrated, collaborative and coordinated approaches and actions.
Conclusion..

- Regular cross-border meetings, development of joint strategies and programmes, monitoring and evaluation of activities and establishment of referral mechanism for treatment as well as communication system are vital for border health management.
- Close collaboration with regional associations such as ASEAN, SAARC is a must to ensure sustainability of cross-border activities.
- All relevant resources including government agencies, local NGOs and the community need to be fully mobilized and involved.