

I went in for minor surgery and came out with a vicious infection. A story about contaminated hospitals, dirty doctors and the bacteria that are killing 8,000 Canadians a year

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Photography by
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SUPER-BUGGED

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OSPITALS TERRIFY ME. SO AT 30 YEARS old, I considered myself lucky that I'd never had to stay in one. I'd never broken a bone, still had my appendix, my tonsils were present and accounted for.

My luck ran out last year. I needed to undergo a minor gynecological procedure—in and out the same day—and was booked into Sunnybrook for January 9.

In a last-ditch effort to avoid surgery, I'd called the hospital and asked if the operation should be postponed because I'd had a cold over Christmas. I didn't want to risk infecting some poor creature with a compromised immune system. "You know, a sick person," I practically whispered through the receiver to the nurse on the other end of the line. I was assured there was no cause for concern.

I had kept the number of people who knew about my operation to a minimum: the necessary co-workers, a few friends and my two sisters. I didn't tell my parents, because I knew they'd worry and insist on being involved. As simple as the surgery was, I was anxious enough. I took only ID, keys, my cellphone and cab fare to get home. When I stepped off the bus in front of the hospital, I was filled with a low-grade panic.

The operating room was frigid. When I made a comment about the temperature, someone explained that it was to keep the staff cool under the bright lights. I was covered with a thin blanket, which in my apprehensive state felt more like 100 pounds of lead. The last thing I can remember is a mask being placed over my face and my mild disappointment that no one asked me to count back from 10, like they do on TV. An hour or so later, I came to in a recovery room and for one disjointed moment had no idea where I was or what I was doing there, until a searing pain bloomed in my crotch and spread through me, as if to serve up a reminder.

I spotted my surgeon—a dour 60-something man with a gentle touch—heading my way. He said the operation was a success and handed me a sheet of paper outlining outpatient procedures. I couldn't have sex (without a doubt, the furthest thing from my mind), would need to take frequent sitz baths and could dull the pain with Tylenol 3s.

What he didn't know was that my minor procedure would soon become a major nightmare. At some point during my brief stay, I contracted a superbug. I was one of the estimated 250,000 people a year in Canada who leave the hospital with a new infection—acquired, more often than not, because of unsanitary conditions. Patients check in to hospitals making a silent pact with those who work there that they will leave healthier than when they arrived.

Showing up for a routine surgery and exiting with a potentially deadly infection is not part of the agreement.

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T FIRST MY RECOVERY SEEMED normal, if a little unpleasant. My ex-girlfriend Christina had agreed to play Florence Nightingale. What was supposed to be 12 hours on her pullout couch turned into 48, then 60, as the

after-effects of the surgery and the anaesthetic worked themselves out. There was vertigo, nausea, memory lapses, sharp pain upon urination, and what felt to me like litres of blood loss. My surgeon had said there would be a five- to six-week healing period, and I was scheduled for a follow-up appointment on Valentine's Day, but by the third week in January, I knew something was wrong: walking had become an exercise in gingeriness, and a network of small boils had surfaced in and around my groin.

After some prodding from Christina, I called my surgeon to move up the appointment. He agreed to see me, and after briefly inspecting the boils, he told me I had a minor infection unrelated to the procedure. When I mentioned that I had never before experienced anything even remotely similar, he said the infection wasn't uncommon and that I could have picked up the bacteria anywhere. He handed me a prescription for the antibiotic Clindamycin and sent me home.

At night, I'd sweat through my sheets. When I was awake, I'd concentrate on wishing the skin abscesses away. After a few days, they expanded and burst, which offered almost immediate relief from the pain but left weeping sores. I figured the antibiotics had worked. A couple of weeks later, a small red mark appeared on my right thigh, then another a couple of inches below my left hip bone. This second round of boils was wilier: rather than building up over six or seven days, they became agonizing in less than 72 hours. I made an appointment with my GP at her office in a midtown family clinic. She examined them and explained that she was also unsure of the cause but guessed that it might be related to the operation. She swabbed the smaller spot, now a dime-sized area with a deep, almost black hole at its centre, shipped the sample off to a lab, put me on a different course of antibiotics and booked a follow-up.

Over the next five days, the dot on my hip grew into a shiny, maroon abscess the size and shape of a tangerine. The surrounding skin was hot to the touch; anything more than the most fleeting contact was excruciating. I was still going to work, but every few hours I'd lock myself in a bathroom stall to take deep breaths and, occasionally, cry. After spending an evening lying on my right side

propped up by pillows, stiff as a board, I was utterly discouraged and increasingly afraid. My appetite, usually unshakeable, had all but disappeared—I was subsisting on tea and toast. If I managed to fall asleep, I'd wake up the moment I accidentally rolled over. I was exhausted and in constant pain and had no idea why. And neither, seemingly, did anyone else.

