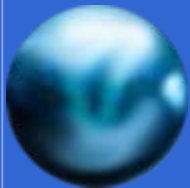


# Avian Flu ICT Preparedness

Tony Pappas, WHO/HQ



**World Health  
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# Agenda

**1. WHO Emergency Management Cycle**

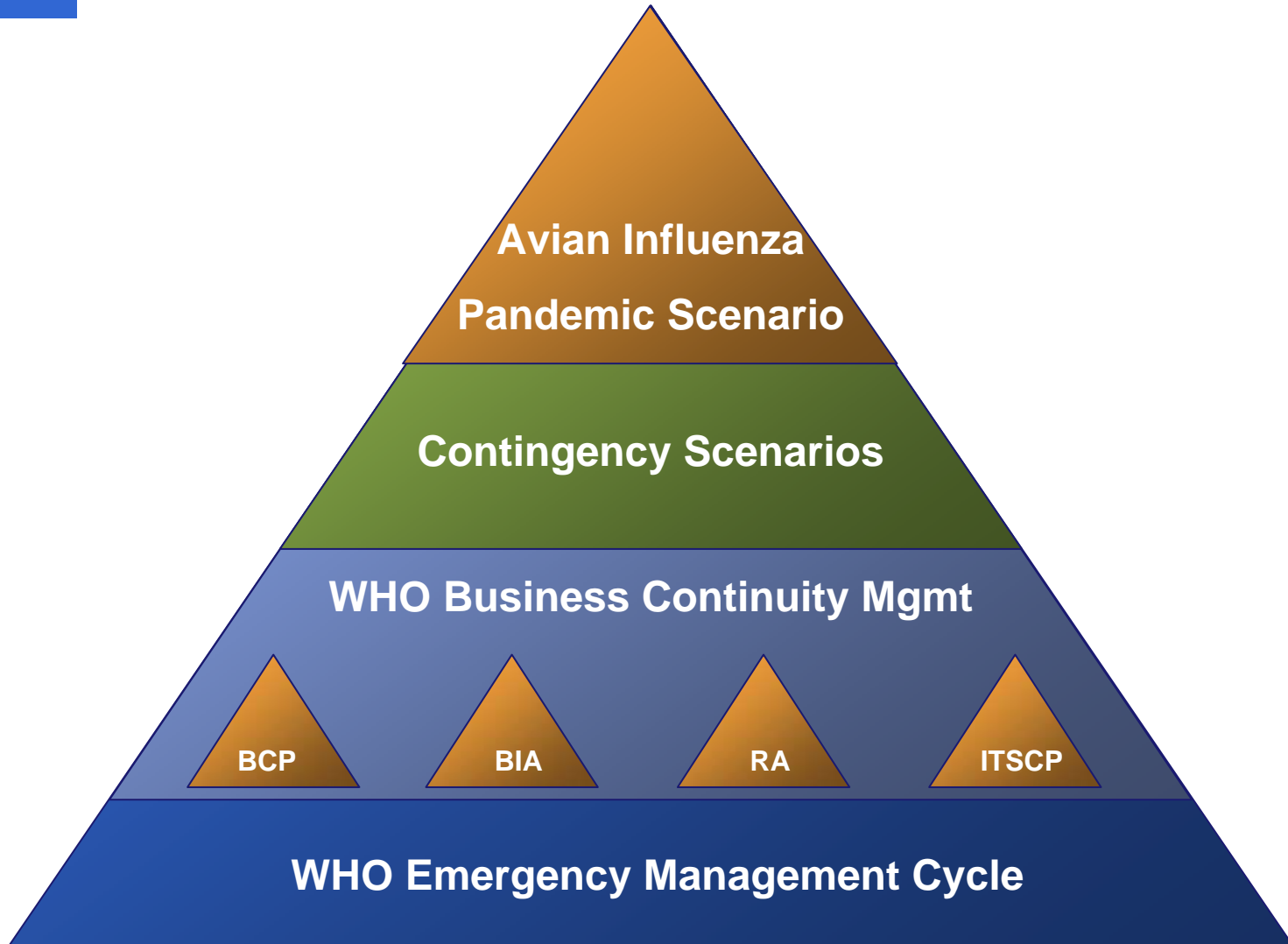
**2. Business Continuity Management at WHO**

