

**DEAD  
FALL**  
**A ZOMBIE NOVEL**  
**JOSEPH  
XAND**



a XandLand publication

Published by XandLand Press

Copyright © Joseph Xand, 2017

All rights reserved. No part of this chapter may be reproduced in any form or by any means without permission in writing from the author, except for the inclusion of brief quotations.

This is a work of fiction. Names, characters, places, and incidents either for the are the product of the author's imagination or are used fictitiously, and any resemblance to actual persons, living or dead, business establishments, events, or locales is entirely coincidental.

# Interlude 1

---

**D**R. THADDEUS PALMER WAS late for work. In less than an hour, he was expected to present to the board of Levinson Pharmaceuticals on the readiness for human trials of the new cancer drug he and his team had been developing. In spite of normally wearing many hats and advising multiple projects, just over a year ago the board, frustrated over the slow progress of the new drug that had cost the company and its shareholders such a large amount of money for the funding of research and testing, demanded Palmer dedicate his time exclusively to the one project, promising him a hefty bonus for getting it ready for human trials in a timely fashion. Well, the last of the hurdles of animal trials were passed yesterday.

To celebrate, he'd treated his team to an exclusive party at a swank restaurant and bar. And in spite of the early morning presentation, they'd stayed out all night and drank beyond excess.

Yeah, he would be late for the meeting, and the board would be slightly perturbed by his tardiness and general disheveled-ness, but in the end they would hear what they wanted to hear, unanimously approve solicitation of the FDA so that it may allow human trials to begin, and they'd all leave the meeting happy, slapping him on the back for a job well done and

## Dead Fall

requesting he keep up the good work. Even if he did smell like a distillery. And by the end of the week, Thad would receive his bonus, distributed evenly via direct deposit among his several untraceable offshore accounts.

He'd done this before.

And there was no doubt the FDA would approve the project's progression to human trials. Dr. Palmer had followed every protocol to the letter, and he'd never once failed to gain approval for anything yet. Of course, it didn't hurt that some of the top brass of the FDA were close personal friends.

Thad stood in front of the mirror working to tie his tie. This was his fourth attempt, and it wasn't going well. He ignored his cell phone the first two times it rang, and then ignored it completely when he saw it was Michael Tally, a colleague and co-presenter at this morning's meeting. *Probably wondering where the hell I am*, Thad thought.

But when the phone started ringing for the fifth consecutive time, Thad ripped the tie off his neck, tossed it against the wall, and snagged up the phone.

"Dammit, Michael, I know I'm running late, but there's no reason for you—"

"Turn on the TV," Michael interrupted.

"What?"

"Turn on the TV," he repeated.

Thad crossed the room and picked up the remote.

"What channel?" he asked.

"Any channel."

The TV lit up to reveal what looked to be a cruise ship on fire. A small, blinking map in the corner of the screen showed the location of the ship to be about 500 yards off the coast of New Jersey, just south of Thad's penthouse in Lower Manhattan. Dark smoke billowed from the center of the ship. Fire raged from within it.

Joseph Xand

*"For the past two hours, we've been tracking a Liberty Coast cruise liner that is in obvious distress. But our sources tell us that any attempt at rescue has been met with resistance from the top levels of the administration. New York City fire boats are not even being allowed to go near the ship to at least assist in putting out the blaze that has recently erupted from somewhere on the ship. Rumors are flying that Coast Guard troops were actually arrested when they tried to mount a rescue attempt against the orders of the executive office."*

"Jesus," Thad said to no one in particular. The phone was no longer to his ear, but rather hung in his hand by his side. He crossed the living room and pulled open his curtains. Beyond Battery Park and Hudson Bay, beyond Staten Island, deep in the distance he could make out the faint traces of black smoke rising.

Thad lifted the phone. "Let me call you back," he said into it absently and tossed it aside on the couch.

*"The cruise liner has not changed course or speed at all, not that we can tell, and if it were to continue on its current trajectory, it will run aground along the beaches of Coney Island within the hour. Tom, can you zoom in closer please?"* Moments later the camera zoomed in on the various decks of the ship, slipping in and out of focus. *"And rescue attempts are being thwarted despite literally hundreds of people roaming the decks in need of assistance. In the past two hours, we've witnessed many people jumping off higher decks onto lower decks, and some jumping into the water. We've even seen some poor souls on fire. The administration's refusal to offer assistance is baffling and unconscionable."*

Thad moved closer to the TV to study the distorted images of the passengers on the decks. Something wasn't right about them. Hell, lots of things weren't