I returned to my doctor's office the following Monday. She had just received my test results: MRSA-positive. I had only a vague idea of what that meant, but her tone indicated it wasn't good. She ordered me to Women's College Hospital's urgent care centre immediately—the wait there was likely to be shorter than in an emergency room—and asked if I had a friend or family member who could go with me.

I phoned my father, who lived around the corner from the clinic. I was still loath to involve my parents, but I no longer had a choice. This was obviously getting serious—that much I'd figured out. Plus, I hadn't eaten anything all day and was feeling wretched. I asked him to bring me a little something—the plainer the better. He arrived with melba toast and water and drove me downtown while I told him what I knew. Once we got to the hospital, it became clear the wait was going to be considerable, and I sent him home. After the gauntlet of admissions, I was shepherded into a private room. I remember thinking how fortunate I was to be able to lie down in a quiet space rather than sit in a chair in the hallway like everyone else. It had nothing to do with luck: hospitals routinely isolate MRSA patients.

When a pair of tag-teaming doctors finally entered the room wearing gowns, gloves and matching sympathetic looks, I thought, This is when they tell me I'm going to die. Saying little, they examined me and decided to drain the abscess on my hip. In an effort to exert a modicum of control over a situation that I felt was going off the rails, I had them describe every step before they took it. They were going to spray what where? And how many needles? And how deep a cut? (An anaesthetic on my leg and groin; eight needles, inserted around the edges of the abscess to freeze what the spray didn't; and deep enough.)

After the procedure was over, a skittish Women's College employee came into the room decked out in a mask, gown and gloves. The mask was unsettling, but I was relieved to meet someone jumpier than I was. She explained the home care process: daily visits from a nurse, who would flush the incision site out with a saline solution, remove stubborn debris with a swab, pack the wound with stiff gauze to keep it open and draining, and put on a fresh dressing. You're young and you're healthy, she said. And though she didn't say it, I knew what she was thinking:

This isn't supposed to happen to you. In reality, that's not quite true.

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UPERBUGS ARE RAPIDLY TURNING into a significant threat to public health. Every year, an estimated 8,000 of the 250,000 Canadians who contract a hospital-acquired infection die from it—a number greater than the combined annual toll from

breast cancer, car accidents and AIDS. Like many unjust things, hospital-acquired infections often target the elderly, people undergoing chemotherapy and surgical patients—essentially, anyone with a compromised immune system. The three most common superbugs running rampant in hospitals across the country are

Clostridium difficile, Vancomycin-resistant enterococcus and Methicillin-resistant *Staphylococcus*.

C. difficile, whose symptoms include diarrhea, fever and inflammation of the colon, gained national attention when 70 people contracted it at a hospital in Saint-Hyacinthe, Quebec, between May and November 2006. Sixteen patients eventually died. A class-action lawsuit has since been launched against the hospital by people who claim that staff did little to control the spread of the disease. The most high-profile outbreak in Ontario occurred during a 20-month period starting in 2006 at Joseph Brant Memorial Hospital in Burlington. The deaths of 91 of the hospital's patients have resulted in a \$50-million class action suit.

A VRE infection presents itself as a fever, a wound infection or pneumonia and is caused by bacteria normally found in a person's bowels. While incredibly difficult to eradicate, it's not as dangerous as either *C. diff* or my bug.

MRSA is the drug-resistant version of *Staphylococcus aureus*, a bacterium that lives on over a quarter of the population, usually without serious consequences. It commonly causes skin infections and can lead to surgical wound infections, bloodstream and bone infections and pneumonia. Normally found in the nose and on the skin, MRSA is spread through skin-to-skin contact. It can lead to toxic shock (blood poisoning), necrotizing pneumonia (the rapid breakdown of lung tissue) and death.

These diseases acquired the umbrella term "superbugs" when it was discovered that they'd developed a resistance to antibiotics through constant mutation. Scientists who studied bacteria from the 1950s and compared them with contemporary strains have concluded that mid-century bugs didn't disappear, as was previously believed, but adapted to their environment and began behaving differently. Penicillin, viewed by many to be a panacea when it became widely available in the 1940s and 1950s, is now useless against a range of infectious diseases. The same will eventually be true of the newer generations of antibiotics.

