Introduction

While each camp reopening should be addressed on a case-by-case basis, there are several general approaches for minimizing the risk of COVID-19 transmission while reopening summer camps and campgrounds. The strategies presented in this document are intended to serve as a general framework for developing comprehensive plans to reduce the risk to campers and staff. The guidance provided is aligned with recommendations of the Centers for Disease Control and Prevention (CDC) for youth and summer camps (CDC, 2020) and the American Camp Association (ACA, 2020), and provides specific examples of guidance for return to normal operations for certain types of summer camps and campgrounds.

The guidance outlined below is aimed at reducing the risk of transmitting COVID-19, with the assumption that each facility or campground is also adhering to local, state, and federal health guidance on COVID-19. Recommendations outlined in this document address the key points on this page and suggest some approaches to the unique challenges faced by summer camps and campgrounds.

Points to consider for camps and campgrounds:

> Implement strategies to minimize the risk of COVID-19 transmission among staff and campers arriving at the facility or campground.
> Take precautions to minimize the risk of COVID-19 transmission among campers and staff in common spaces (e.g., cafeterias, playgrounds, restrooms, showers, etc.).
> Develop and execute a management plan for individuals with, or suspected to have, COVID-19.
> Establish a communication protocol regarding COVID-19 risks and safe-operations for campers, their families, and staff.

General COVID-19 Mitigation Strategies

The reopening and operation of campgrounds and summer camps should be approached on a case-by-case basis and should consider the needs and issues specific to each location and population. While each campground or summer camp may have unique challenges, the following general guidance can be applied:

OVERARCHING STRATEGIES

> Re-opening should be controlled and monitored.
  > Consider a phased re-opening approach that first allows only small groups of campers and limited activities. Camp facilities should remain up-to-date on local case loads and determine whether regional gating criteria have been met before considering later phases with more campers and expanded activities (see the CDC/White House phased approach guidelines).
– The number of campers and/or camping sites should be reduced (e.g., to 50% capacity) or additional space should be provided to ensure adequate physical distancing during all camp activities.
– To the extent possible, keep groups of campers together for the duration of camp, minimizing group mixing.

> Evaluate the procedures before, during, and after implementation, and make necessary adjustments to mitigation procedures.

**ARRIVAL TO AND DEPARTURE FROM FACILITIES**

> Check-in and check-out procedures should be streamlined, and contact between campers and staff should be limited.
– The use of staggered and assigned arrival and departure times should be implemented.
– Online check-in and check-out procedures should be utilized to minimize paperwork, and camper check-in times should be staggered when possible to prevent crowding.

> Electronic payments, including online transactions or no-touch credit card readers, should replace the use of cash where possible.
– Hands should be washed or sanitized between each physical currency transaction.

> A written policy emphasizing the need to stay home if a camper, staff, and/or a family member:
1. Is experiencing COVID-19 symptoms; OR
2. Has tested positive for COVID-19; OR
3. Had close contact with a person who tested positive or experienced symptoms of COVID-19.
– Ensure all campers, staff, and family have this policy and understand it, and remind them of this policy at the beginning of each day.

**MAINTAINING WELLNESS & ENFORCING DISTANCING**

> Health screenings of campers and staff should be conducted by trained first aid/medical personnel in a designated screening area upon arrival each day, according to CDC guidelines. Health screenings and record-keeping should have human resources and/or legal oversight to ensure privacy requirements are met.

> Communicate and enforce a handwashing policy requiring soap and water. Provide hand sanitizer with at least 60% alcohol (60% ethanol or 70% isopropanol) in areas where sinks are not available.
– Post signs with instructions at handwashing areas.
– Consider installing mobile handwashing stations throughout the facility, and/or provide hand sanitizer to all staff and campers.
– Store hand sanitizer in proper conditions, out of the sun and heat.

> Staff should wear masks at all times, unless having trouble breathing (per CDC guidelines).

> Campers aged two and over (per CDC guidelines) should be encouraged to wear masks at all times, unless an activity prevents them from doing so.
– In the event that a camper is unable to wear a mask for medical reasons or otherwise, enhance social distancing measures so that there is six feet between campers.
– Monitor campers for symptoms of heat stress. Encourage regular water and shade breaks for those wearing masks during outdoor activities. Water should be provided in bottles, rather than from a shared cooler.

> If fans are utilized to cool campers, ensure that they are arranged in a manner so as to not blow air across one camper onto another.

> Discourage staff from congregating at break times. Consider staggering breaks and maintain proper distancing.