## Dead Fall

right. Some moved faster than others, but none of them seemed to be moving with any sense of urgency. Lifeboats clinging to the sides of the cruise ship were being completely ignored. None of the people were waving their arms in the air begging the helicopters above for help. One person emerged from the smoke and his back was on fire. He didn't seem to notice. Others seemed covered in what might have been blood. Some looked injured, maybe even severely, but it was hard to tell. Many of them seemed overly concerned with groups of birds hovering over parts of the decks. Were they reaching for the birds? Trying to grab them? And Thad would have sworn he saw some birds landing on people and pecking at their heads and eyes while the people shambled around, oblivious. There were some pockets of people huddled around areas of the deck on their hands and knees, dog-piled together; there had to be something important under that pile to circumvent their survival instinct. One person went over the rail on a lower deck and into the water below. But did he jump as the reporter had suggested? Rather he seemed to just topple over accidentally. What was wrong with these people?

Psychology was not his specialty, but he quickly ran through the possible psychiatric disorders the people on the ship could have been exhibiting. Possibly some sort of collective bipolar I disorder or a collective hallucinatory or psychotic disorder (*what had a colleague called it? Folie à deux?*), maybe coupled with acute stress disorder brought on by some trauma on board the ship. Maybe a collective dissociative fugue or dissociative disorder (*That's also brought on by trauma, isn't it?*). He even considered a collective depersonalization or derealization, although they seemed less likely.

Joseph Xand

In every case, he knew all his amateur diagnoses collapsed around a single word: collective. While individual passengers were certainly capable of manifesting any or all of these psychiatric disorders, the prospect of all of them displaying symptoms at the same time was, well, impossible.

The cause of such a mass psychosis would have to be chemical or...biological or...

"Bacterial," Thad said aloud. He reached for the phone when his attention was again drawn to the television, the shot changing from the cruise ship to a boat of an entirely different nature.

*"And the most recent development in what may soon be the most significant maritime disaster in American history, a naval destroyer, the U.S.S. Gettysburg, has been deployed, leaving its port a short few miles away in the Hudson River off Manhattan's West Side Highway, and is now anchored midway between the New Jersey Coast and Coney Island at the mouth of Raritan Bay in what our sources have described as a defensive stance. Tom, do you have any news?"*

In the corner of the screen, a live video of a reporter wearing headgear and a microphone slid into view.

*"Well, Susan, we've been monitoring every military band we can think of, but so far there has been absolutely no communication between the naval destroyer and the Liberty Coast that we know of. From up here, the distance between the two is closing fast and we'd expect one to try and hail the other, but so far, nothing. We can only speculate as to what happens if the Liberty Coast doesn't slow or change course soon— Oh my God! Give us the Liberty Coast! Go to the Liberty Coast!"*

*"Tom, what's happened?"*

The live feed shifted back to the cruise liner. The front of the massive ship was engulfed in flames. Most

## Dead Fall

of the people on the decks had been knocked off their feet.

*"A ball of fire has just erupted from the bow of the ship from an apparent explosion, possibly from something internal—"*

Immediately another explosion rocked the failing ship.

*"Oh my God! Another blast has just ripped a large, gaping hole into the ship's hull! The ship is starting to capsize!"*

Indeed the massive cruise liner listed to its port side. The passengers toppled over the sides by the dozens.

"My God," Thad said to himself. Just as the news anchors seemed swept up in a state of verbal chaos, Thad muted the TV and grabbed up his phone. Quickly dialing in a contact, he peered out his window into the distance. The phone rang and rang before going to voicemail. He ended the call and redialed. Voicemail again. Again he redialed. Finally, on the eighth attempt, he got through.

"I'm a little busy, Thad," the person on the other end said immediately.

"Jennifer, what's going on?"

"That information is classified. You know that."

"Then this *is* coming from the CDC. If you need me to come in—"

"You work for a pharmaceutical company, Thad. If we need aspirin, we'll call you."

"Jen—"

But the line went dead. He dialed her back several times, but it went to voicemail every time.

Thad finally sat on the couch and stared at the TV screen. He didn't need the anchors' commentary to watch the confusion and disorder unfold, nor did he need to hear the opinions of pundits to fully comprehend the complexity and enormity of the

Joseph Xand

situation developing a few scant miles from where he sat.

Eventually, he called Michael and asked him to handle the presentation to the board. That could do without the pats on the back for a day, and human trials would move forward without him regardless.

No, today he'd sit at home and think about why on Earth a naval destroyer would want to sink a luxury cruise liner.