**3. ICT Preparedness for Avian Influenza**

**4. WHO Reference Documentation**



# Preparedness Layers



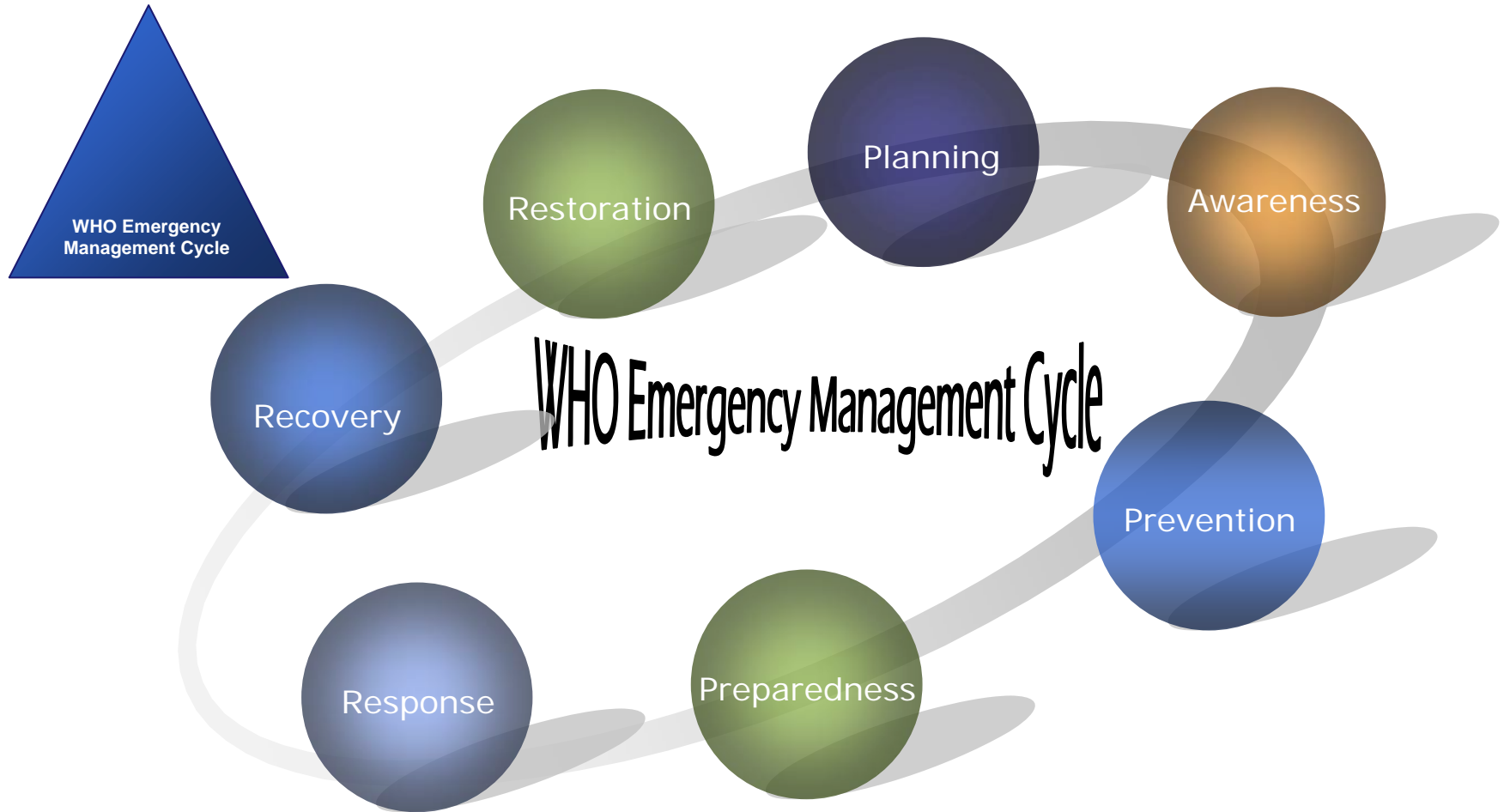
# WHO Emergency Management Cycle



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# WHO Health Emergency Mgmt Cycle





