NPS Risk Analysis for Quarantine and Isolation for COVID-19 for Parks with Housing

REVISED March 24, 2020

The WASO IMT has developed a Quarantine & Isolation (Q&I) risk assessment for parks with housing to use for planning purposes. This tool assumes a planning level worst case scenario. Park managers can use this tool to evaluate their current capabilities and capacity to support Q&I due to coronavirus disease (COVID-19). Quarantine is for an individual who meets risk criteria for exposure but is not sick and needs to self-quarantine (also be called "self-isolate"). Isolation is for an individual who is presumed or confirmed to have COVID-19.

Current scientific research predicts an infection rate up to 81% of the population without mitigation efforts to prevent transmission. Based on this research and for planning purposes, parks should estimate that 40% of the total population at the park will require isolation and 4% will require hospitalization based on this research. For example: a park has a total population of 2000 people; 800 people will require isolation and 80 will require transport to an appropriate hospital.

It is difficult to estimate the number of individuals that may require quarantine after exposure. It could be several times the number of infected individuals depending on the level of risk associated with the contact. Example: 1 person in a dormitory is infected, the entire dormitory (or a significant portion of it) will have to go into quarantine. It is important to remember that this assessment will need to include space for both quarantined and isolated patients.

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This external review evaluates risk and identifies measures that can mitigate risks to the residents within park housing inside park boundaries.

**Individual Category Rating**
(Score by applying the best numerical rating from the matrix below)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Document Condition</th>
<th>System Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Not present.</td>
<td>No system or process present.</td>
</tr>
<tr>
<td>4</td>
<td>Incomplete or currently being drafted</td>
<td>Process or procedure not implemented, or not in practice.</td>
</tr>
<tr>
<td>3</td>
<td>Incomplete, but in progress (recent improvements)</td>
<td>Practice deviates from policy.</td>
</tr>
<tr>
<td>2</td>
<td>Complete, updated, but without appropriate approvals.</td>
<td>Practice is consistent with written plans, inconsistently applied.</td>
</tr>
<tr>
<td>1</td>
<td>Complete, current, approved, but may not be known by all staff.</td>
<td>Systematic approach largely consistent with written plans.</td>
</tr>
<tr>
<td>0</td>
<td>Complete, current, implemented, known, and of high quality.</td>
<td>Practice is consistent with policy, and consistently applied.</td>
</tr>
</tbody>
</table>

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1 The research identifies that 50% of the infected population will not have recognized symptoms requiring isolation. Ferguson NM, Laydon D, Nedjati-Gilani G, et al. Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand. On behalf of the Imperial College COVID-19 Response Team, WHO Collaborating Centre for Infectious Disease Modelling. March 16, 2020.
### RISK FACTOR

<table>
<thead>
<tr>
<th>1. Park Pandemic plan</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Comprehensive and inclusive plan?</td>
<td></td>
</tr>
<tr>
<td>• Copies made available to staff (printed and/or electronic versions)?</td>
<td></td>
</tr>
<tr>
<td>• Content is reviewed in training, briefings, and meetings?</td>
<td></td>
</tr>
<tr>
<td>• References or job aids relating to content are created for the workplace?</td>
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### Housing

(Note: If this element is scored 4 or 5 the final GAR is red)

Note: All housing types and occupants are to be included in this assessment to include concessioners, contractors, and park employee dependents. Parks may also need to consider inholdings that rely on park assistance for emergency services.

- What is the current occupancy of the park's housing units? (Include required occupancy, permitted, volunteer, and concessions housing)
  - Currently Occupied # ______ Not Occupied but Available # ______
- Does the park have co-housing and dormitories? Co-housing and dormitories have higher risk due to the proximity of residents and the high rates of exposure and could increase the number of quarantine and isolation units required.
- Does the park have a plan and space for individuals who must be quarantined and isolated? (Note: individuals under isolation must have a separate room and bathroom for their use. They cannot be in a shared space with others who are isolated or quarantined.)
- Will the park be required to negotiate a contract with a concessioner or local housing business (hotel, etc.) for use of rooms/housing for quarantine and isolation?