And the more he thought about it, the more he brooded. Because deep down he knew that at some point over the next few days or weeks a spotlight would shine down.

And he wouldn't be in it.

\* \* \* \* \*

Following the blasts at the bow of the cruise liner, the ship took 87 minutes to sink. Once it did, the U.S.S. Gettysburg moved from the mouth of Raritan Bay, pushed through the debris field, and parked itself on the spot where the ship had gone down. Still no rescue efforts were made, but oddly there were no passengers clinging to floating debris in want of rescue. Many other boats, both rescue vessels and curiosity seekers, were turned away by the destroyer, and at some point, a circular no-boating zone was officially established and enforced around the site of the tragedy.

It wasn't until the next day, when pundits, political leaders, and the general public were becoming more and more vocal in their demands for answers, that the President finally released a written statement to the press; he was deeply saddened by the previous day's events, an investigation into the nature of the blasts that ultimately doomed the cruise ship would be launched,

## Dead Fall

but much more information than that was classified and a matter of national security.

Of course, the statement to the press fueled the flames of dissent, especially when it was pointed out that an investigation couldn't possibly take place without studying the wreckage, but the President seemed in no hurry to allow access to the sunken vessel.

But the anger would reach a fever pitch when video surfaced of the moments before the blasts to the bow of the ship. The video showed two shadows moving at high speed under the water towards the Liberty Coast; shadows that could only be torpedoes fired from the Gettysburg. Thad was surprised it had taken people that long to catch on.

When the President finally held a live press conference three days after what was being dubbed the Raritan Bay Disaster (although the cruise liner was sunk before reaching Raritan Bay), or the Raritan Bay Massacre by some of the President's more aggressive opponents, he never once pointed the finger at terrorists. Instead, it was he who gave the order to sink the Liberty Coast, and that he took full responsibility for the disaster. He assured the public again that the decision was one of national security, that no one in the country was more aggrieved than he as to the events three days prior, and implored his fellow Americans to be patient and that, although information was still classified, he was expected to be able to release some information soon once initial investigations had concluded.

Immediately voters and journalists began calling for the President's resignation and prompt arrest. Political leaders on both sides of the aisle began impeachment proceedings. No clarification would do to explain why

Joseph Xand

the President of the United States would oversee the murder of over 2,000 U.S. citizens in American waters.

Of course, Thad knew that wasn't completely true. All the President had to do was utter the word "terrorism" and the outcry against him would be quelled, at least a little bit. Ever since the 9/11 attacks the public had given the President and lawmakers *carte blanche* to make decisions in matters of national security when terrorism was suspected.

The President's reluctance to point to terrorism as the culprit only further proved what Thad had already discovered from his brief phone conversation with Jennifer; that is, the CDC influenced the President's decision to sink the ship.

Once again, the President's words did nothing to calm the fervor, and if nothing else, only heightened it. For the next few days, passionate fury reigned.

But suddenly on the fifth day following the sinking of the cruise ship, the Raritan Bay Disaster was pushed to the back burner on the news cycle, replaced by something fresher and more terrifying.

Because the fifth day was the day the passengers of the Liberty Coast walked out of the surf and onto the beaches of Shoreline Hook and the carnival grounds of Coney Island.

\* \* \* \* \*

At first, the news was sketchy and wrought with misinformation. Emergency personnel had responded to a domestic disturbance along the coastline of Shoreline Hook. Several beachgoers had been injured. The police had the situation under control. It was certainly not enough to dethrone the Raritan Bay Disaster as the top story. Although it was mentioned locally on New York 1 and scrolled across the ticker every few minutes on

## Dead Fall

the cable news networks, nationally it got no other mention. At least initially.

At the time it happened, several news crews were on the beach, though a few miles down coast from Shoreline Hook. They were covering a gathering of the Liberty Coast passengers' friends and families. Their loved ones were planning an all-day protest in preparation for a midnight vigil. Originally they'd hoped to hold the protest in Shoreline Hook and use the U.S.S. Gettysburg as a backdrop. However, Shoreline Hook sits on a national preserve, and the government wouldn't allow it. So instead of hundreds of protesters, the Shoreline Hook coastline was populated with the traditional beach-loving rabble—sunbathing women, sand castle-building kids, surf-diving teens, drunken treasure hunters with metal detectors—most of whom saw the Gettysburg on the distant horizon as simply part of the landscape.

When on-location reporters first got word of trouble further up the beach, none of them were willing to leave their posts at the protest for fear that they'd miss something truly important. But when amateur video hit the internet showing grotesque, bloated, often-naked creatures sloshing out of the water, falling onto and attacking unsuspecting sleeping sunbathers, news vans were suddenly racing to the scene.