# 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

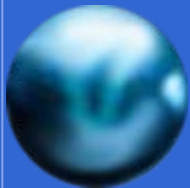
**Phase 3 – Preparedness**  
– Steps taken in advance to reduce the loss from an event

**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

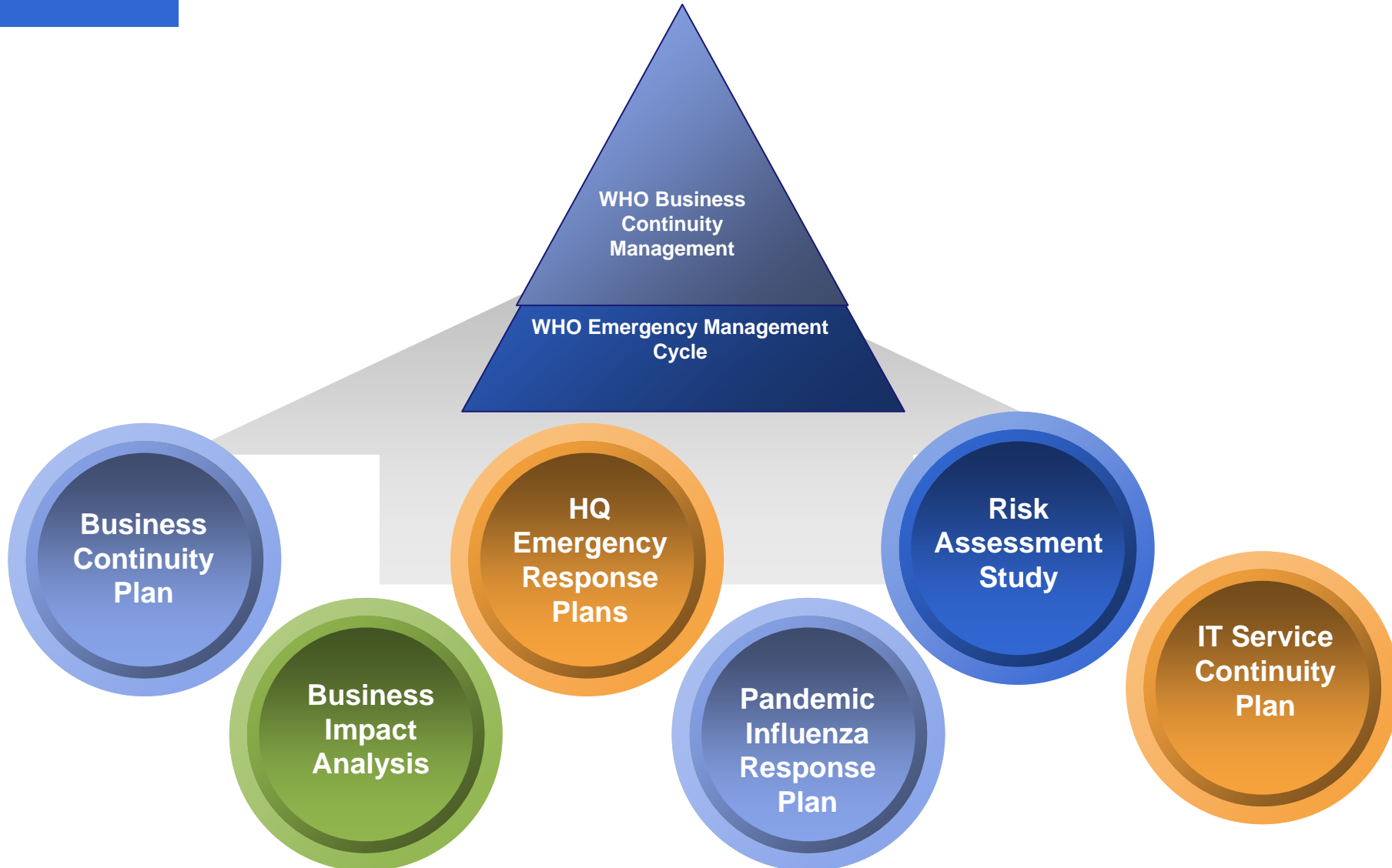
# Business Continuity Management



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# WHO Business Continuity Management





