Pandemic Response
Management Letter
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2020 has seen unprecedented conditions resulting in the suspension of international travel and need for many citizens to shelter in place. In light of the global response to the COVID-19 pandemic it becomes apparent that the Dutch Caribbean needs to ensure all Park Management Authorities feel confident in their ability to recognize, respond and protect themselves if situations like these arise again.

COVID-19 has been unique in how widespread and devastating the infection has been. The uncertainty surrounding this virus has led to the need for social distancing and minimization of travel. This drop in tourism has been difficult, especially for the Dutch Caribbean. Interactions between the public and parks varies between the six islands, however, with the implementation of safety protocols and procedures, risks can be minimized.

The objective of pandemic planning is to ensure that all six Dutch Caribbean islands are comfortable recognizing and responding in case of an emergency. With pandemics, time is often the most important factor, with an immediate response potentially saving lives and limiting the spread. The blueprints of a pandemic response can also be useful in a variety of other emergency situations, so having clear, well thought out protocols can be an important asset in future emergency response.
Management Letter Purpose

The Pandemic Response Management Letter will provide Park Management Authorities with the tools needed to properly recognize and respond in emergency situations. This letter is meant to provide a quick reference point for how to recognize various types of outbreaks, how to properly respond to minimize spread and infection, how to properly manage interactions between park staff and the public, and how to begin to define some of the financial considerations needed to ensure each park is fully prepared in the future. Each outbreak will have its own unique set of conditions, so these guidelines will need to be tailored appropriately. The key to an effective response is for a timely acknowledgment of the problem and to respond as efficiently as possible.

This management letter has been broken down to three main parts. The first part gives a background to the different types of pandemics outbreaks and outlines various considerations which must be taken into account. The second portion provides safety and response protocols which should be implemented as soon as an outbreak is suspected. The final portion outlines the financial considerations which will be required to implement these protocols.

It is recommended that each park take these recommendations into consideration and use them to draft a more specific plan, applicable to each island. Pandemic preparedness is not a quick process, as it will require careful planning between all stakeholders and will involve community buy in. Therefore, it is also important to promote community involvement to optimize local knowledge, expertise, resources and networks.
Types of Pandemic Outbreaks

Understanding the nature of the outbreak will help Park Management Authorities design and implement an appropriate response. An effective and appropriate response will need to take into consideration how the outbreak is spreading and work to contain the infected area as soon as possible. The following section outlines the four types of outbreaks and will provide critical considerations to include during the response design and implementation.

Point Source

Point source outbreaks are contained within a specific area and take place over a small-time scale. An example of this could be an *E. coli* outbreak which occurs after a population has consumed contaminated food.

**Considerations:**

- Determine point source of contamination as soon as possible
- Minimize exposure by separating individuals from the source and each other
- Have exposed individuals seek immediate medical attention if necessary
- Remove or confine the source of contamination
- Contact the relevant Health Authorities

Continuing Common Source

Continuing common source is when the infected area is confined, but infections are occurring over a longer time scale. An example of this could be that visitors are being infected after visiting a specific area of the park.

**Considerations:**

- Determine point source of contamination as soon as possible
- Minimize exposure by separating individuals from the source and each other
- Have exposed individuals seek immediate medical attention if necessary
- Prevent access to area(s) of question until the source of contamination can be properly handled
- Contact the relevant Health Authorities
Propagated

Propagated outbreaks are spread from person to person within a community. An example of this type of outbreak is the 2019 Coronavirus.

Considerations:

• Minimize interactions between individuals as much as possible
• Immediately implement social distancing and sanitization protocols
• Have exposed individuals seek immediate medical attention if necessary
• Contact the relevant Health Authorities

Vector-Borne

Vector-borne outbreaks are spread within a population through an additional vector, such as livestock, fleas or mosquitoes. An example of this type of outbreak is the Zika virus which is spread through mosquitoes. This may be especially applicable for the Terrestrial Protected Areas.

Considerations:

• Determine vector source as soon as possible
• Minimize exposure by separating individuals from the source and each other
• In the case of mosquitoes, conduct routine surveys to remove areas of standing water (when possible) to minimize population booms
• Provide educational material at entrance points to warn visitors of the risks and provide suggestions on how to protect yourself
• Have exposed individuals seek immediate medical attention if necessary
• Prevent access to area(s) of question until the source of contamination can be properly handled
• Contact the relevant Health Authorities
Response Protocols

Park Visitor Check in/out Protocols

Proper management of outbreaks requires that all individuals within the contamination area are accounted for. The key here will be to keep careful records of who enters and leaves the parks, when possible. Obviously for some islands this is easier said than done. Terrestrial parks may have a physical location for entering and exiting the park, where as the marine parks will not have this luxury. Consider adding language within the User Fee Purchasing Agreement for marine park tags to address emergency situations and direct users to proper resources for more information. When possible, implement check in/out procedures as appropriate.