Before they got there, more amateur videos made their internet debuts, and each was lifted from YouTube and other websites and streamed on every major network, complete with revelatory graphics introducing the shaky camera work as "Breaking News" or "This Just In." Maudlin-esque news anchors warned the public that "what you are about to see may not be suitable for children." One video showed sleeping sunbathers attacked. Another focused on people in the water, casually chatting afloat colorful inflatables when

Joseph Xand

they are one by one pulled underwater screaming, some unseen entity yanking them by their dangling legs. Another showed a man crawling out of the water, his legs mangled, only to have some humanoid-looking creature emerge from the surf behind him and fall on top of him, and then another. One of the last videos showed policemen zapping one of the aggressors with a stun gun with no effect. One officer shot one of the assailants repeatedly, but the creature kept walking. Officers were injured and overwhelmed, screaming into radios for backup. In the background, more grayish-white, bloated figures streamed out of the reddening swells.

Eventually, the jerky, ramshackle camera work was replaced by the unwavering video of professional videographers. Nervous but trained reporters stepped into the pictures, describing the chaos. Hordes of ambulances and EMTs pushing gurneys raced back and forth from the ambulances to the beaches. Sometimes the paramedics came back wounded but heroically pushing an injured victim. Other times they wouldn't come back at all. The voices of the reporters were barely audible over the constant barrage of gunshots. At least two of the more ambitious news crews reporting on the attacks got too close to the action and were themselves attacked. One cameraman was killed by friendly fire.

The incident lasted less than three hours. That's how long it took for the attackers to be dispatched, the dead and injured removed, and a large portion of the beach to be cordoned off as a crime scene. All in all, thirty-nine attackers had emerged from the surf, killing thirteen people, including two children, four police officers, and two EMTs. Two dozen more were wounded, many seriously.

## Dead Fall

An hour after the last of the crime scene tape had been stretched out and about the same time as the chief of police was about to update the media on what he knew so far (which wasn't much), the incident repeated itself, across the mouth of Raritan Bay, on Coney Island.

Thousands of carnival attendees, both tourists and native New Yorkers, were enjoying their evening on Coney Island as a cool breeze blew off the Atlantic. Most were too busy eating hot dogs, riding rides, playing games, and shopping the various open markets and bazaars to notice strange-looking individuals stroll out of the water, walk up the steep grade, and either tumble over the small barrier separating the carnival events from the water or slowly navigate up the narrow sets of steps leading to the main promenade.

And even when the screaming started, few people paid it any mind, assuming a carnival ride was playfully torturing its riders.

As bad as the situation at Shoreline Hook had been, it paled in comparison to the confusion and pandemonium at Coney Island.

Imagine.

Seventy-three corpses walked out of the water. Hundreds of people were injured. Forty-five were killed, many trampled underfoot by the civilian stampede. Even though police and other crisis personnel were in closer proximity to what those in Shoreline Hook had been, the disorder and bedlam led to a slower response time.

Dozens of amateur videos hit the internet shortly after the Coney Island attacks began.

And, from his high-rise office at Levinson Pharmaceuticals in Midtown Manhattan, Thad sorted through them all. He was particularly interested in shots that offered good, clear views of the assailants. In each

Joseph Xand

screenshot, he noticed commonalities among the strange people attacking others with no apparent motive; namely bloated faces and hands—traits typical of dead bodies that have been decomposing in temperate waters for several days. What homicide and forensic experts would call "floaters." As putrefaction ensues, the body's tissues accumulate gases, beginning with the face and hands. This accumulation forces them to float, hence the term.

Thad resisted the urge to call Jennifer again, but his lack of involvement was torture.

The next day, members of the general public, via blogs and Facebook and other social media outlets, began speculating the attackers were the vengeful ghosts of the Liberty Coast passengers. The mainstream media and leading medical and military experts called such conjecture ludicrous. Thad wasn't so sure. And once again the President was being tight-lipped.

Two days after the attacks, Thad's cell phone finally rang. He recognized the caller immediately. He quickly shut his office door before picking up.

"Jen? Are you out of aspirin?"

"Thad. I'm sorry about...the other day when you called. I was..."

Back at his desk, Thad gathered his belongings as he talked. "Jen, forget it. Just tell me what I can do. I can be on the next flight to Atlanta and probably arrive at CDC headquarters at, uh..."

"I'm not in Atlanta."

Thad paused. "No?" He closed his briefcase slowly. "Where are you?"