> When possible, host group activities outdoors, with social distancing measures in place. Avoid activities that require groups of campers and staff to congregate indoors. When singing songs, for example, do so in small groups outside, with individuals at least six feet apart.

> When indoors, independent activities and/or small-group activities with six-foot social distancing should be provided. Tape and other floor markers may be used to delineate spacing.

> Increase ventilation where safe and feasible (e.g., opening windows and doors) (See ASHRAE guidance).

**FOOD AND BEVERAGES**

> Food and beverage operations should follow established health guidelines:
– Food handling and service should follow the guidelines provided by the Food and Drug Administration (FDA) and the CDC.
– Do not serve family-style or buffet meals.
– Use disposable utensils and dishes, if possible. If dishes must be washed, ensure dishes are handled with gloves, washed in hot soapy water, or washed in a dishwasher.
– Provide no-touch disposal bins.
– Dining areas should have reduced capacity and automated hand sanitizer dispensers.
– Consider staggering lunch and/or restricting lunch to small groups in separate spaces, rather than large groups in a communal dining room.

> Limit the use of communal, high-touch hydration resources, such as communal water fountains and hoses, in favor of individually packaged products, such as water bottles.

> Campers should not share food or beverages with each other.

**DISINFECTION MEASURES**

> Shared facilities (e.g., restrooms; picnic areas) should be monitored and disinfected on a regularly scheduled basis.

> Equipment (e.g., sports equipment; musical instruments) or craft supplies should not be shared:
– Campers should be encouraged to bring their own equipment and supplies, if possible.
– When communal equipment is necessary, equipment should be disinfected with Environmental Protection Agency (EPA) registered disinfectants between uses (EPA List N).

> Increase frequency of routine cleaning and disinfecting.

> Encourage campers to prepare supplies ahead of time and travel directly to campsite, avoiding stops at grocery stores and gas stations, if possible.

The table on page 3 provides additional information and examples regarding the reopening of specific types of summer camps and campgrounds.
TABLE 1: Unique Challenges and Infection Prevention and Control Considerations for Select Summer Camps and Campground Venues