Because human-to-human contact occurs hundreds of times over the course of a day throughout a hospital, it's virtually impossible to track the exact origin of an infection. Until effective vaccines are created, the main preventive measure is handwashing. Ignaz Semmelweis, a 19th-century Hungarian physician, was the first to discover the correlation between handwashing and higher survival rates. He created a chlorinated lime solution for interns, who performed autopsies and



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her hands at every point of contact, it will amount to well over 100 times a shift, which can lead to dry, cracked and sometimes bleeding hands, presenting an entirely different problem.

Some infectious disease specialists remind patients that it's their right to ask doctors if they've washed their hands before beginning an examination, but it's feeble advice at best. What's the doctor going to say if he or she hasn't? "Oh, I hadn't thought of that"? And it assumes patients can even work up the nerve to ask in the first place. Hospitals and clinics are intimidating places. Patients

don't want to tell doctors what to do—they want to be reassured and taken care of.

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N THE WEEKS AFTER MY MRSA diagnosis, I often found myself playing a game of sliding doors. What if I'd been told not to come in after all because of my holiday cold? What if my surgery date had been different? What if I'd done this, what if they'd done

that? I'd long since left Christina's couch and was back in my west-end apartment. A gregarious male home care nurse who tramped through the snow at 7 a.m. every day to change my dressing had the dubious pleasure of seeing me groggy and clad only in a sweat-shirt and underwear.

Thrice-daily sitz baths had been replaced by an early-morning shower during which I peeled off the tape and gauze covering my wound. I'd let the water wash away as much of the debris as possible before the nurse arrived; I quickly learned that packing was much easier to remove if it was wet, since it was almost impossible to remain still while he extracted it dry from inside the wound. I missed close to two weeks of work, during which I watched hours and hours of *Friday Night Lights* and *Dawson's Creek* on DVD. I refused all offers of visits. The bug was wearing me down, the third round of antibiotics was making me jittery, and I was pretty much wedded to a decade-old pair of paint-splattered overalls, the only pants loose enough to fit comfortably over the puffy dress-

ing on my upper thigh. I was lonely, but I wanted to be left alone. My governing instinct told me to keep my head down and just get through it.

My right leg. My left leg. My groin. My ass. My vagina. Now my eye. In March, a pustule caused my left eyelid to redden and swell. When the pustule eventually burst, it covered the white of my eye with a gooey combination of pus and blood. My superficial inner brat howled, "That's it. This is war. My genitals are one thing, but my face is an entirely different matter." It wasn't just vanity. My swollen eye was an outward sign of an infection I was trying desperately to hide, one that was now visible to anyone who glanced my way.

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MALLPOX, SCARLET FEVER, THE Spanish flu, tuberculosis, diphtheria, polio, AIDS—all have sent panic coursing through Toronto in the past century. SARS, which resulted in 44 deaths during its five-month rampage in 2003, is the most recent illness to have

shaken Torontonians on a collective level. Terror can be a powerful motivator when a disease needs to be identified and annihilated. Donald Low, the medical director of Ontario's Public Health Laboratories and an infectious disease specialist at Mount Sinai, led the team of microbiologists who isolated the infection. "If everybody had the same fear of MRSA as they did of SARS," he recently told me, "we'd probably conquer it because everybody would wash their damn hands."

After the SARS crisis, the Ministry of Health established an arm's length organization that would be able to offer credible guidance while remaining deft enough to avoid getting bogged down in bureaucratic concerns. The new organization—the Ontario Agency for Health Protection and Promotion—was launched last October. Michael Gardam, its first director, is hoping to slow the rate of hospital infections by implementing "positive deviance," an operational model developed in the 1990s by a couple working

with malnourished children in Vietnam. The driving idea is that a community's problems are best solved by the members of that community, rather than outsiders. An almost Pollyannaish notion, it's been curiously successful in six American hospitals. When it comes to handwashing, positive deviance holds that the problem lies not in the fact that health care practitioners don't want to wash their hands, it's that they don't want to be told to wash their hands. (Turns out nagging really doesn't work.) Gardam believes that once nurses and doctors are educated about the seriousness of superbugs and follow precautions of their own accord, their co-workers will follow suit. It's

basic peer pressure. "Scientists want to educate you to death, but that's not how people respond," he says. "You have to get them on an emotional level, get them to buy in, get them to take ownership, and wait for the viral spread."

