Status of Swine Influenza in pigs in India

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Surveillance for SIV in pigs

- Initiated since the outbreak of current pandemic H1N1/2009.

- Clinical SIV infection in pigs have not been reported so far. However, swine fever outbreaks are regularly reported from various parts of India.

- Serum samples and nasal swab/tissue samples from the govt farms & other commercial farms are being received.
Diagnostic Facilities

Molecular detection methods

1. RT-PCR – Target NP and HA genes

2. Real Time RT-PCR – primers and probes as per FAO/CDC/WHO guidelines

3. Sequencing, if positive (so far none)
Diagnostic Facilities

Biological methods

- ECE inoculation
- Virus isolation in cell culture (MDCK)
- HA

Serological methods-

- AGID- Influenza A Group Specific Antigen
- HI - (H1)
- ELISA - (IDEXX Herd Check H1N1 & H3N2 Kit)
Swine samples tested at HSADL, Bhopal for SIV

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Month</th>
<th>States</th>
<th>Tissue samples</th>
<th>Nasal swabs</th>
<th>Serum</th>
<th>Total samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>May 09</td>
<td>Maharashtra, MP, Rajasthan, HP</td>
<td>8</td>
<td>21</td>
<td>23</td>
<td>52</td>
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<tr>
<td>2</td>
<td>June 09</td>
<td>MP, Orissa</td>
<td>0</td>
<td>13</td>
<td>54</td>
<td>67</td>
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<tr>
<td>3</td>
<td>July 09</td>
<td>Assam, MP,</td>
<td>8</td>
<td>40</td>
<td>62</td>
<td>110</td>
</tr>
<tr>
<td>4</td>
<td>Aug 09</td>
<td>Maharashtra, MP, Assam, UP</td>
<td>30</td>
<td>76</td>
<td>9</td>
<td>115</td>
</tr>
</tbody>
</table>

Total: 46 tissue samples, 150 nasal swabs, 148 serum samples, 344 total samples

All the samples were negative for SIV infection
Swine influenza workgroup

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