Avian and Pandemic Influenza
Sub-Regional Common Plan of Action

Palestinian, Jordanian, and Israeli health and agriculture experts recommend that their governments adopt the following principles and procedures for common action during outbreaks of avian and pandemic influenza.
### Definitions and Acronyms

<table>
<thead>
<tr>
<th><strong>MoA</strong></th>
<th>Ministry of Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MoH</strong></td>
<td>Ministry of Health</td>
</tr>
<tr>
<td><strong>OIE</strong></td>
<td>Office International des Epizooties (World Organization for Animal Health)</td>
</tr>
<tr>
<td><strong>Originating Nation</strong></td>
<td>Jurisdiction where a suspected case of avian influenza occurs</td>
</tr>
<tr>
<td><strong>Protection Zone</strong></td>
<td>3km radius around an affected farm in which all birds must be culled.</td>
</tr>
<tr>
<td><strong>Receiving Nation</strong></td>
<td>Jurisdiction that receives information about a suspected case of avian influenza in a neighboring jurisdiction</td>
</tr>
<tr>
<td><strong>Surveillance Zone</strong></td>
<td>10 km radius around an affected farm in which enhanced surveillance and control measures must be taken.</td>
</tr>
<tr>
<td><strong>WHO</strong></td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>

### Case Definitions (Avian) Provided by OIE

**Suspicion of Disease**
- For domestic birds: Any massive and sudden mortality without apparent cause, associated with respiratory disorders and/or decrease of appetite, drinking and egg production and affecting mostly layers, broilers and turkeys irrespective of age.
- For wild birds: Dead birds found without obvious cause of death, either unidentified illness in 5 or more birds in a small perimeter, the size of which should be defined by the competent department or service.

### Case Definitions (Human) Provided by WHO

**Suspected H5N1 case**
- A person presenting with unexplained acute lower respiratory illness with fever (>38 °C) and cough, shortness of breath or difficulty breathing.
- AND
  - One or more of the following exposures in the 7 days prior to symptom onset:
    a. Close contact (within 1 metre) with a person (e.g. caring for, speaking with, or touching) who is a suspected, probable, or confirmed H5N1 case;
    b. Exposure (e.g. handling, slaughtering, defeathering, butchering, preparation for consumption) to poultry or wild birds or their remains or to environments contaminated by their faeces in an area where H5N1 infections in animals or humans have been suspected or confirmed in the last month;
    c. Consumption of raw or undercooked poultry products in an area where H5N1 infections in animals or humans have been suspected or confirmed in the last month;
    d. Close contact with a confirmed H5N1 infected animal other
than poultry or wild birds (e.g. cat or pig);
e. Handling samples (animal or human) suspected of containing H5N1 virus in a laboratory or other setting.

| **Probable H5N1 case** | Probable definition 1  
A person meeting the criteria for a suspected case 
AND 
One of the following additional criteria:  
  a. infiltrates or evidence of an acute pneumonia on chest radiograph plus evidence of respiratory failure (hypoxemia, severe tachypnea)  
  OR  
  b. positive laboratory confirmation of an influenza A infection but insufficient laboratory evidence for H5N1 infection.  

Probable definition 2:  
A person dying of an unexplained acute respiratory illness who is considered to be epidemiologically linked by time, place, and exposure to a probable or confirmed H5N1 case. |

| **Confirmed H5N1 case** | A person meeting the criteria for a suspected or probable case  
AND  
One of the following positive results conducted in a national, regional or international influenza laboratory whose H5N1 test results are accepted by WHO as confirmatory:  
  a. Isolation of an H5N1 virus;  
  b. Positive H5 PCR results from tests using two different PCR targets, e.g. primers specific for influenza A and H5 HA;  
  c. A fourfold or greater rise in neutralization antibody titer for H5N1 based on testing of an acute serum specimen (collected 7 days or less after symptom onset) and a convalescent serum specimen. The convalescent neutralizing antibody titer must also be 1:80 or higher;  
  d. A microneutralization antibody titer for H5N1 of 1:80 or greater in a single serum specimen collected at day 14 or later after symptom onset and a positive result using a different serological assay, for example, a horse red blood cell haemagglutination inhibition titer of 1:160 or greater or an H5-specific western blot positive result. |
Agreed Principles

There will be ongoing consultation among the Palestinian, Jordanian, and Israeli health and agriculture at all levels in the area of avian influenza.

- Any time there is a suspicion of a case, there will be rapid communication among the three.
- If the Protection Zone and Surveillance Zone do not cross a boundary, nations should inform each other of any procedures they plan to employ that deviate from existing national plans.
- If the Protection Zone or Surveillance Zone crosses the boundary between two or three nations, control measures must be harmonized.
- Nations should consult with each other before taking a decision to vaccinate poultry.
- All partners in this collaboration on avian and pandemic influenza should have sufficient resources to implement necessary, agreed control measures.
- All partners should assess the situation, evaluate their needs, and if they have gaps, should, together, appeal for international assistance.
- In addition to consulting about emerging events, partners should share post-event reports in order to facilitate learning.

