

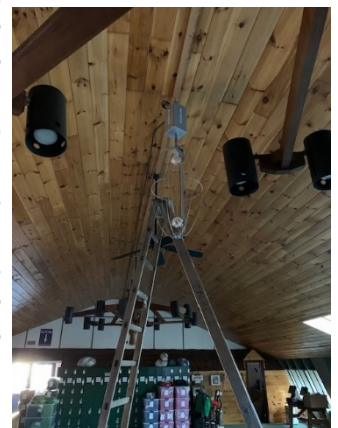
## Mount Peter Opens Season with UV Sterilization Protocols

Every snow spots venue faces the same challenges this season... and probably for many seasons to come. How can Covid-19 be comprehensively and cost effectively addressed? To solve the problem, area owners Rebecca Kullberg, General Manager and Amy Cutler, Executive Manager evaluated dozens of sanitizing technologies to determine what would yield the best results at an affordable capital expenditure, and in time for the 2020/21 season. The objective was to protect indoor and outdoor gathering areas as well as sterilizing chairlifts. The first realization was that the solution should not be worse than the problem. Chemical foggers and sprays have many health issues that include allergic reactions, skin irritation like contact dermatitis, and a propensity to freeze when used outdoors. After reviewing “How To” videos for foggers and chemical applications, the processes appeared too time-consuming and difficult. Ultraviolet (UV) sanitizing stood out as the most practical, but industrial-strength units cost upwards from \$100,000 and were primarily designed for hospital settings. Less expensive equipment did not have the power to effectively sterilize environments within short enough times.

Coincidentally, Rebecca discovered that Ultra-Tech™ Lighting that supplied Mt. Peter with their Snow-Bright™ slope fixtures had a full line of sanitizing UV fixtures called Sterile-Bright™. These are the most powerful full-spectrum UV units she could find and are capable of sanitizing Mt. Peter’s entire indoor venues in minutes rather than many hours. Equally important, fixtures could be permanently mounted and activated with locked timer switches, eliminating the need for workers to spray chemicals using foggers. UV sanitizing works as well outdoors, too. Thus, Sterile-Bright™ provided the complete and ideal solution. For lifts, mounted Sterile-Bright™ units can sanitize an unoccupied chair when it rounds the wheel at the top and bottom. The installation could be fast and inexpensive, only requiring standard 2 3/8<sup>th</sup> galvanized pipe at a sufficient height to clear the chair while providing the necessary amount of UV energy to deactivate any viruses or bacteria on the chair and safety bar. The one challenge is to make sure the UV is not visible to avoid possible eye exposure. This is being addressed with banners that are lifted on both sides of the chair path with sufficient room for clearance.

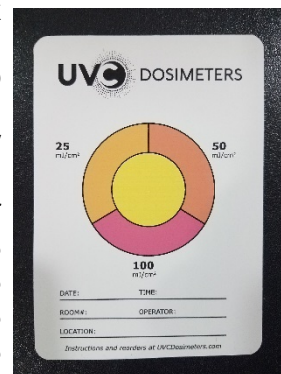


For indoor venues, a single 400W Sterile-Bright model STRL-DD-400WUV was installed in the main 2,337 square foot cafeteria which can be sanitized with UV and ozone in about five to seven minutes. This leaves plenty of time for customary cleaning. One objective was to be able to rapidly sanitize during the day by evacuating the room and deploying the UV light. Although the process is scheduled for pre-opening and post-closing, there could be a situation requiring midday treatment. This “chandelier” UV fixture is the same as is featured in the Orange County Choppers showroom which sanitizing more



than 5,200 square feet in a tad over ten minutes.

For their 2,840 square foot Sunrise Lounge, Mt. Peter chose two 2' x 2' 250-watt "troffer" ceiling units. Since the lounge does not have a suspended (grid) ceiling, these fixtures were directly mounted to ceiling beams. Again, time was of the essence to ensure rapid turn-around with thorough sanitizing. All spaces were tested using UV dosimeter cards that measure the amount of energy received on surfaces at various distances from the units. It takes 25mj/cm<sup>2</sup> of energy to deactivate coronavirus like Covid-19. Dosimeter cards are easy to use and inexpensive. When the "control circle" in the middle matches the color of segments of the outer ring, you have exposed to that level of energy. The card center is yellow before exposure.



Troffers are placed equidistant from the entrances (short walls) to provide uniform coverage, end-to-end. With only five minutes, the long walls register 25mJ/cm<sup>2</sup> exposure, eliminating the threat of Covid-19. The fixtures are attached to a locking single-pole switch in line with a standard rotational timer. Patrons cannot intentionally or accidentally activate fixtures. A major added advantage is the conspicuous appearance of these space age looking UV lamps. Customers immediately notice them and are made aware that all Mt. Peter facilities are

sanitized with UV technology. This gives skiers, riders, and parents a sense of safety and comfort.

Tubing is addressed using a pop-up UV resistant tent that facilitates pushing tubes through UV exposure after each return. When customers are finished with their session, the tube is sanitized with a quick UV treatment. The tent shields eyes from exposure. The process is fast, effective, and easy. Every procedure can be verified using dosimeter cards. A 2' x 2' troffer is mounted in the top of each tent. The same approach is used to sanitize returned rental equipment. The added advantage of ozone is its powerful deodorizing capability. Ozone is able to neutralize skunk musk.



For smaller spaces, bathrooms, and kitchen facilities, Mt. Peter is using the Sterile-Bright™ model STRL-PU-250WUV hand-portable unit that can be moved from area to area. This is an extremely versatile device that is able to sanitize the outdoor picnic area by setting it on strategically located tables. This is the only practical way to sterilize outdoor surfaces in cold temperatures because wet applications freeze. Bathrooms can be maintained germ-free and fresh-smelling with the dual modality of powerful UV plus germicidal ozone. Since the hand-portable units are light (under 20 pounds) and easy to use, they can be deployed several times during the days and nights.



Covid-19 has presented the snow sports industry with significant challenges. The good news is that Ultra-Tech™ Lighting is already well known in the industry for its unique induction light approach to slope illumination. That experience translates in tailored sanitizing solutions for winter venues.