The way hospitals have been designed and how they're run is as much a problem as unclean staff. Hospitals with private rooms are better at isolating and eradicating infection, while four- or six-bed wards encourage transmission. Scandinavia and the Netherlands have had great success in reducing their MRSA infection rates to almost zero through a series of aggressive measures that include putting MRSA-positive patients in strict isolation and closing wards if there's a single superbug transmission. Andrew Simor, the head of the microbiology department and an infectious disease consultant at Sunnybrook, doesn't think that's realistic in Ontario. It comes down to budgets. "In the Netherlands, they can afford to close wards because hospitals only have a 70 per cent occupancy rate," he says. "Our hospital runs at 99 per cent. Closing a ward has enormous implications, and you have to think really carefully if you're going to shut down for one or two MRSA patients. The reality is you don't do it."

Some U.S. hospitals have begun to voluntarily disclose medical errors in a bid to improve patient-doctor relationships and avoid lawsuits down the road. Up until recently, Ontario hospitals have been more focused on prevention education than transparency. The only strict requirement is that they declare their *C. difficile*, MRSA and VRE infection rates to the Ministry of Health and Long-Term Care. The ministry now publishes that data on-line on a monthly basis.

In an effort to stop the spread of superbugs, many GTA hospitals test incoming patients. Some perform universal screening (every patient who steps through their doors gets tested for MRSA), while others opt for risk-based screening (testing patients who are being transferred from other health care facilities and are therefore at risk of being colonized or infected with a superbug). The results, unsurprisingly, are uneven. Some things, like broken bones, can be detected easily. Others, like shape-shifting infections, are much more elusive.

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UST WHEN I THOUGHT I WOULD never recover, I began to feel better. By late spring, I was still tired but had started biking again and playing football. The boils had cleared up, and though I kept waiting for a sign of infection, none came. Over the summer months, I thought about it less and less. Things had returned to normal. In early September, I decided to book a ticket to visit a friend in Calgary. A few days later, I received an e-mail from Christina. It was a list from *McSweeney's* literary humour Web site: "Jokes I Came Up With While Recovering From Methicillin-Resistant Staphylococcus Aureus."

Q: What do you call soldiers-for-hire with pus-filled abscesses on their legs?
A: MRSA-naries.
Q: What do you call the boyfriend who is too busy to check in on

My infection was the super-strength version of a common bacterium. In the worst cases, it can lead to blood poisoning, the rapid breakdown of lung tissue, or death

and maybe even spend a little time with his boil-ridden girlfriend?
A: Im-MRSA-ed in his work.

I laughed and wished I'd come up with them first.

While in Calgary, I felt a repulsive and all-too-familiar sensation, as if tiny bugs were skittering across my flesh, the same feeling that had preceded the eruption of boils in the winter. By the end of the weekend, I'd developed an anal abscess that made the four-hour return flight indescribably hellish. Unable to sit but not allowed to stand, I spent the trip home in a half-crouch, trying to avoid putting any pressure on the growing boil.

Back in Toronto, I went directly to see my now difficult-to-startle GP. She took a quick look and sent me to Women's College, where I went through a procedure almost identical to the one I'd undergone seven months earlier. Grab a clipboard. Check off the MRSA box. Wait to be triaged. Pass through the swinging doors and sit in the red chair until a nurse arrives with my file. Get shuttled off to a private room and cool my heels for one, two, three hours. Forget to turn off my cellphone. Doze on the gurney after reading the same page in my book over and over again. Wake up when the door squeaks open. Introduce myself to the doctor and nurse, give my spiel, turn onto my side, lift my gown and grip the wall, wishing I could melt into it. Anything to get away from the freezing, the slicing and the not quite numbed flesh that sends signals to your brain saying they're cutting, don't cry, they're cutting. And now they're pushing on your body to drain all the bad and it's leaking down your legs.

The home care merry-go-round started up again. For four weeks, I dropped trou for a rotating quartet of nurses so they could—and there's no delicate way to put this—jam gauze up my ass to keep the wound from closing over too soon and trapping the infection inside. Well-meaning family members inquired after the location and configuration of each new abscess (final boil tally: 16). At one point—when a nurse showed me how I could cover the wound in a way that would still allow for bowel function—I wondered if it could possibly get any more uncomfortable and whether I'd ever be mercifully cured.

My case was getting more complicated. My GP started making calls to get me a referral to see an infectious disease specialist. My main home care nurse made calls, too. After several attempts, I finally got an appointment with a specialist at Toronto General.