Agreed Procedures

The following scenario details the events that would occur during an avian influenza outbreak, the activities that the Originating Nation would take and the ways that the Originating Nation and Receiving Nation would communicate and cooperate following each event.

Cases of H5N1 in Poultry

<table>
<thead>
<tr>
<th>Event: Originating Nation: Notification of Suspected Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action at the national level:</td>
</tr>
<tr>
<td>- MOA informs MOH</td>
</tr>
<tr>
<td>Action at the regional level:</td>
</tr>
<tr>
<td>- MOA/Veterinary Director should report to counterpart in the neighboring countries (by phone, fax, email, within time frame?)</td>
</tr>
<tr>
<td>- MOH should report to counterpart in the neighboring countries (by phone, fax, email, within time frame?)</td>
</tr>
<tr>
<td>- If a report is sent to OIE, a report also will be sent to neighboring countries.</td>
</tr>
<tr>
<td>Receiving nation:</td>
</tr>
<tr>
<td>- MOH and MOA communicate</td>
</tr>
<tr>
<td>- National committee convenes to decide on actions at the national level.</td>
</tr>
</tbody>
</table>
### Event: Originating Nation: Protection and Surveillance Zone Established

**Action at the nation level:**
- OIE procedures will be followed, [e.g. all avians culled in 3km radius].
- OIE procedures will be followed, surveillance increased in additional 7km radius for one month.

**Action at the regional level:**
- If protection and surveillance zone includes more than one nation,
  - Focal Point in originating nation initiates consultation with neighboring nation[s]
  - An immediate meeting should be convened (within 24 hours), using telephone or videoconference if face-to-face meetings are not feasible in the time frame. Topics for consultation might include, but are not limited to, the following:
    - Details of protection and surveillance zones
    - Prophylaxis for humans according to WHO guidelines and national plans
    - Disposal of infected birds
    - Disinfection
    - Restriction of movement
    - Gaps in resources

- If protection and surveillance zone includes only one nation.

  - Focal Point in originating nation initiates consultation with neighboring nation

  - A meeting should be convened at the earliest convenient time.

**Receiving nation:**
- National committee convenes to decide on actions at the national level.

### Event: Originating Nation: Laboratory Confirmation of H5

**Actions at the national level**
- Isolate virus if nation has capability.
- If nation does not have capability, transfer specimens to neighboring nation for testing.
  - Use Israeli-Palestinian liaison (Problems: time, x-ray machine possible degradation of sample)

**Actions at the regional level:**
- Do epidemiological study on isolates to sequence viruses from all three countries (agriculture and human).
- The partners agree on the need to evaluate the molecular and epidemiological
aspect of the influenza viruses in the region and will exchange viruses between their labs.

**Event: Follow-Up**

**Actions at the national level**
- Send report of outbreak investigation to neighboring nations.

**Actions at the regional level:**
- Within a month after the end of an outbreak, there should be an effort to convene a regional meeting to identify lessons learned.

**Cases of H5N1 in Humans**

**Event: Originating Nation: Notification of Suspected Case**

**Action at the national level:**
- MOH informs MOA

**Action at the regional level:**
- MOA/Veterinary Director should report to counterpart in the neighboring countries (by phone, fax, email, within time frame?)
- MOH should report to counterpart in the neighboring countries (by phone, fax, email, within time frame?)
- If a report is sent to WHO, a report also will be sent to neighboring countries. (?, is this report different from the investigation report?)

**Receiving nation:**
- MOH and MOA communicate
- National committee convenes to decide on actions at the national level.

**Event: Originating Nation: Epidemiological Investigation**

**Actions at the national level:**
- Initiate epidemiological investigation of suspected case.

**Actions at the regional level:**
- If investigation turns up something relevant, consult with neighboring nation[s]
- Conduct common investigation if relevant. (This could range from sharing information and hypotheses on while the investigation is under way to physically joining in a neighboring nation’s field investigation.)
- Include agriculture personnel investigation.
- Exchange report of investigation of the case once it is concluded (preliminary, intermediate, final report? Probably final).
Receiving Nation:
- Share information relevant to the epidemiological investigation.

Event: Originating Nation: Laboratory Diagnosis of H5
Actions at the national level
- Isolate virus if nation has capability.
- Send to accredited lab for confirmation.
- If one country does not have the necessary diagnostic facilities… we should make every effort to exchange the samples.

Actions at the regional level:
- Do epidemiological study on isolates to sequence viruses from all three countries (agriculture and human).
- The partners agree on the need to evaluate the molecular and epidemiological aspect of the influenza viruses in the region and will exchange viruses between their labs.

Event: Follow-Up
Actions at the national level
- Send report of outbreak investigation to neighboring nations (repeated).

Actions at the regional level:
- Within a month after the end of an outbreak, there should be an effort to convene a regional meeting to identify lessons learned.

Conclusion: Next Steps for Preparedness
In order to implement an effective cooperative response to avian influenza in the coming months, participating experts recommend multinational training and workshops on essential topics.