The epidemiology of avian influenza (AI) is complex. AI viruses constantly evolve by mutation and re-assortment with the emergence of new subtypes causing significant impact on animal health and production. Some AI subtypes can be zoonotic and therefore pose major threat to human health.

This report presents an overview of HPAI disease events (in poultry and non-poultry including wild birds) reported to the OIE’s early warning system (immediate notification and follow-up reports) by its Members, as well as non-Member Countries, during the period 2 October – 22 October, 2020 through the World Animal Health Information System (WAHIS). The stable situations reported in the six-monthly reports by two countries, namely Egypt and Indonesia, are not described in this report as this data for the second semester 2019 will be collected throughout the first and second semesters of 2020.

The HPAI events (new outbreaks) are reported in Table 1.

**Table 1: HPAI outbreaks reported through early warning system during 2 October – 22 October 2020**

<table>
<thead>
<tr>
<th>REGION</th>
<th>COUNTRY</th>
<th>Administrative divisions affected</th>
<th>Subtype(s) Poultry</th>
<th>Subtype(s) Non-poultry</th>
<th>N° Outbreaks Poultry</th>
<th>N° Outbreaks Non-poultry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>Israel</td>
<td>5</td>
<td>H5N8</td>
<td>H5N8</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Europe</td>
<td>Kazakhstan, Russia</td>
<td>6</td>
<td>H5, H5N8</td>
<td>NA</td>
<td>9</td>
<td>NA</td>
</tr>
</tbody>
</table>

1. **Spatial distribution**

![Figure 1. New and ongoing outbreaks in poultry (2 October – 22 October, 2020)](image1)

In this period, 12 new outbreaks (red dots on the map) were notified in poultry, in Israel, Kazakhstan, and Russia. The total ongoing HPAI outbreaks worldwide is 104 (blue dots on the map). They are distributed as follows: Africa (18), Asia (42), Europe (41) and Oceania (3).

2. **Impact of the disease by Region in poultry**

During the period (2 October – 22 October), a total of 59,340 animals were notified as losses in Asia and Europe in the ongoing and new outbreaks (59,602* losses notified in the previous report).

* The impact of the disease is measured in terms of losses, which are calculated by the sum of dead and culled animals from the infected farm or backyard premises of the reported outbreak. In case of non-poultry the losses correspond to the dead animals reported.

3. **Changes in the epidemiological situation**

**Countries/Territories with new outbreaks during the period.**

**Africa**

No new outbreaks were reported in poultry and non-poultry during the period. Ongoing outbreaks are still present in South Africa and Nigeria in poultry (H5N6 and H5N8) and in South Africa in non-poultry (H5N8).

**America**

No new or ongoing outbreaks were reported during the period.

**Asia**

Israel reported 3 new outbreaks (H5N8) in poultry and 13 new outbreaks in non-poultry (H5N8). Ongoing outbreaks are still present in Afghanistan, China (People’s Rep. of), Chinese Taipei, Israel, Korea (DPR), and Vietnam in poultry (subtypes H5, H5N1, H5N2, H5N6, H5N8, and H7N9) as well as in Afghanistan, China (People’s Rep. of) and Israel in non-poultry (H5, H5N6, H5N8, and H7N9).

**Europe**

Kazakhstan and Russia reported 9 outbreaks (H5, H5N8) in poultry. Ongoing outbreaks are still present in Kazakhstan and Russia in poultry and in non-poultry (H5, H5N8) for both types of populations.

**Oceania**

No new outbreak has been reported during the period, 3 outbreaks (H7N7) are still ongoing in Australia.
Key messages

In the reporting period, 12 new H5 and H5N8 HPAI outbreaks were reported in domestic birds in Asia and Europe and 13 new outbreaks of H5N8 in non-poultry in Asia. In addition, 136 HPAI outbreaks in poultry and non-poultry are still ongoing in Oceania, Europe, Asia and Africa involving different subtypes, namely H5, H5N1, H5N2, H5N5, H5N6, H5N8, H7N7 and H7N9.

- Outbreaks of H5N1, H5N2, H5N5, H5N6, H5N8 and H7N9 are continuing in Asian countries, with recurrence of new H5N8 outbreaks in Israel during the reporting period.
- Few outbreaks of H7N7 are ongoing in Australia.
- In Africa, ongoing outbreaks of H5N6 and H5N8 are continuing in Nigeria and South Africa.
- In Europe, Kazakhstan experienced first occurrence of HPAI H5 (neuraminidase subtype pending) in northern districts near the border with Russia, which is also reporting new and ongoing outbreaks of H5N8 in poultry and non-poultry. It is more likely that the source of infection in these outbreaks is contact with migratory wild birds. More information is available here.

Veterinary Authorities in the affected countries have responded to contain outbreaks in poultry with stamping out measures, heightened surveillance, and recommendations to poultry owners to increase biosecurity.

The OIE Standards, and the transparency of reporting through the OIE’s World Animal Health Information System, provide the framework for Veterinary Services to implement effective surveillance, reporting, and controls for avian influenza. Wild bird surveillance can indicate periods of heightened risk, and at these times measures to improve on-farm biosecurity may reduce the likelihood of exposure of poultry.