



The offices of Drs. Menke and McAllister after the tornado

SURVIVING THRIVING — After Disaster Strikes

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A doll in the street wearing a coat of flecked mud and insulation. A soggy 1981 George Brett baseball card plastered to a jagged maple trunk. An upside-down pickup truck — in a living room — impaled by a 2x4. They're all remnants of lives violently scattered to what would normally be the four winds — except this malevolent wind descended from the heavens to create hell.

Word to the wise: when a little white popcorn cloud disappears before your eyes, you know something ominous is headed your way. Thousands of lives were forever changed beginning at 5:34 pm on May 22, 2011. It was an otherwise normal Sunday afternoon in the peaceful burg of Joplin, Missouri. Dr. Stephen Menke was attending his son's high school graduation. Dr. Edward McAllister was working in his yard with his kids. What happened next knocked their lives — and their community — upside down.

"The sirens went off and it was dark to the west, but relatively clear in our area," Dr. Menke said. "The sirens stopped. We thought it was okay to leave. We were about 10 or 15 minutes from home. We got to within a block of our house, and that's when the tornado hit us.

"It wasn't windy or raining, then all the sudden...rain. Wind. Hail. Windows breaking. My wife pulled into a neighbor's driveway. There were five of us. We ducked into the middle of the car. All this went on for a minute or so. We got out of the car and tried to get into the house...the roof was gone. The center of the tornado went across our backyard. There were pieces of wood lodged into the side of our house. The house across the street was rubble. Our town looked like a city from a World War II movie; just bricks and the rest gone."

Menke's business partner, Ed McAllister, had the same shock. "I was at my house on the west side of town. I had been grilling and doing Sunday afternoon stuff, working in the yard. I didn't realize anything bad was going on until I heard the tornado sirens. There was a little white popcorn cloud in the midst of this black sky...then it disappeared and I told my family to get to the basement.

"I waited with my son out front because my daughter's friend was supposed to be coming over. We could see the rotation left to right at the end of our street. I sent my son to the basement. As the tornado approached, I went inside, opened some windows and there was rain coming in from the east side. I grabbed our dog and ran to the basement just as all of our windows exploded.

"The basement was filled with a cloud of dust that the tornado brought in and sucked out again.

It sounded like someone driving a backhoe over the top of your house.

All kinds of smashes and bangs, then the second half came and it was bigger. We heard a huge smash — my wife's car hitting the roof of our house. Two stories of our house were gone. The roof was gone. The F5 started on our side of the street according to the Weather Channel people assessing the damage. Fortunately, my daughter's friend had pulled into a driveway and was basically okay. I think our oak hardwood floors made all the difference in the subfloor — and maybe us — not being blown away, too."



THE OFFICE: There But Gone

After collecting their wits and whatever else the tornado hadn't swept away or ruined, Drs. Menke and McAllister headed to their office. Two employees rode out the storm unharmed in the basement. The late 1960s building that was originally Dr. McAllister's father's office withstood the impact, but was pushed off its foundation and lost part of its roof. As a result, a lot of modern, relatively new equipment was totaled. A structural engineer determined the building was unsafe. The partners decided to look for new land. Land that had suddenly grown very expensive.

You can imagine the massive disruption this caused in their practices and in others all over town that had also lost their offices. "A few of us retired, but for those of us left, it made us a lot tighter. Dentistry is very competitive but this helped us eliminate that. It's definitely changed enough for us to see each other as friends rather than competitors," Dr. McAllister said. As proof of that, several dentists with undamaged practices opened up their offices for their peers to use until they could get back on their feet again.

Drs. Menke and McAllister started their own rebuilding process relatively fast. A team of Goetze Dental

employees from Kansas City and Springfield were on the scene within 48 hours — which was the soonest the National Guard would let them enter the area. Chris Wilhoit, Equipment Specialist, was one of those who went to Joplin. "We started with the office computers to see what client records we could salvage. Then we began the process of seeing what equipment we could salvage. We got an x-ray machine that was intact out before the rain ruined it. We also retrieved five chairs (one of Dr. Menke's clients owns an upholstery shop and reupholstered the chairs so they look brand new), an air compressor and a vacuum pump. The force of the tornado blew debris into a lot of equipment and made it unusable. Past that initial time, we started to think how we could help our clients get through this," said Wilhoit.

So how do you help get your clients through \$2 million in damage? It should be noted that Drs. Menke and McAllister were not Goetze's only clients affected by the tornado. Dentists all over town were in a similar if not the same situation. How do you get them back up and running as soon as possible to preserve the health of their business, of jobs in the community, and of the community itself?



Four trailers served as temporary space while the new office was designed and built

Putting Trailers to Work

You start with a novel idea from Goetze Vice President Equipment (now retired) Gary Lewis. There is a trailer business across the street from Goetze's Kansas City headquarters. Lewis suggested using those trailers to set up temporary offices.

Drs. Menke and McAllister gave an enthusiastic green light, and the Goetze team went to work. Chris Wilhoit and Curt Huwe helped the dentists determine what equipment, supplies and furniture were needed.

