District level Facility based surveillance for COVID-19

Background
- There is a need to establish systematic surveillance for SARS-CoV-2 infection in all districts of country. This surveillance will be in addition to the routine testing as per current testing guidelines.
- Besides the facility based surveillance, ICMR/NCDC in collaboration with key stakeholders and state health departments is initiating a population based sero-survey in selected districts representing the case detection across the country.

Objective
- Monitor the trend in prevalence of SARS-COV2 infection at district level

Methods
- Surveillance unit: district
  - From each district, 10 health facilities (including 6 public and 4 private health facilities should be selected)

- Population groups:
  - Low risk population: Outpatient attendees (non-ILI patients) and pregnant women
  - High risk population: healthcare workers,

- Sample size and frequency of sample collection:

<table>
<thead>
<tr>
<th>Sentinel Group</th>
<th>Samples per District per Week</th>
<th>Samples per District per Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>High risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare workers</td>
<td>100</td>
<td>400</td>
</tr>
<tr>
<td>Low risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient attendees (Non-ILI patients)</td>
<td>50</td>
<td>200</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>50</td>
<td>200</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>800</td>
</tr>
</tbody>
</table>

- Laboratory test and pooling:
  - Throat/nasal swabs to be collected for RT-PCR tests
  - Samples should be tested in a onetime pool of 25. Results of this sample pooling is only for surveillance purposes. It should not be used for diagnosis of individual patients.
  - In addition to throat/nasal swabs, blood samples should be collected for detecting IgG antibodies for ELISA testing.
  - In subsequent rounds, IgG ELISA based testing of serum samples will replace RTPCR based testing for surveillance purpose.

- Data collection and analysis:
  - Data on demographic characteristics will be collected on a specifically designed standard data collection form using ODK platform.
  - The data will be analyzed locally for action using standard indicator formats. Indicators for person, place, time and trend analysis will be made.
  - Data collation and dissemination will take place as decided jointly by ICMR and DoHFW.

- Implementation partners:
  - District and State health administrative, IDSP, NCDC, ICMR institutes, community medicine departments of medical colleges and public health institutes.