<table>
<thead>
<tr>
<th>Selected Summer Camps and Campgrounds</th>
<th>Unique Challenges</th>
<th>Infection Prevention Control Options</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Band/Music Camp</strong></td>
<td>&gt; Marching band formations (typically more than six feet between musicians) &lt;br&gt; &gt; Cannot wear masks to play instruments &lt;br&gt; &gt; Sharing of instruments</td>
<td>&gt; Create formations where players are spaced six feet apart &lt;br&gt; &gt; Consider moving all practices outdoors, or indoors in spaces large enough for individuals to be spaced six feet apart</td>
<td>&gt; Designate areas for each camper to store personal equipment</td>
</tr>
<tr>
<td><strong>Educational Camps</strong> (e.g., art, math, space, and science camps)</td>
<td>&gt; Largely indoors &lt;br&gt; &gt; Often rely on group activities &lt;br&gt; &gt; Activities often require enhanced adult supervision</td>
<td>&gt; Increase spacing between student seating &lt;br&gt; &gt; Provide independent activities, when possible &lt;br&gt; &gt; Limit activities requiring enhanced supervision</td>
<td>&gt; Have campers bring their own supplies (e.g., pencils; calculators) &lt;br&gt; &gt; Consider making activities electronic; have campers bring their own electronic devices or provide one device per camper for the duration of camp</td>
</tr>
<tr>
<td><strong>Sports Camp (e.g., baseball; soccer; etc.)</strong></td>
<td>&gt; Shared equipment &lt;br&gt; &gt; Handshakes, high fives &lt;br&gt; &gt; Sidelines/benches &lt;br&gt; &gt; Cannot wear masks in most sports &lt;br&gt; &gt; Communal water and hydration stations</td>
<td>&gt; Run drills with limited person-to-person interaction, if possible &lt;br&gt; &gt; Communal water fountains should not be used &lt;br&gt; &gt; Prohibit spitting &lt;br&gt; &gt; Discourage parent viewing of the camp &lt;br&gt; &gt; Maintain six feet between all counselors/staff and players, and always wear masks when not playing</td>
<td>&gt; Encourage campers to bring their own equipment, when possible &lt;br&gt; &gt; Provide campers with plenty of bottled water and individual refreshments</td>
</tr>
<tr>
<td><strong>Overnight Camps</strong></td>
<td>&gt; Common spaces such as showers and restrooms &lt;br&gt; &gt; Beds and sleeping accommodations are usually in groupings &lt;br&gt; &gt; Sometimes campers may travel from areas where COVID-19 is prevalent &lt;br&gt; &gt; &gt; &gt; &gt;</td>
<td>&gt; Beds should be set at least six feet apart, with special consideration to the ventilation in the room &lt;br&gt; &gt; Campers should sleep head-to-foot, including in bunk beds &lt;br&gt; &gt; For common spaces such as bathroom sinks, place Plexiglas barriers between each &lt;br&gt; &gt; Have shower time at a designated time for certain groups &lt;br&gt; &gt; Groups of campers should stay together throughout the entire camping experience – limit interactions with groups not sharing the same cabin</td>
<td>&gt; Designate areas for each camper to store personal belongings</td>
</tr>
<tr>
<td><strong>RV Campgrounds</strong></td>
<td>&gt; Limited or no staff to disinfect between users, screen campers, or provide medical assistance &lt;br&gt; &gt; Potential incompatibilities with disinfectants &amp; septic systems</td>
<td>&gt; Post signage to remind users of proper social distancing measures while using dump station &lt;br&gt; &gt; Only allow one RV to use the dump station at a time, even if multiple hookups are available</td>
<td>&gt; Develop schedule for regular cleaning of dump station equipment (water hoses, spigots, garbage cans) (see RV guidance here) &lt;br&gt; &gt; Disinfect restroom facilities frequently &lt;br&gt; &gt; Disinfect camp equipment (such as picnic tables, lawn chairs, hand railings) frequently</td>
</tr>
<tr>
<td><strong>Rustic Campgrounds</strong> (limited facilities)</td>
<td>&gt; No staff present to disinfect between users, screen campers, or provide medical assistance &lt;br&gt; &gt; Remote locations with limited access</td>
<td>&gt; Encourage camping with family members and others known not to have symptoms and to have maintained safe practices in the two weeks prior to the outing &lt;br&gt; &gt; Limit use of shared shelters to one group, or to the number of campers/groups that can maintain adequate distancing</td>
<td>&gt; Remind campers to bring disinfection supplies when using shared shelter spaces &lt;br&gt; &gt; When possible, send staff to remote shared shelters to perform regular disinfection</td>
</tr>
<tr>
<td><strong>Campgrounds with tenting</strong></td>
<td>&gt; Shared water/food facilities &lt;br&gt; &gt; &gt; &gt;</td>
<td>&gt; Book every other campsite to extend distance between camping groups &lt;br&gt; &gt; Close communal locations; when not possible, limit the number of campers who can be in these areas at one time &lt;br&gt; &gt; Limit the number of campers allowed in the restroom at a time</td>
<td>&gt; Develop a schedule for regular cleaning and disinfecting of restrooms &lt;br&gt; &gt; Increase maintenance staff for facility disinfection and cleaning</td>
</tr>
</tbody>
</table>
Strategies for Selected Summer Camps and Campgrounds

The following examples provide additional information regarding how the strategies in Table 1 can be implemented at summer camps and campgrounds. These are not exhaustive examples, and owners and staff reopening these venues should consider and address the specific (and possibly unique) needs of their facilities on an individual basis.

SUMMER CAMPS EXAMPLE: BAND & MUSIC CAMPS

Marching band and other music camps pose unique challenges. As many other educational camp activities can be moved to virtual or electronic formats, marching bands and musical ensembles may not be able to do so because of the number of members and the nature of their practice. Mitigating viral spread is particularly difficult in music camps because playing wind instruments requires deep breathing, blowing through an instrument, handling mouthpieces that have been contaminated with saliva, and cleaning (e.g., inside the instrument and emptying spit valves). Further, indoor practicing and marching band field formations can involve tight spacing between players. In addition to the guidance provided in Table 1, the following strategies can be used to mitigate risk of virus spread in these camps:

- Prevent the sharing of instruments, if possible; as noted in Table 1, shared instruments (e.g., drums, pianos) should be disinfected between users.
- Consider using polyester or cotton covers (typically used for decorative purposes) over the bells of brass instruments and some woodwinds (e.g., saxophones) to limit aerosol spread from the bell.
- Direct students to release spit valves into a lined trash receptacle, away from the group.
- Ensure that all students promptly sanitize or wash hands after playing and putting away their instruments.
- Students playing instruments that do not require mouthpieces (e.g., percussion), should wear masks during practice.
- Ensure students wear masks and maintain social distancing when on breaks.
- Players should wash mouthpieces with warm, soapy water after each session.
- Reeds should be dipped in at least 70% isopropyl alcohol, rinsed, and left to dry.
- Do not hold ensemble practices in small rooms; consider spacing players in large auditoriums or outdoors.