- ❖ 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

Initiation and Input Gathering

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

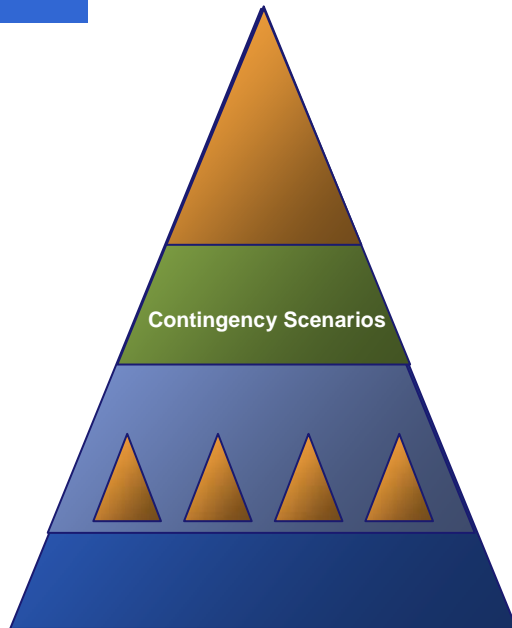
Change Management

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



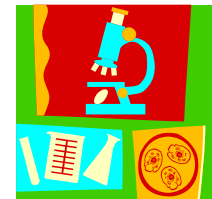
# Priority Scenarios

❖ 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

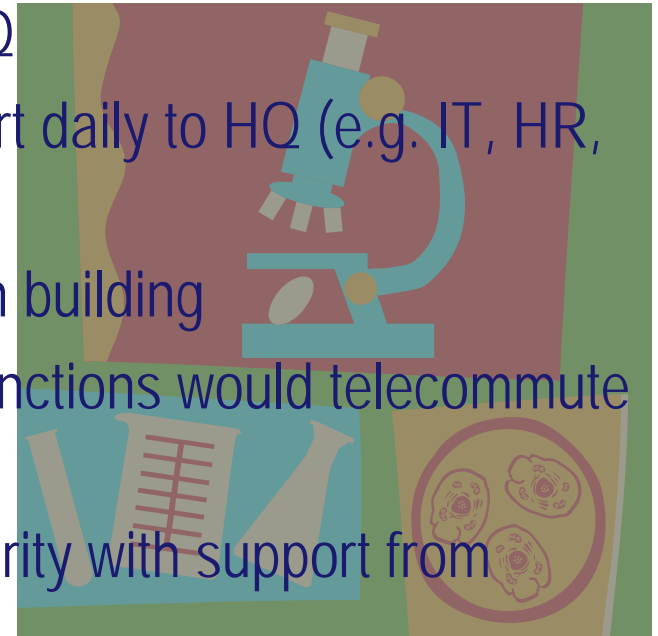


(2) Pandemic Phase 5/6 declared for Switzerland and neighboring France