**The following key information should be collected during check in:**

- Name
- Date, location and time of visit
- Contact information

Knowing when and where a person visits will be important for contact tracing if an outbreak is identified after an individual has left the park. In addition, contact information is vital if individuals need to be warned of a potential contamination after they've left the park. All personal information should be kept behind the counter, maintaining confidentiality.

During an outbreak, all visitors should be presented with the necessary information concerning changes in the park rules or services. It is important that all individuals are aware of any potential risks upon entering the park and have been briefed on how to respond if they believe they have been infected. Parks may consider implementing a liability or risk waiver to minimize legal risks.
Personal Protective Equipment

Personal protective equipment (PPE) will vary depending on the type of work being done and nature of the health issue or crisis. It is recommended that every park include an emergency kit with the following equipment. When interacting with the public, be sure to use the appropriate PPE to protect yourself and visitors:

Eye and Face Protection

- Safety goggles
- Masks or respirators
- Eye washing kit

Head Protection

- Safety helmet
- Wide brimmed hats to protect against the sun

Body Protection

- Overalls or protective aprons
- Gloves
- Plastic screens to be installed between park staff and visitors
- Safety boots or shoes
- Sink with disinfectant soap

When an emergency occurs, it is important park staff members take the time to stop and carefully assess the situation. Priority must be placed on ensuring personal safety before moving forward. When possible, minimizing interactions between individuals should be prioritized. Implementing measures such as placing protective screening up and using gloves and face masks should be done as quickly as possible. In addition, proper sanitation measures should be taken between visitations and periodically throughout the day, which will be further detailed in the Sanitation Protocol section.

In addition to maintaining proper PPE, there are a few additional steps which need to be taken.

1. Staff must be provided PPE and properly trained in how to properly use the equipment.
2. PPE should be located such that it can be quickly and easily accessed in case of an emergency.
3. Regular checks of PPE should be conducted to ensure inventory is maintained and equipment is still in working order.
4. Damaged or defective PPE must be removed and replaced immediately.
Sanitation Protocol

1. **Timely Communication on Safety and Hygiene Concerns**
   a. Staff and visitors must receive timely updates on safety conditions.
   b. Periodic updates should be sent to all staff on current sanitation protocols.

2. **Public Spaces**
   a. Normal routine cleaning with soap and water should be conducted at increased intervals, depending on how often staff is interacting with the public.
   b. In the case of propagated contaminations, EPA or EEA approved disinfectants should be used in public spaces to further protect against the spread of viruses.
      i. If these are not available, consider making alternative disinfectants using a bleach to water ratio of 1:3, or 70% alcohol solutions. Do not mix bleach or other cleaning and disinfection products together. This can cause fumes that may be very dangerous to breathe in. Bleach solutions will be effective for disinfection up to 24 hours.
   c. Hand sanitizer dispensers should be made available in high-traffic locations, such as entrances/exits, visitors centers, museums and restaurants.
   d. It is recommended that areas open to the public should be periodically sanitized based on the frequency of visitation.
   e. Minimize numbers of visitors in confined spaces, try to maintain social distancing protocols of 1.5m between individuals.

   **In addition, the following items should be taken into consideration:**
   • Wear skin protection and consider eye protection for potential splash hazards
   • Ensure adequate ventilation
   • Use no more than the amount recommended on the appropriate label
   • Use water at room temperature for dilution (unless stated otherwise on the label)
   • Avoid mixing chemical products
   • Label diluted cleaning solutions
   • Store and use chemicals out of the reach of children and animals
   • You should never eat, drink, breathe or inject these products into your body or apply directly to your skin as they can cause serious harm.
   • Do not wipe or bathe animals with these products or any other products that are not approved for animal use.

Special considerations should be made for people with asthma or other underlying health conditions. These individuals should not be present while an area is being cleaned or disinfected, as this can exacerbate their conditions.
Social Distancing Protocols

In addition to standard sanitation protocols, in cases of propagated outbreaks, social distancing measures may need to be taken as well.

1. Limit the number of personnel and/or visitors in building, rooms, on boats or other general areas to easily maintain at least 1.5m distance from one another at all practicable times. Post occupancy limits in rooms.

2. Placing visible signs in congested-prone areas, reminding people to be at least 1.5m apart.

3. Ensure a responsible person (supervisor, park ranger) is monitoring areas verifying everyone is maintaining at proper distance and use of PPE.

4. Placing tape or other markings at least 1.5m apart and direct visitors to use the markings to maintain distance.

5. All personnel should be instructed to maintain at least 1.5m distance from visitors and from each other. Personnel may momentarily come closer when necessary to accept payment, conduct check ins, marine park tag checks, or as otherwise necessary (while wearing required PPE).

