The epidemiology of avian influenza (AI) is complex. The AI virus constantly evolves by mutation and re-assortment with the emergence of new subtypes causing significant threat to both animal and human health. This report presents an overview of HPAI disease events (in poultry and non-poultry including wild birds) reported to the OIE by its Members in December 2019 through the World Animal Health Information System (WAHIS) early warning system. The stable situations reported through the six-monthly reports by 2 countries in the world namely Egypt and Indonesia are not described in this report as this data for the second semester 2019 will be collected in the beginning of 2020.

The December HPAI events (new outbreaks) are reported in Table 1 (data reported through the early warning system)

Table 1: HPAI outbreaks reported through early warning system during November

<table>
<thead>
<tr>
<th>REGION</th>
<th>COUNTRY</th>
<th>Administrative divisions affected</th>
<th>Subtype(s)</th>
<th>N° Outbreaks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Poultry</td>
<td>Non-poultry</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Poultry</td>
<td>Non-poultry</td>
</tr>
<tr>
<td>Africa</td>
<td>Nigeria, South Africa</td>
<td>2</td>
<td>H5N6, H5N8</td>
<td>NA</td>
</tr>
<tr>
<td>Asia</td>
<td>Chinese Taipei</td>
<td>3</td>
<td>H5N2</td>
<td>NA</td>
</tr>
</tbody>
</table>

1. Spatial distribution

Figure 1. New and ongoing outbreaks in poultry (December, 2019)
In this period, 13 new outbreaks (red doths in the map) were notified in Chinese Taipei, Nigeria and South Africa in poultry. The total ongoing HPAI outbreaks worldwide is 97 (blue doths in the map) distributed in the Americas (1), Africa (16) and Asia (56) (Figure 1).

2. Impact of the disease by Region in poultry

In December, a total of 96,736* animals were notified as losses in Asia in the ongoing and new outbreaks (22,558* losses notified in November 2019 in Africa, Asia and the Americas).

* 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 in November.

**Africa**
Nigeria notified 1 new outbreak in poultry (H5N6) and South Africa 3 new outbreaks in poultry as well (H5N8). Ongoing outbreaks are still present in South Africa in both poultry and non-poultry (subtype H5N8).

**America**
No new outbreaks were reported during the period. Mexico is the only country affected in the Region, reporting one H7N3 ongoing outbreak in poultry

**Asia**
Chinese Taipei reported 9 new outbreaks in poultry (H5N2 subtype). Ongoing outbreaks were reported by Afghanistan, China (PRC), Chinese Taipei and Korea (DPR) in poultry (subtypes H5N1, H5N2, H5N5, H5N6, H7N9) and by Afghanistan and China (PRC) in non-poultry (H5N8, H7N9)

**Europe and Oceania**
No new or ongoing outbreaks were reported during the period.

**Key messages**

H5N2 HPAI outbreaks continue to be reported from Chinese Taipei since its origin in 2012. There were relatively decreased number of HPAI outbreaks in poultry and wild birds in Asia, Africa, Europe and the Middle East compared to the last year. Despite the decrease in outbreaks, Member Countries are encouraged to maintain heightened surveillance and apply strict biosecurity measures at farm level to prevent the introduction. 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.