- ❖ 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

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

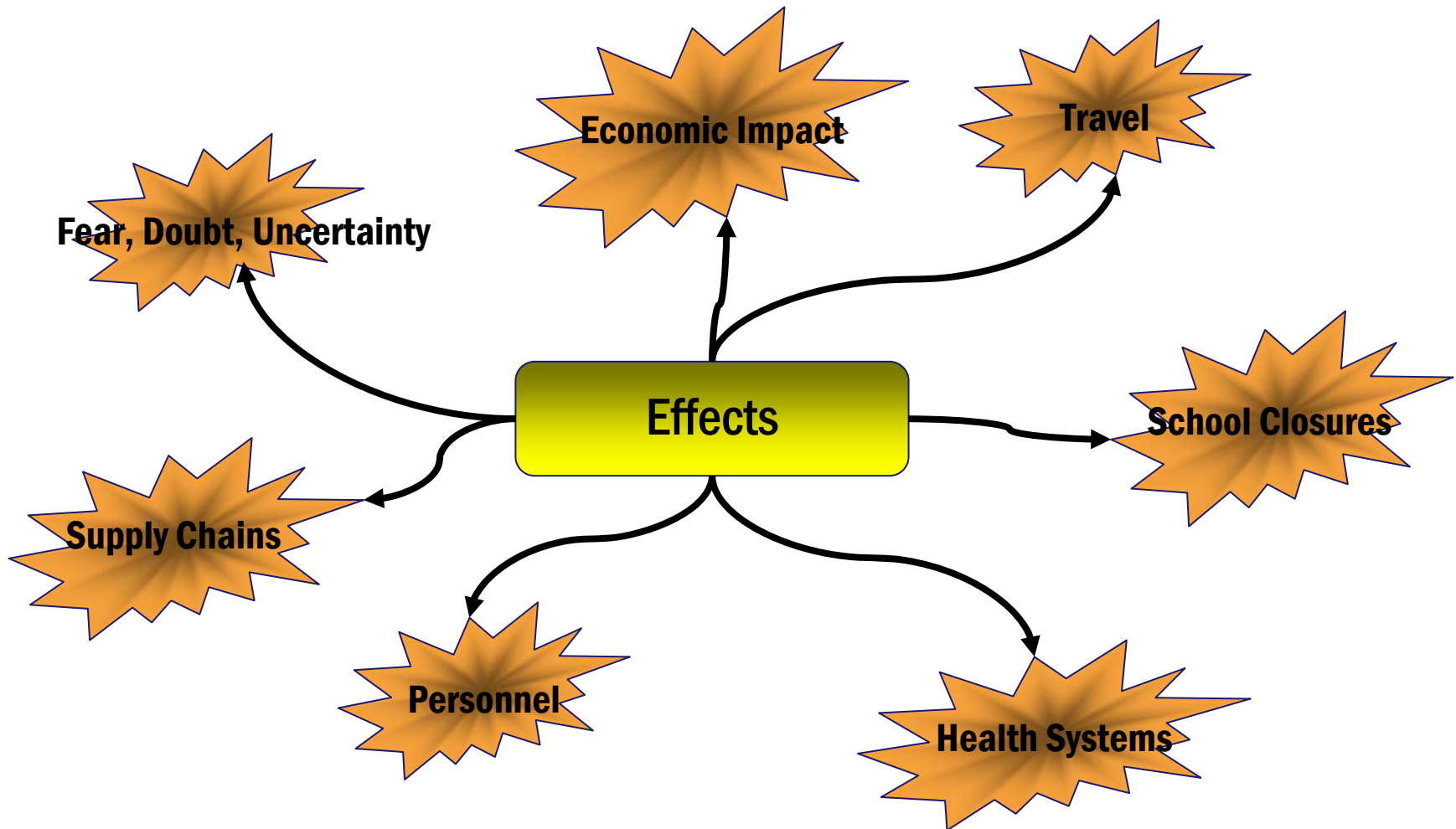
# Avian Influenza ICT Preparedness



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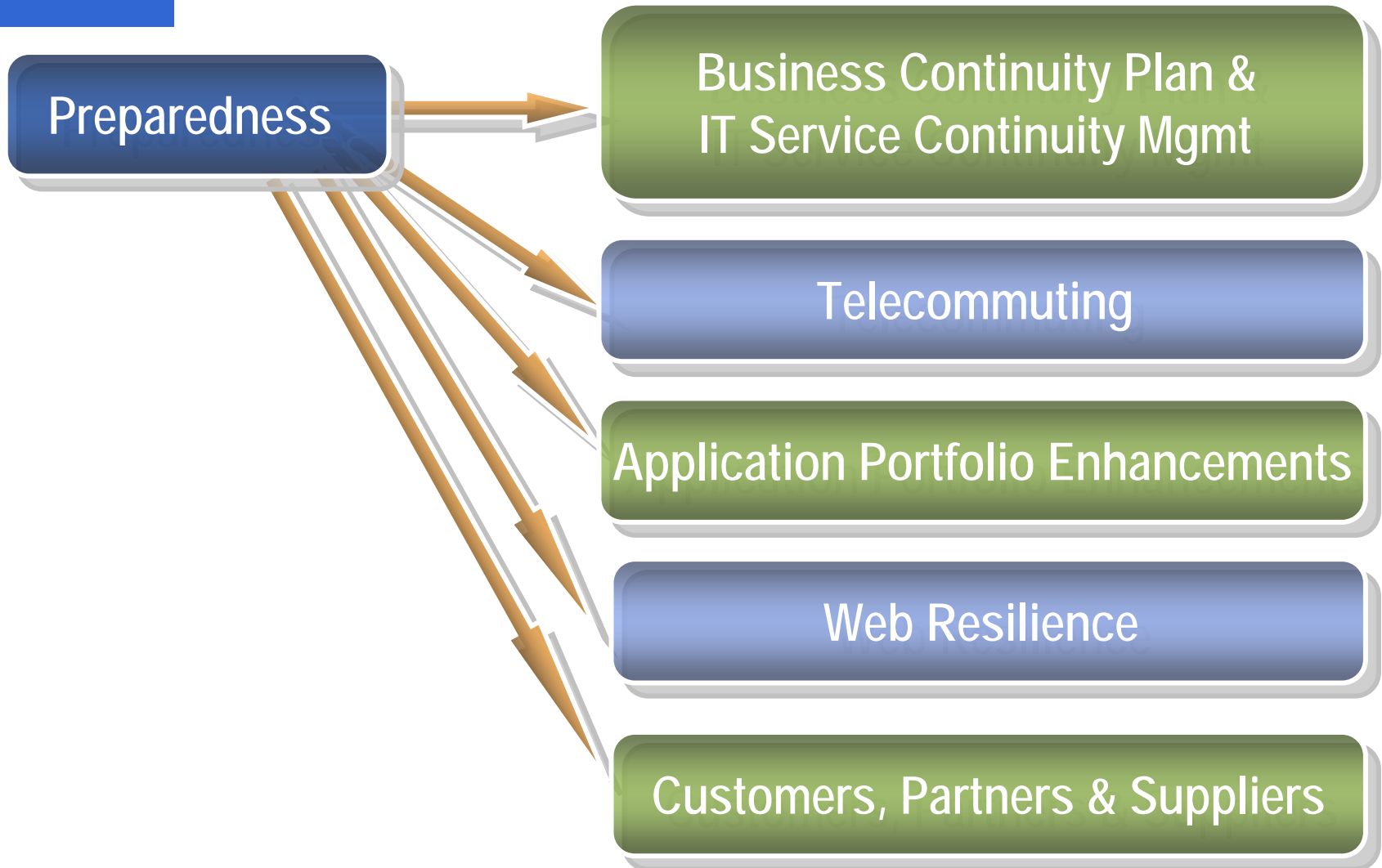