6. Reconfigure areas and prevent gatherings in common areas. Try to maximize ventilation and use of outdoor space.

7. Stagger schedules or alternate work schedules to minimize number of people in each location.

8. Install plastic shielding in areas with frequent interactions between park staff and visitors.

9. Conduct marketing and social media campaigns promoting safe use of parks through online check ins, sources of information and to purchase marine park tags where appropriate.
Lockdown Protocols

Types

Normal Access:

There are no known security/safety threats and normal business operations may continue. Exterior and interior doors are open to allow normal visitor access.

Lockdown Levels:

Type I  Admittance to the park is open, but required monitoring to ensuring proper safety protocols are implemented. Visitors may also access parks but at controlled numbers and after receiving required safety briefings.

Type 2  Admittance to the park is restricted, only individuals with prior authorization or employees are admitted entrance to the park.

Type 3  Admittance to park is limited strictly to park personnel.

Type 4  Total lockdown, no one, even personnel is admitted to the park. Park entrances and exits should be closed with proper public outreach explaining the situation.

Entering and Exiting Lockdown

When an outbreak is suspected, Park Management Authorities should immediately meet to decide which type of lockdown to initiate. The most conservative response should be taken immediately, and then changed once the outbreak is understood or contained.

Upon entering lockdown its essential that all park employees understand the changes in protocols and how to properly protect themselves and visitors. Ensure all changes have been clearly communicated. Consider printing out these changes and hanging them in a visible area to serve as a reminder.

Exiting lockdown will require similar levels of communication. Ensure all park personnel and visitors are aware of the change in conditions. Remind everyone that moving between lockdown levels is not always a one-way road, and a return to a previous level may be necessary if conditions change. It is important that everyone understands the differences between each lockdown level and is prepared to implement the appropriate changes.

In addition, ensure coordination with local Emergency Support Functions (ESF) or Emergency Operating Committees/Commands (EOC) authorities. Be sure to adhere to recommendations by local authorities.
Lockdown Procedures

Each park administration should establish the staff “Person in Charge” at each location to initiate lockdown procedures.

1. If a lockdown is necessary, remember to implement changes in a controlled and timely manner.

2. Proceed to restrict access to public entry points.

3. Place a sign on the main entrance stating: “The park is in lockdown.”

4. Announce lockdown over social media and through visual signage throughout the park. (Example: The park is initiating lockdown protocols. Please find the nearest park ranger to request further instruction.)

5. Park rangers should immediately cover the public entrance(s). NO ONE may enter the park until an “all clear” has been announced.

6. Staff “Person in Charge” will assist the police and/or other emergency responders as requested.

7. Issue an “all clear” when notified by Park Management Authorities or when the situation has cleared.

8. Coordinate with local Emergency Support Functions (ESF) or Emergency Operations Committee/Command (EOC) authorities.

Office Closures

In the event that it becomes necessary to restrict access, or shut down an office, efforts should be made to ensure continuity of duty when possible. Remote access through teleconferencing, online document sharing and other online platforms should be used to allow work to continue while following social distancing or quarantine recommendations. When possible, minimize in-person meetings and work to promote safe working environments for all staff.
Financial Considerations

Properly planning for an emergency response will require financial investment to ensure supplies, training and materials are available and kept up to date. Parks should be prepared to set aside time each year for emergency response training and should conduct regular safety checks of materials and inventory to ensure everything is available if needed.

Items to consider:

- Changes in staffing requirements
- Material purchases: PPE, sanitation supplies, physical barriers to restrict access
- Facility charges: will there need to be extra patrols requiring more fuel, etc.
- Communication: signage, public announcements, media campaigns
- The inclusion of emergency funding reserve
- The ability to quickly and effectively apply for emergency funding
- Procedures for the application to the DCNA Emergency Fund (request to Trust Fund committee in writing, request in writing to board chair etc.)
- Ensuring that Financial reporting requirements are up to date and are able to be submitted with short notice

These items should be included in annual budget requests to ensure funding is freely available if needed.
Conclusion

A safe and appropriate response is only possible through careful planning and preparation. Once a plan has been created, only slight adjustments should be required to tailor the response to a specific outbreak. Remember, human safety must be the most important consideration, so it’s better to react proactively and conservatively at first, as restrictions can always be lessened later.

The nature of these emergency responses is that they will always be different and provide a unique set of challenges which will need to be considered. It is important that all park staff feels confident and capable of helping to define these needs for each specific park and implementing them in a safe and timely manner. With open communication and thoughtful response, pandemics can be contained as much as possible ensuring a safe environment for staff and visitors alike.