### Services & Supplies

(Note: If this element is scored 4 or 5 the final GAR is red)

- Is someone (staff, primary caregiver, etc.) available, with the proper resources (training, PPE, etc.), to provide cleaning services (bathrooms, linens, etc.) and other supportive care for isolated individuals? (Note: Assuming that those isolated may be too ill to clean or maintain the living space.)
- Is there someone (staff, primary caregiver, etc.) available to deliver food and supplies to quarantined and isolated individuals?
- Are adequate supplies on hand to support all quarantined and isolated individuals living in the park with immediate food and critical supply needs? (Note: Isolation periods are dependent on the severity of the illness.)
- Are there support services (child/pet/elder care, acquire medications, transportation, mental health) for quarantined and isolated individuals living in the park?
- Is the local supply chain able to meet resupply demands?
- Will the supply chain continue in the foreseeable future?

### Transportation

- Is there a transportation plan to move infected individuals to alternate housing sites?
- Is there an adequate transportation plan to move infected individuals to the appropriate medical facility?

### Local Health System Access

- Is the local health care system available to provide medical treatment and hospitalization for individuals infected with COVID-19?
6. Monitoring Support
- Is there someone (staff, primary caregiver, etc.) to conduct daily wellness checks on quarantined/isolated persons?
- Does the park have onsite clinic or EMS personnel to assist with the daily critical care of infected individuals?

7. Safety
(Note: If this element is scored 4 or 5 the final GAR is red)
- Does the park have resources (PPE, training, etc.) for medical providers, EMS and Law enforcement?
- Does the park have surgical masks for isolated patients and N95 masks for their non-infected caregivers?
- Does the park have the resources (PPE, Training, etc.) for cleaning and disinfection?
- Are standards and Best Practices being employed (HIPAA, Bloodborne pathogens, engineering controls, PPE, Training, etc.)
- Are appropriate Risk Management Procedures understood and being implemented?

8. Team Selection
- Are there adequate NPS employees to support quarantine and isolation efforts?
- Can the park work with non-governmental organizations within the park (concessions, cooperators, partners) to support quarantine and isolation?
- Will Partnerships with other organizations under existing agreements be able to support the park?
  i) State and local health departments
  ii) Local and/or state law enforcement
  iii) Local healthcare system
  iv) Local Emergency Medical Services (EMS)
  v) Others
- Can the park work with other federal government agencies locally to support response? (USPF, other DOI bureaus and offices, local military bases, tribes, etc.)

9. Prevention Efforts and Strategies
- Is the park actively using CDC and local public health guidance to mitigate spread?
- Is messaging on preventing spread of disease appropriate and effective?
- Has training been provided to employees (Operational Leadership, ORM, or risk management)?
- Do personnel formally assess risk on a regular basis?
- Are tangible mitigation strategies actively in place and effective?
- Is risk management actively occurring?
- Are strategies keeping responders from being injured or becoming ill during operations?

10. Local ICS Incident Management Practices
- Is the ICS system employed habitually on incidents?
- Do position assignments include trainees and mentoring to build operational depth, succession planning for this event/occurrence?
- Is the use of ICS locally effective at showing command and control of the event?
- Has park management formally become part of large incident organizations?
- Is critical Incident Stress Management (CISM) support or other mental health programs in place?
- Is the park prepared to handle fatalities?
QUARANTINE / ISOLATION RISK ASSESSMENT
GREEN, AMBER and RED MODEL

TOTAL GAR SCORE: _______

Did you score any one of the following elements either a 4 or 5? Housing, Services and Supplies or Safety
Yes ________ No _______

If Yes, final GAR is red.
Final GAR Color _______

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<td>16-34</td>
<td>Requires correction – may be able to support quarantine/isolation with mitigation.</td>
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<td>0-17</td>
<td>Park currently has capacity to support quarantine/isolation within park housing. Monitor for changes to capacity.</td>
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RECOMMENDED (MINIMUM) PROGRAM REVIEW SUMMARY:

- Describe the overall level of readiness and adequacy?
- What prioritized improvements?
- What best practices from this program can be shared with other parks?
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