# Pandemic Effects





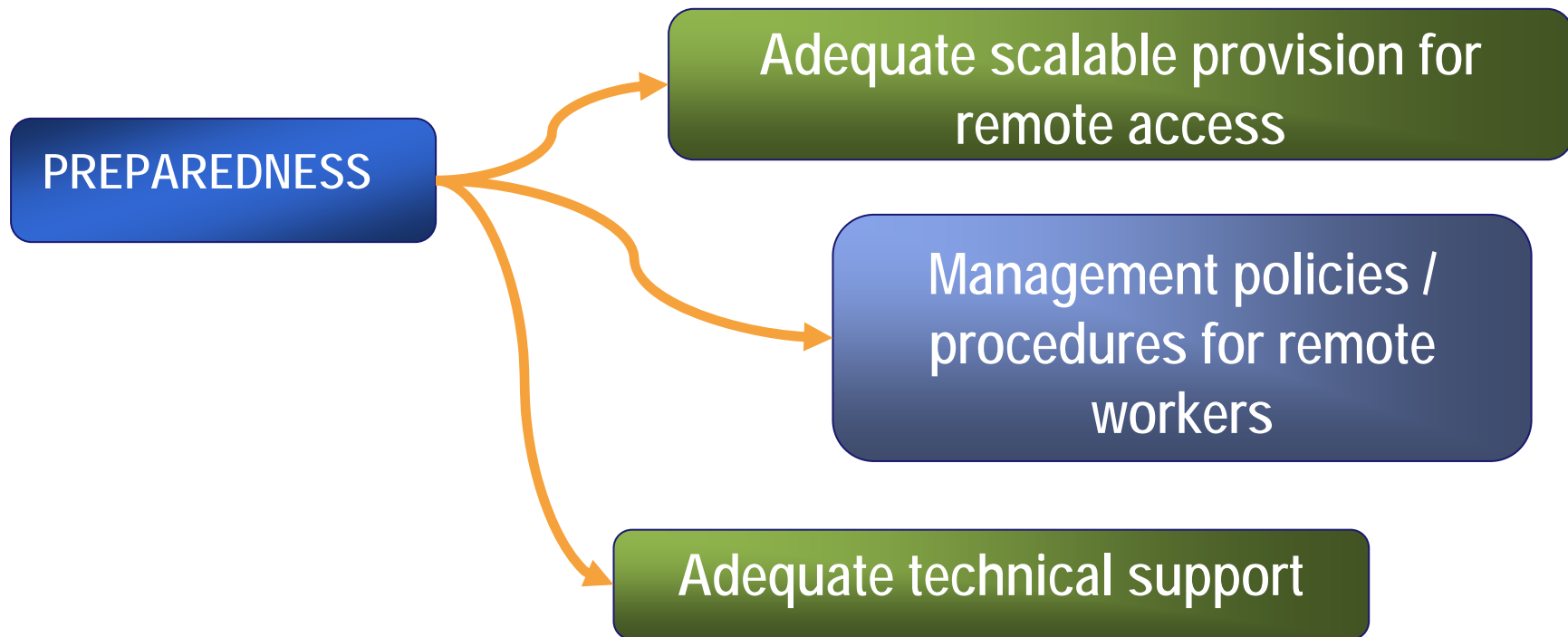
# Major ICT Preparedness Areas





**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





# 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 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.



# ICT Standard Operating Procedures (SOPs)

Currently drafting ICT Response Plan specific to Influenza Pandemic

## WHO Emergency Management Cycle

Phase 0 – Planning



Pandemic Phase 3

Pandemic Phase 4

Pandemic Phase 5

Pandemic Phase 6

## WHO Pandemic Phases

# WHO Reference Documentation

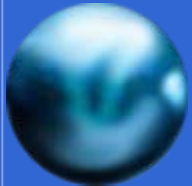


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❖ [http://www.who.int/csr/disease/avian\\_influenza/guidelines/topics/en/index.html](http://www.who.int/csr/disease/avian_influenza/guidelines/topics/en/index.html)

Thank You



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