Agenda

1. WHO Emergency Management Cycle
2. Business Continuity Management at WHO
3. ICT Preparedness for Avian Influenza
4. WHO Reference Documentation
Preparedness Layers

WHO Emergency Management Cycle

WHO Business Continuity Mgmt

Contingency Scenarios

Pandemic Scenario

Avian Influenza

BCP  BIA  RA  ITSCP
WHO Emergency Management Cycle
WHO Health Emergency Mgmt Cycle

- Planning
- Awareness
- Prevention
- Preparedness
- Response
- Restoration
- Recovery
WHO Health Emergency Mgmt Cycle

Phase 0 – Planning – General contingency and operational planning steps taken that are not specific to any identified emergency event. Activities in this phase take place before and in parallel with all other phases.

Phase 1 – Awareness – Steps taken to identify, confirm and monitor an event

Phase 2 – Prevention – Steps taken to avoid an incident or mitigate an incident’s effect

Phase 3 – Preparedness – Steps taken in advance to reduce the loss from an event

Phase 4 – Response – Steps taken during or immediately after an event to save lives and property

Phase 5 – Recovery – Steps taken to recover the affected areas to an acceptable operational status

Phase 6 – Restoration – Steps taken to restore the affected area to their normal status
Business Continuity Management
WHO Business Continuity Management

WHO Business Continuity Management

WHO Emergency Management Cycle

Business Continuity Plan
HQ Emergency Response Plans
Risk Assessment Study
IT Service Continuity Plan
Pandemic Influenza Response Plan
Business Impact Analysis
WHO Command & Control Structures

- Pandemic Influenza Command Team
  - Chair: Director-General
  - Members (3): Chair of Business Continuity Team, Chair of Crisis Management Team, Chair of Avian Influenza Response Team

- Business Continuity Team
- Crisis Management Team
- Avian Influenza Response Team
- Emergency Response Coordination Team
**Purpose:** Ensure that ICT services continue to be provided in the event of a serious disruption due to a disaster

**Two-fold strategy:**

- Strengthen *operational resilience* in the delivery of ICT services.
- Implement and maintain a robust *recovery process.*
ITSCM Implementation Process

Phase 1 - Initiation
- Service Catalog
- Service Level Requirements
- Configuration Details

Phase 2 – Requirements & Strategy
- Business Impact Analysis
- Risk Assessment
- Business Continuity Strategy

Phase 3 – Implementation
- Organization & Implementation Planning
- Hosting Arrangements
- Procedures
- Recovery Plans
- Risk Reduction Measures

Phase 4 – Ongoing Operation & Optimization
- Review and Audit
- Education & Awareness
- Change Management
- Training
- Testing
Current Contingency Scenarios in HQ Emergency Response Plan

- **Generic Response**
  - Evacuations
  - Medical Incidents
  - Mass Casualty Incident
  - Staff Death

- **Specific Incident**
  - Fire & Explosions
  - Hazardous Material Incident
  - Floods
  - Bomb Threats
  - Earthquakes
  - Civil Disturbance, Demonstrations and Illegal Occupation of WHO Premises
  - Major Air Transport Incident
  - Workplace Violence & Threat to WHO Staff
  - Hostage Taking Incident
  - Pandemics
As part of the development of the Business Continuity Plan (BCP), WHO HQ has decided to concentrate first on two contingency scenarios:

(1) Fire within main HQ building

(2) Pandemic Phase 5/6 declared for Switzerland and neighboring France
Pandemic Phase 5/6 declared for Switzerland and in France (in addition to other countries in Europe)

- HQ closed for all non-critical functions
- 40 staff performing critical functions related to pandemic influenza need to report daily to HQ
- 80 other support staff need to report daily to HQ (e.g. IT, HR, security, medical, etc.)
- Appropriate lodging provided within building
- ~500 other staff performing core functions would telecommute from home
- HQ building secured by WHO security with support from Geneva Canton
## Pandemic Phases

<table>
<thead>
<tr>
<th>Phases</th>
<th>Transmission</th>
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<tbody>
<tr>
<td><strong>Inter-pandemic period</strong></td>
<td>1. Influenza virus subtype in animals only (risk to humans low)</td>
</tr>
<tr>
<td><strong>(planning &amp; preparedness)</strong></td>
<td>2. Influenza virus subtype in animals only (risk to humans substantial)</td>
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<tr>
<td><strong>Pandemic Alert</strong></td>
<td>3. Human infection (transmission in close contacts only)</td>
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<td><strong>(emergency &amp; pre-emptive</strong></td>
<td>4. Limited human-to-human spread; small clusters</td>
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<td><strong>response)</strong></td>
<td>&lt;25 cases &lt; 2 weeks</td>
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<td><strong>Pandemic</strong></td>
<td>5. Localized human-to-human spread; large clusters</td>
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<td><strong>(minimizing impact)</strong></td>
<td>25-50 cases over 2-4 weeks</td>
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<td></td>
<td>6. Widespread in general population</td>
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</tbody>
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Pandemic Effects

Effects

- Economic Impact
- Travel
- School Closures
- Health Systems
- Personnel
- Supply Chains
- Fear, Doubt, Uncertainty
Major ICT Preparedness Areas

- Business Continuity Plan & IT Service Continuity Mgmt
- Telecommuting
- Application Portfolio Enhancements
- Web Resilience
- Customers, Partners & Suppliers
Telecommuting

International Telework Advisory Council (ITAC) – Teleworking Definition: the ability to work anytime, anyplace, using remote access connectivity and mobile technology

Telecommuting Definition: home-based teleworking

PREPAREDNESS

- Adequate scalable provision for remote access
- Management policies / procedures for remote workers
- Adequate technical support
Telecommuting Provisioning

- Ensure senior executives have necessary equipment and broadband access at home.
  - Same provisioning should be made for most-critical employees
- Email
  - Invest in a backup environment for email traffic
  - Contract with an external service provider for email
- Obtain satellite phones for critical staff
- Contract with audio/videoconferencing provider
- Contract with Emergency Notification Services provider
HQ health technical units have requested applications for the following:

- A centralized sick call reporting system
  - For tracking of staff and family members
- A centralized volunteer system
- A centralized warden system
  - With GIS functionality
Improving WHO web site resilience, including the use of a content caching service.
Customers, Partners and Suppliers

- Customers and Partners
  - Develop coordinated capabilities for crisis response

- Suppliers
  - Obtain and evaluate supplier’s influenza response plans
  - Assess supplier strategies for remote management
Suppliers – Where are we now?

- We have contacted all of the HQ major ICT suppliers for their Avian Influenza Preparedness Plan.
  - Most suppliers responded, referring to their existing BCP plan.
  - Other suppliers responded that they were updating their BCP plan to cover Influenza.
  - A few suppliers have yet to respond.
Currently drafting ICT Response Plan specific to Influenza Pandemic
WHO Reference Documentation
WHO Reference Documentation

Thank You