Goetze's Senior Interior Designer Inga Paul made the trailers a working reality from the ground up. She and the rest of the Goetze team planned where to put the plumbing, heavy equipment and interior details such as cabinetry. As a designer, Paul also planned furniture, colors, cabinetry and all the other details that go into a

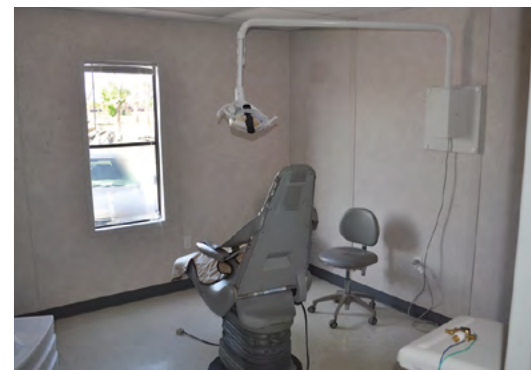
comfortable, inviting and efficient dental office. In this case a makeshift one.

It can be said that eight was the magic number for the temporary space. Four trailers were combined to make eight operatories within a 50'x70' space. The trailers were put on an adjoining lot that the partners owned. The dentists utilized the equipment that was still intact, and added eight operatory lights, curing lights, and eight delivery units — among other equipment and supplies. The practice was back up and running just eight weeks after the tornado.

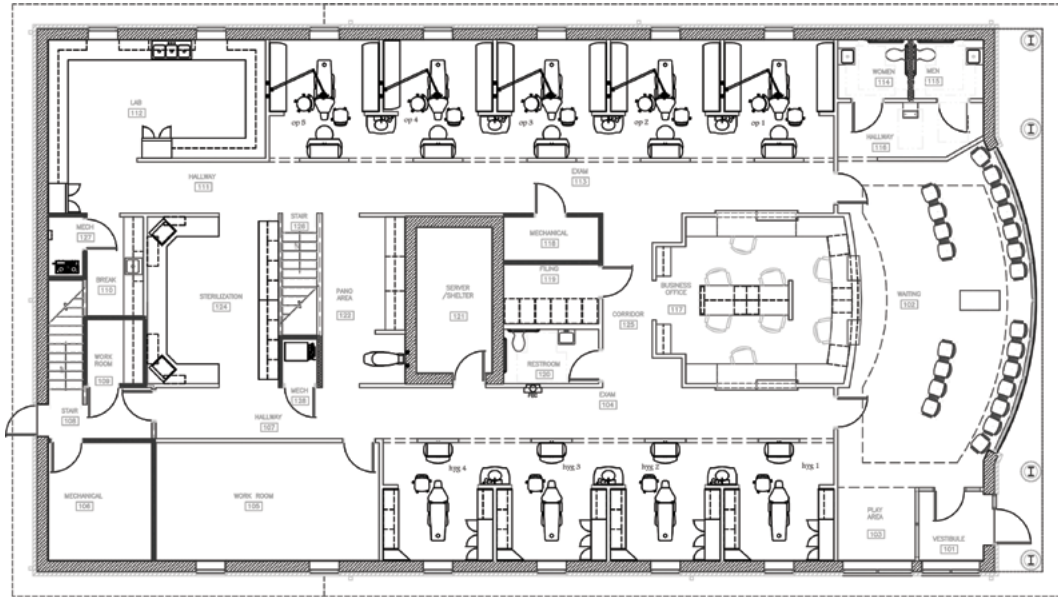
“ I think the doctors did a really good job of knowing what they wanted to see and the direction they wanted to go, even in the early stages, which helped us expedite faster. They were working split shifts and were able to meet with us and get this horrible situation turned around to get what they wanted,” said Paul.



The patient waiting room in the trailers



One of the operatories in the trailers



...While Creating New Space

Concurrent to all of this, the team was also busy creating plans for the new, permanent office. Retrofitting an existing space was considered. But because a dental office is so intensive with plumbing and electrical, the partners decided to build from the ground up. After surveying several land options, the dentists chose a new location in an undamaged area of town about two months after the tornado struck.

Wilhoit, Huwe and Paul again secured equipment, supplies and cabinetry and together with Goetze install teams worked with the partners, their architect, contractors and subcontractors on creating what amounts to a state-of-the-art dream office with much higher efficiency and better flow than the old office space. The new office opened in November of 2012, about 18 months post-tornado.

“We drew some things from the temporary office space, like wider hallways. We sat down with Inga and told her what we wanted, how we wanted the rooms set up. You’ve seen offices you like...we wanted open space in our offices, sinks in between,” said Dr. Menke.

