



Funworld

# Attractions Do Their Part to Support Emergency Response

## Parks change tracks to manufacturer and supply PPE

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Deno "D.J." Vourderis started using Deno's Wonder Wheel's 3D printer to create face masks.

"When I saw hospitals and other places were running out of PPE, I immediately thought about 3D printing," says Deno "D.J." Vourderis, a third-generation member of the family that owns and operates Deno's Wonder Wheel Park at Coney Island in Brooklyn, New York. Since the park went into an extended hibernation due to the coronavirus pandemic, Vourderis has been manufacturing face shields and donating them to area facilities. It's just one of the ways that parks and attractions have been doing their part to help the emergency response in their communities.

Why is the park in possession of 3D printers? Vourderis taught himself to custom-make 3D parts for the park's classic rides. He got the idea while

watching a documentary about the printers. When he learned they could accommodate a variety of materials such as nylon and polyethylene, he was sold.

Deno's uses most of the 3D printed parts for its impressive collection of vintage kiddie rides manufactured by the W.F. Mangels Company. "They had all metal parts back in the 1940s and 50s," Vourderis explains. "Since then, plastics are the new standard, providing better stability and durability than metal." Among the parts he has printed are bushings, cap nuts, and gears. (Fun fact: The main gear for the Wonder Wheel, which opened in 1920 and is celebrating its 100th anniversary this year, was made of rawhide. The park needed to replace the part every year until it had a plastic gear made in 1992. It has since been changed only once.)

During the four-year period he's been using the printers, Vourderis says he has created dozens of parts for eight different rides. Instead of subcontracting with a machine shop, the in-house parts save time and money. Since 3D printed plastic parts are self-lubricating, they also save on lubricants. Once he develops a template, Vourderis says that he can easily use it again to make another part on demand. It takes about two to four hours to print a part.

Vourderis spent about a week perfecting the template and working out the kinks so that he could efficiently create face shields in the makeshift shop he set up in the garage at his house. "Now I can knock one out every 12 minutes," he notes, adding he can generate 100 of them per day. Vourderis has been putting in 14-hour days and keeping a laser cutter running unattended through the night.

At first, he donated the equipment, which is imprinted with "Deno's Wonder Shield," to his mailman, cashiers at a nearby grocery store, and other essential workers. Then he gave them to Coney Island Hospital and area nursing homes. Now he brings them in bulk to NYC Makes PPE [<https://nycmakesppe.com>], an organization that distributes equipment to underserved healthcare workers and organizations in the city.

PortAventura World in Salou, Spain donated 500,000 euros for the purchase of respirators, which were given to seven hospitals in the province of Tarragona. "In these exceptional times, we want to dedicate all our efforts and contributions toward supporting the health system," says Arturo Mas-Sarda, the resort's president. The donation was made "to recognize and offer our appreciation for the great dedication and efforts of healthcare professionals who are fighting on the front line to combat the COVID-19 outbreak," he adds.

When team members at Six Flags America in Maryland discovered 2,880 non-branded ponchos in the park's warehouse, a light bulb went off that they could be repurposed as PPE. "We wanted to

figure out a way to stand with our community,” says Denise Stokes, communications manager. “We want to let them know we are in this fight with them.”



Six Flags America donated unbranded ponchos to Johns Hopkins and a local hospital.

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The ponchos had been purchased a couple of years ago when rain had been forecast for a park buyout. They weren't used, however, because the day turned out to be beautiful. Stokes says that the park donated them to the Johns Hopkins Unified Command Center in Baltimore, Maryland, which in turn distributed them to area nursing homes. Another batch went to Doctors Community Hospital in Prince George's County. The medical center's doctors and nurses wear them over the top of their scrubs as an extra layer of protection.

“We've got another 1,2000 Six-Flags branded ponchos,” says Stokes. “We're happy to donate those as well.”

Dollywood in Tennessee also donated ponchos to first responders in Sevier County. In addition, members of its wardrobe and costume shops sewed more than 3,500 facemasks for patients, nurses, and doctors at East Tennessee Children's Hospital.

“The fabric is very recognizable to me,” says Wes Ramey, the park's senior public relations manager. Using surplus material from the shops, the decidedly non-standard-issue masks reflect the lively attire the park creates for its performers and team members. “They're definitely colorful, including some that look like American flags and others that are filled with sunflowers,” Ramey adds.

Other attractions that have supported response efforts include the Chimelong Group in China, which shipped 5,000 medical grade protective masks to WhiteWater in Canada for a donation to St. Paul's Hospital in Vancouver. Walt Disney Parks and Resorts donated 150,000 ponchos to MedShare, a humanitarian aid organization, for distribution to medical facilities in the United States. It also donated more than 100,000 N95 masks to New York, California, and Florida.

“The world can be a pretty dark place, especially now,” says Vourderis. But, he adds, it can also bring out the best in people when they demonstrate compassion. Deflecting praise for the long hours he's been putting in to make Deno's Wonder

Shields, Vourderis says, "It's all of New York City. It's the entire world. People are generally good. They want to help each other."

*For more information on managing the impact of COVID-19, visit [IAAPA's resource page](#).*

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