One morning, while getting my dressing changed, I realized,



PHOTOGRAPH: "IV REMOVAL," 2006

I've become that person. I've become pushy. An irritating advocate for my own health. My days were consumed by the struggle to overcome my illness. When a new spot appeared, I'd try to remain calm and rational. Maybe it's a rash. Dry skin. Eczema. A pimple. An ingrown hair. A spider bite. If you start worrying about every little blotch on your body, you'll drive yourself mad. But what if, in the space of four days, it blows up to 50 times its original size, making it difficult to sit, stand, walk or—truthfully—to wear pants? I need to wear pants!

On October 24, the day of my appointment with the specialist, I headed out an hour earlier than necessary—I wasn't going to be late. Making my way through the winding hallways to Toronto General's infectious disease clinic—which shares space with the (deceptively) exotic-sounding tropical medicine clinic—I scanned the walls for Purell dispensers and contemplated how many get used and how often. I checked in, took a seat in the waiting area and looked around the room, wondering what kinds of diseases the other patients are carrying (and how easy it is to contract them). I eavesdropped on staff gossip and guessed at how many bacteria clung to three hulking stuffed animals to the left of reception—an elephant, a lion and a ceiling-grazing giraffe. If my apartment is a Petri dish of infection, what's hugging those plush safari creatures? My eyes fell back to my lap, onto the thick brown folder twisted up in my hands and filled with photocopies of every piece of medical information I'd compiled over the past 10 months. I was determined to win this round.

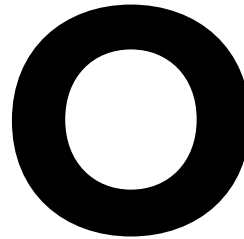
I asked my infectious disease specialist if there was anything I could do to help myself out and prevent the superbug's symptoms from resurfacing. "My husband jokes that people should stay out of hospitals," she said. "They are dangerous places"

The specialist prescribed a decolonization process that involved two more antibiotics, a super-strength version of Polysporin (inserted up the nostrils and around the anus with Q-tips) and a hefty antibacterial wash that, even though used sparingly on a daily basis for two weeks, led to a web of tiny cuts over a good part of my body. I'd eye these minuscule slashes in the shower suspiciously, tiny portals for more infection. What once seemed innocuous, a mere nick, had become terrifying.

A couple of weeks after finishing the purge, I returned to Toronto General. The specialist swabbed the four key areas—nostrils, perineum, armpits and groin—then pre-emptively comforted

me. "If it comes back, don't consider it a failure. Sometimes we have to do it again." Did she mean a personal failure—as if it had occurred to me that any of this might be my fault? As I collected my coat and bag, I asked her when I would find out if the infection was really and truly gone and if there was anything I could do to help myself out, to keep the MRSA from resurfacing.

"My husband jokes that people should stay out of hospitals," she said. "They are dangerous places."



N DECEMBER 18—ALMOST ONE year since my operation—I was officially declared decontaminated. By then, I'd seen 16 doctors and nurses and been prescribed six different kinds of antibiotics, some more than

once, for a total of 74 days. My favourite—headache, nausea and fatigue aside—was Rifadin, an antibiotic used to treat tuberculosis. One of the potential side effects is that it can permanently stain your contact lenses—quite the party trick. For me, it turned my sweat, spit, feces and urine orange.

Despite the pain from the boils and the constant uncertainty, I was relieved my illness wasn't more serious. But it didn't stop me from speculating about the infection's source. Was it equipment?

Unlikely. Was it fabric? Perhaps. Was it someone's hands? Probably. At what point did it happen? Had I been unconscious for long? Did it even happen in the OR or was it later, in recovery? In the few hours I was at the hospital, I dealt directly with a dozen people and indirectly with who knows how many others. Apportioning blame is a natural human impulse. We want to force someone to take responsibility when something bad happens that was entirely preventable.

I look around my house and try not to think about how long bacteria can live on surfaces (hours, days, even months) or on skin (ditto). Staff at Sunnybrook conducted a study in the late '90s where they followed patients who had been colonized (but not infected) by MRSA. They had been discharged from the hospital, and when their homes were cultured some time later it was discovered that the MRSA had spread to one in four family members in a third of the households and could be found on high-touch surfaces

like towels, linens and bedroom furniture.

Various doctors assured me there was little chance that I'd passed it on to my new girlfriend, though of course I'm regularly stricken with anxiety about that, too. After all, the superbug lived in my system for six months before reappearing. In 50 per cent of patients at best, decolonization will get rid of MRSA forever; in the other half, it's temporary.

All my life, I've had an almost pathological aversion to all things medical. I'd get sweaty palms and palpitations just thinking about doctors and hospitals. Until now, I always thought my fear was irrational.

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