NEW EQUIPMENT LIST

A-dec Wall Mount Light
 A-dec 541 Duo Delivery System
 Air Techniques IntraOral ScanX
 Air Techniques Remote Control Panel
 Air Techniques Remote Water Control Valve
 Aribex Nomad Pro Portable X-ray
 Belmont Quolis 5000 Dental Chair
 Belmont D-66 X-Caliber LR Treatment Console
 Belmont D-5 X-Caliber LR Treatment Console
 Belmont X-Caliber Assistant Side Console
 Belmont X-Caliber Doctor Side Console
 Belmont D-8 Sink Console
 Dentsply Cavitron Jet Plus Gold
 Miele G7881 Dental Washer Disinfector
 Quala Ultrasonic Cleaner

Belmont provided Custom Cabinets for the following areas:

- » Sterilization
- » Lab
- » Hygiene
- » Panoramic Area
- » Break Room
- » Work Room
- » Business Office
- » Locker Area
- » Kitchen Area

A few necessary measures from the temporary space made the jump into the new one. The dentists found they loved the portable convenience and high-tech impact of the Nomad handheld x-ray machines, so they decided to keep using them in the new space. "You can do an x-ray anywhere, and you don't need so many machines. You can have three instead of eight or nine, plus you don't have a whole wall taken up by an x-ray unit," said Dr. Menke.

Electric hand pieces also made the jump. The doctors like that they're quieter than the pneumatic ones they had previously used. They also liked the wireless LED rechargeable curing lights, a convenient improvement over corded halogen lights.

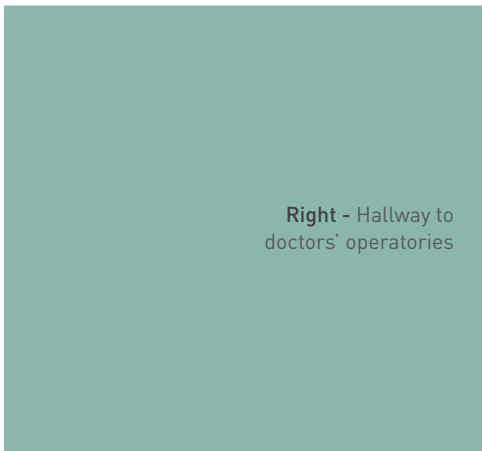
Scheduling was another innovation that carried over into the new space. Drs. Menke and McAllister are partners but they maintain separate books, equipment and staffs, so they began working alternate shifts in the limited space of the trailers. The first was 7am to 1pm, and the second was 1pm to 7pm. They found that patients appreciated this setup, so they kept it. It also allowed everyone involved to spend important time rebuilding their homes — and reconstructing their lives.

The new space has nine operatories where the previous one housed 12, but thanks to the larger space and more efficient use of it, it's now easier to get people in and out. Rooms and hallways are wider which makes a big difference in accessibility. And the doctors' labs are considerably larger than they were in the old space.

The layout was designed for maximum flow and efficiency for every aspect of the practice. "Our staff start in the middle and work their way to the outside. And now we have a new machine that's like a dishwasher, it sanitizes the instruments so they can be processed for putting into the autoclave for sterilization. It's better for



Left - Hygiene operator



Right - Hallway to doctors' operatories



Left - Clean storage in sterilization center

safety that way. We can break up the chain of infectious material. The person we work with to maintain OSHA, CDC and HIPAA compliance considers it a model office," said Dr. Menke.

Designed & Built for the Future



Protecting staff and patients isn't just something that happens on the inside of the new building. The outside walls are built with ICF — insulated concrete forms — 2.5-inch thick Styrofoam blocks put together with rebar and eight inches of poured concrete in between, then another 2.5 inches of Styrofoam. A side benefit is high insulation value...r50 on the walls, r35 on the roof. The building is not only much safer than the previous one, but extremely energy efficient, especially in winter.

Perhaps most importantly, the structure also includes a dedicated tornado shelter with the same exterior ICF construction as well as a concrete roof. It's large enough to house everyone who may be in the building at any given time. The shelter space also protects important equipment such as the computer server containing patient data and office records. Upstairs there's a break room with a TV that can be used for continuing education. There's also a laundry room, bathrooms and doctors' offices.

cheaper maybe but those companies don't take care of me. Goetze was there. They helped us figure out what to do. I know the mail-order companies wouldn't have been here helping us. And that's why we use Goetze. When I need a piece of equipment, when something goes down, boom, I've got it, they're there for us."

As tornados go, the one that hit Joplin, Missouri that Sunday — the one that left boats in trees — was one of the costliest on record. It stole 162 lives and injured 1,150 others. Insured damages amounted to a total of \$2.2 billion making it the most expensive single tornado in U.S. history at that time. An EF-5 tornado is the most destructive that nature can mete out. No one who lives in Joplin was unaffected. But even in darkness, there is hope.

"I've always said that Americans will squabble with themselves until something arises and they band together to fight it. This was one of those times when we banded together to make something good come out of something bad," said Dr. Menke.

Dr. McAllister was pleased with all that happened in the tornado's aftermath. "We started sharing hand pieces to gain economies of scale. Goetze helped us a tremendous amount on that side of it, ensuring we had all we needed to practice again. They did a great job for us; how they got us started made a huge difference. I can't say enough about how they helped us.

"I didn't have to worry about all the stuff you have to worry about when something like this happens. I could've gotten some stuff

Editor's Note: If you'd like to donate to tornado recovery in Joplin or the recent tornados in Oklahoma, visit redcross.org or salvationarmy.org. If you'd like a free app for your mobile device that warns of severe weather, wildfires and earthquakes in your area, visit redcross.org/prepare/mobile-apps.

See more photos at goetzedental.com/officespace.

