COVID-19 Template App: Port of Entry Surveillance

Port of Entry Surveillance Application Demo Video (please click image below)

For questions, please email info@dimagi.com

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About the Port of Entry Surveillance Application

Download the CommCare Application

The Port of Entry Surveillance application is available to be imported directly into your CommCare project space, along with all free COVID-19 template applications, in this library: https://www.commcarehq.org/covid19

Application Version History

- April 10, 2020: First version released
The application has been designed to screen travelers for COVID-19 risk factors and symptoms at air, sea, rail and land Ports of Entry and to record their travel companions or close contacts. To establish a mechanism for communicating alerts of suspected COVID-19 cases between Port of Entry health authorities, transport sector officials and national health surveillance systems, the application has also been designed to integrate with the COVID-19 Tracking template application based on the WHO First Few X (FFX) Cases protocol.

It is envisioned that screening will be conducted across several countries or sites with geographic and demographic diversity. Following guidelines from the WHO, the application allows epidemiological exposure data to be systematically collected and shared rapidly in a format that can be easily aggregated, tabulated and analyzed across many different settings globally for timely estimates of 2019-nCoV infection severity and transmissibility, as well as to inform public health responses and policy decisions. This is particularly important in the context of a novel respiratory pathogen, such as 2019-nCoV. You can access interim guidance for point of entry and mass gatherings directly on the WHO’s website.

Application Details

Application Workflow

As per WHO guidelines, the application has been designed to support the following processes for managing ill travelers at points of entry:

- Detection of ill travelers at international points of entry
- Interview and screening of ill travelers
- Reporting of ill travelers with suspected COVID-19
- Initial case management and referral of ill travelers with suspected COVID-19

CommCare Application Workflow
This application was developed around the WHO interim guidelines, including the Management of ill travelers at Points of Entry (international airports, seaports, and ground crossings) in the context of COVID-19. The tables below break down the role of each form in the CommCare application, including:
<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form Name</th>
<th>Form Purpose</th>
<th>Summary of content</th>
<th>Collecting information from whom</th>
<th>Timing of data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>CommCare</td>
<td>WHO</td>
<td><strong>Screening</strong></td>
<td>Traveler identification and locator information</td>
<td>All travelers at a port of entry</td>
<td>As soon as possible before traveler entry or exit</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Traveler</strong></td>
<td>Data collector information</td>
<td>Traveler Symptoms</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Public</strong></td>
<td>Traveler Exposures</td>
<td>Traveler Exposures</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Health</strong></td>
<td>Screening Assessment</td>
<td>Traveler Symptoms (detailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Declaration</strong></td>
<td>Traveler Exposures (detailed)</td>
<td>Traveler Exposures (detailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Form</strong></td>
<td>Travel Outcome and Medical Intervention (detailed)</td>
<td>Travel Outcome and Medical Intervention (detailed)</td>
<td></td>
</tr>
<tr>
<td><strong>Conduct</strong></td>
<td><strong>Secondary</strong></td>
<td><strong>Screening</strong></td>
<td>Traveler identification and locator information</td>
<td>For travelers who are suspected or probable COVID-19 cases</td>
<td>As soon as possible after the suspected case is detected or notified</td>
</tr>
<tr>
<td><strong>Secondary</strong></td>
<td><strong>Screening</strong></td>
<td><strong>Form</strong></td>
<td>Data collector information</td>
<td>Traveler Symptoms</td>
<td></td>
</tr>
<tr>
<td><strong>Travel</strong></td>
<td><strong>Contacts</strong></td>
<td><strong>Passenger</strong></td>
<td>Traveler Exposures</td>
<td>Traveler Exposures (detailed)</td>
<td></td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td></td>
<td><strong>Locator</strong></td>
<td>Travel Outcome and Medical Intervention (detailed)</td>
<td>Travel Outcome and Medical Intervention (detailed)</td>
<td></td>
</tr>
<tr>
<td><strong>Add</strong></td>
<td><strong>Travel</strong></td>
<td><strong>Contacts</strong></td>
<td>For travelers who are suspected or probable COVID-19 cases</td>
<td>As soon as possible after the suspected case is detected or notified</td>
<td></td>
</tr>
</tbody>
</table>
Convert to High Risk Traveler

| Convert to High Risk Traveler | N/A | This form converts a traveler screened as low-risk or cleared to a high-risk traveler. | Confirmation of conversion of traveller’s status from low-risk to high-risk | For travelers whose risk level has been reassessed | When the primary screening form has already been filled out |

App Case Types and Relationships

Like many CommCare applications, this application uses case management to keep track of progress of various points of interest. To learn more about the case types and relationships, please review your application’s case summary.

This application was designed to integrate seamlessly with programs following the WHO First Few X (FFX) Cases protocol so the case structure mimics that of the COVID-19 Template app. Figure 1 represents the application’s current case structure. To learn more about configuring case sharing or case assignment workflows, you can refer to our documentation on Case Sharing Using Organizations.

You can reconfigure the case structure if you intend to use the Port of Entry Surveillance tool as a standalone application. Figure 2 represents a sample alternate case structure you could adopt.

![Case Types and Relationships](image)

**Figure 1**

* covid_19_case
  * contact

**Figure 2**

* traveller
  * companion