CAMPGROUND EXAMPLE: RUSTIC CAMPGROUNDS AND REMOTE HIKING FACILITIES

Increased emphasis on social distancing and restrictions or closures of more traditional camping facilities has led to a surge in popularity of remote outdoor recreational activities. In an effort to spend time outdoors, many people may visit privately owned, state, regional, or national campgrounds. While commercial campgrounds may have staff available to perform regular disinfection of common spaces, rustic campgrounds with limited facilities may be less regularly serviced by staff, if at all. Additionally, due to regional or state-specific restrictions, remote shelters located along seasonally frequented hiking trails may not have the same volunteer support staff that they had during previous summer seasons when social distancing measures were not in place. Safe use of these shared spaces depends primarily on the user. However, staff responsible for rustic campgrounds may consider providing guidance for campground users online, or at the campground entrance or trailhead. Note that many of these recommendations require effective communication and cooperation from both the campground staff and campers:

- Encourage campers to only travel with members of the same household, and in groups of 10 or fewer.
- Provide preparation guidance to campers, including a list of disinfectant supplies they should consider acquiring prior to arriving at the campsite.
- Instruct campers to maintain social distancing on trails and wear a mask when passing other hikers not a part of the same group.
- At rustic campgrounds, instruct campers to disinfect any high-touch, non-porous surfaces before using and before departing the campsite, and provide disinfectant supplies, if possible. For those car-camping at rustic facilities, consider using disposable tablecloths on picnic tables and discarding after use.
Summer Camps and Campgrounds: COVID-19 Mitigation Strategies

Given the unique challenges faced by summer camps and campgrounds during the COVID-19 pandemic, including shared facilities and camper and staff contact, some summer camps and campgrounds have responded with alternative plans to maintain operations and camper participation. Selected examples of these creative measures are presented to provide camp and campground management additional ideas to consider when formulating individual plans for reopening and returning to normal operations:

**Cincinnati Zoo & Botanical Gardens Weekly Summer Camps**

While the Cincinnati Zoo & Botanical Gardens remains closed indefinitely in the face of COVID-19, the staff at the zoo have redesigned the *weekly summer camps* offered to preschoolers through eighth graders. Instead of the traditional on-site camps this summer, the Cincinnati Zoo & Botanical Gardens is offering virtual summer camps. Separated by age group, each camp will take place during designated hours, offering a unique theme taught by camp instructors through Zoom, including a digital PDF of activities. Elements of the in-person camp have been revamped, including animal encounters, digital zoo hikes, crafts, and songs, so that they can be done remotely. Through this innovative solution, the Cincinnati Zoo & Botanical Gardens is maintaining its educational outreach efforts not only for those in the Cincinnati area, but also for those who normally would not have the ability to attend their summer camps.

**Hoops City U**

The staff at Hoops City U have reconstructed their *summer sports camps* to follow social distancing guidelines. The focus of the camps is on individual skill development, and no group activities or scrimmages will occur. Campers are required to bring their own equipment (e.g., basketballs; water bottles), as Hoops City U will no longer provide the equipment. Communal water fountains will be closed. All campers and staff will maintain six feet of distance, staff will wear masks, campers will be permitted to wear gloves and masks, and drop-off and pick-up procedures will be altered to minimize contact between all campers, their parents, and staff. This unique approach incorporates social distancing guidelines and robust disinfecting measures while still allowing in-person camps to be held.

**Boy Scouts of America**

Boy Scout troops across the country have hosted *virtual campouts* to allow scouts to fulfill requirements for their merit badges while remaining socially distant. Each scout is encouraged to safely set up camp in his own backyard or a nearby camping area, and participate in virtual activities to increase engagement. Tutorials for camp cooking, wilderness skills, campground set-up, as well as other activities, are organized on Zoom, allowing campers and troop leaders to engage with each other. This approach allows scouts to gain the necessary skills to earn merit badges and feel connected to the scouting community, while maintaining the appropriate distance to keep themselves and others safe.

