## Case Study: Medical



No Hassles. No Surprises. No Complications. Only Solutions.

Meredith-Springfield provides packaging solution for healthcare industry

New canister prevents leaks during shipping of dental waste

When asked by a packaging supplier to find a solution for a water tight package that contained remnants of dental waste, Meredith-Springfield Associates, Inc., found a solution that made its client smile.

The supplier was working for a client that provides the healthcare industry with packaging that prevents toxic emission into the environment.

For this particular project, the canister in question was being shipped through UPS, and the company wanted to go above and beyond to ensure nothing would leak in transit. The supplier reached out to Meredith-Springfield because of their willingness to engineer a design for a new bottle from scratch.

The corresponding year-and-a-half long research and development process resulted in at least a half dozen prototypes and another nearly half dozen production samples before the final product was created.

The project was especially challenging as it involved the transporting of dental waste. There were many guidelines that had to be followed and the product spec was very specific, right down to the torque of how tightly the cap was to be screwed onto the container.



## No Hassles. No Surprises. No Complications. Only Solutions.

Considerations included the thickness of the plastic, height and width of the container, and how many turns it would take to get the cap to the "locked position."

"There's nothing standard about this bottle," said Dwight Lowe, director of sales for Meredith-Springfield, based in Ludlow, Mass. "We had to take a lot into consideration and make sure that anybody – regardless of the size and strength of their hand – could screw this cap on correctly. It had to fit any person's capabilities and it had to be secure enough to be transported through the postal service."

Meredith-Springfield constructed molds and conducted design experiments to create the extrusion blow molded bottles, which are made out of HDPE (high density polyethylene) resin. Because the containers are used for shipping dental waste, they were created with 100 percent leak-proof specialty caps – made from a partner injection molder – and included liners that were inserted inside, said Lowe.

For the packaging supplier, Meredith-Springfield became a "true partner" throughout the whole research and development process.

It is this level of customization, innovation, and collaborative spirit that keeps Meredith-Springfield top-of-mind for packaging projects across a wide array of industries.

For more information about this particular Case Study and other work provided by Meredith-Springfield, visit meredithspfld.com or call (413) 583-8600.