**Conclusion**

Summer camps and campground facilities encompass a variety of settings, programs, and activities. As these summer camps and campgrounds reopen, owners and directors of camp programs should develop reopening plans that are cognizant of the specific needs and challenges presented by their facilities and proposed activities. Risk mitigation efforts will need to be tailored to address these needs and should include identifying and modifying normally close-contact activities; defining frequently touched surfaces; and establishing effective procedures for disinfection; encouraging campers to follow standard precautions of maintaining physical distance from others; wearing masks when around other campers and staff; and frequently washing (or sanitizing) hands. Plans to reopen should include multiple layers of protection and be specific and flexible, so that protocols are easily understood, and revised procedures can be developed and implemented as conditions change. With detailed planning, training, communication, and flexibility, many camps may be able to provide virtual/electronic alternative activities, or adapt their summer camp programs and campgrounds to reduce the potential of COVID-19 transmission.

**Resources**

**GENERAL**


The EPA has published a frequently updated list of disinfectants for use against SARS-CoV-2: [https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2](https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2)


**SUMMER CAMPS**

The CDC has published recommendations for youth and summer camps: [https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/summer-camps.html](https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/summer-camps.html)

The American Camp Association has provided resources for summer camps: [https://www.acacamps.org/resource-library/coronavirus-information-camps](https://www.acacamps.org/resource-library/coronavirus-information-camps)


**CAMPGROUNDS**

The National Association of RV Parks & Campgrounds published an array of documents to facilitate reopening: [https://acacamps.app.box.com/s/7qkh9buu3ntttxs2y38gq4z94631lag](https://acacamps.app.box.com/s/7qkh9buu3ntttxs2y38gq4z94631lag)

The Minnesota Department of Natural Resources has provided guidance for outdoor recreation facilities: [https://www.dnr.state.mn.us/aboutdnr/covid-19-outdoor-recreation-guidelines.html](https://www.dnr.state.mn.us/aboutdnr/covid-19-outdoor-recreation-guidelines.html)
Ms. Heather Lynch is an environmental health scientist with more than 10 years of experience in toxicology and human health risk assessment. Her areas of expertise include systematic review and weight-of-evidence analyses, controlled human exposure study design, and the toxicity of heavy metals and perfluoroalkyl and polyfluoroalkyl substances (PFAS). Ms. Lynch has published numerous original peer-reviewed articles (including systematic reviews, weight-of-evidence evaluations, and commentaries) on a range of substances and health effects. heather.lynch@cardno.com

Dr. Amanda Buerger is a Health Scientist with Cardno ChemRisk. Dr. Buerger has performed toxicology, public health, and ecological research for a number of industries. She earned her PhD in Environmental Health from the University of Florida. amanda.buerger@cardno.com

Ms. Melanie D. Nembhard is a board-certified industrial hygienist with four years of professional experience in industrial hygiene, exposure assessment and human health risk assessment. She earned her Master of Science in Public Health (MSPH) in Occupational and Environmental Hygiene from the Johns Hopkins Bloomberg School of Public Health. Ms. Nembhard has been involved in assessing risk to workers, consumers, and communities exposed to a variety of chemical and biological hazards, such as asbestos, benzene, butadiene, diacetyl, silica, worker safety, welding, various inhalation irritants, and mold. melanie.nembhard@cardno.com

Ms. Laura Hallett is a Senior Associate Health Scientist with experience in industrial hygiene, quantitative exposure assessment, human health risk assessment, and occupational safety. Ms. Hallett earned her Master of Science in Occupational and Environmental Health with a focus in Industrial Hygiene from the University of Iowa in 2017, and a BS in Environmental Health Science from the University of Georgia. At Cardno ChemRisk, she has provided support to expert witnesses in litigation projects and quantitative support for litigation and non-litigation projects, primarily related to asbestos and talc exposures. Additionally, she has extensive experience in designing and implementing industrial hygiene and occupational health assessments for clients. laura.hallett@cardno.com

Cardno ChemRisk is a globally renowned scientific consulting firm with expertise in evaluating and understanding human health risks, technical capabilities, industry leadership, and a pioneering spirit. The firm provides sound, practical, state-of-the-art scientific solutions to human health and risk challenges used to protect worker health and understand and manage health hazards and risks.

Cardno ChemRisk is not legally responsible for all claims, causes of action, and demands, whatsoever, any third party may incur on account of damage, loss or injury resulting from adhering to these guidelines and recommendations. These documents were primarily developed to guide businesses and organizations without certain occupational health and safety resources to develop science-backed procedures for limiting the spread of the coronavirus. They are subject to all local, state, or federal directives, laws, or orders about operations and should only be used if they are not in conflict with them. These documents are subject to revision as needed.