\* \* \* \* \*

Two hours later Thad pulled into the parking lot of the Shoreline Hook Regional Medical Center, having

## Dead Fall

passed through a military checkpoint after turning into the driveway. There security phoned in his approval to enter, signed him in, and issued him parking and security passes.

Amazing. Thad had never seen anything like it. The Centers for Disease Control and Prevention had commandeered the entire five-story hospital. Jen told him on the phone how every patient had been relocated to surrounding hospitals in less than five hours.

He met Jen in the hospital's lobby, which he was allowed to access only after having his security pass slid through a device, his ID checked, his picture taken, and handprint scanned.

"You always had a flare for the dramatic," he told her. But her stifled grin told him this was anything but overly-cautious protocol.

He leaned in for a hug, but after she glanced at the soldiers on duty, Jen stuck out a hand and he shook it.

"It's good to see you again, Dr. Palmer," she told him.

"So how are you set up here?" He was itching to get started.

"Well, other than the regular CDC personnel, we've also kept on the hospital's professional medical staff, as well as a skeleton crew of OR, ER, and ICU nurses."

"They didn't mind being ordered to duty?"

"You kidding me? We didn't request anyone's assistance. They offered help and we quickly realized we needed it. They were so damn curious as to what's going on, they jumped at the chance."

"I know the feeling. So that's everybody, other than the soldiers?"

"Oh, and the EMTs. They're the only ones initially quarantined against their will. They've been helping out here, too."

"EMTs? Why are you holding them?"

Joseph Xand

"All in good time. But you wanted to know the layout, I guess? The top two floors are for the autopsies of the dead bodies and their storage, for the most part. That's where most of the research is happening. And that's where most of the professional staff are located. Trauma surgeons; the neurosurgeons; orthopedic, cardiac, ENT, and pediatric surgeons; even a hand surgeon and a plastic surgeon. Right now they are all forensic pathologists, performing autopsies."

"Jesus."

"Floors two and three are where we keep the most dire cases. Unfortunately, it's proven to be one giant waiting room until they are moved to the top floors."

She paused to let him take that in.

"Wait a minute. They've all succumbed to their injuries? No one's recovered?"

"Not yet."

Could the news reporters have been wrong in estimating the extent of the injuries? He thought on that, looking around the quiet lobby that would normally be bustling with patients and concerned family members.

*Family members.* Something wasn't right.

"Well, I thought you were going to tell me that the first floor was reserved for the family of the injured, but now I'm not so sure..."

"The first floor is for new admissions," she corrected. "Family members are not being allowed anywhere near this facility. The only reason they are not packed outside and protesting is because we've lied to them as to where their loved ones are being kept."

Thad's jaw dropped in disbelief. Just what had he gotten himself into? But he chose to ignore it for now.

"Okay...new admissions. Those injured in the attacks who maybe underestimated the extent of their

## Dead Fall

injuries? They went home and only later realized they required medical attention?"

"Yeah, there's some of that. But not all."

Thad stared at her, puzzled.

"Do you remember New York?" she asked.

He nodded slowly, cautious and unsure.

"Come on. It's time I show you around. We'll start with the first floor."

Before Thad could go any further, he was ushered into one of the lobby bathrooms, which had been thoroughly sterilized and converted into a scrub room. He changed into scrubs (Jen was already wearing them), and then they helped one another into biohazard suits, complete with small oxygen tanks strapped to the back.

The first corridor they entered led to the ER. There Thad saw many patients suffering various stages of what looked to be some advanced pneumonia. As they walked, Jen discussed the patients' symptoms. High fever, sweating, uncontrollable shaking, dehydration, headaches, body and joint pain and swelling. Other, oddly enough, exhibited symptoms reminiscent of botulism—vomiting, abdominal pain, lack of motor functions, dry mouth and pharynx, dyspepsia (both atonic and cholelithic), alternating mydriatic, and a barking cough. Some of the patients were lucid and conversational. Others were completely unconscious, sometimes still trembling involuntarily. Jen led him to one of these patients first. She grabbed the chart and passed it to him. Flipping the pages was not easy in the thick, rubber gloves of the body suit, but he managed.

"What do you see, doctor?" Jen asked him.

Thad studied the blood test results carefully. "Gram-negative bacteria. Mucoid growth. Excessive formation of capsular polysaccharide. *Klebsiella*. Carbapenem-resistant. This patient has contracted a KPC."

Joseph Xand

Thad suspected as much. Earlier Jen had asked him if he remembered New York. Well, he lived in New York and had any other of his friends or acquaintances asked him such a broad-ranging question, he'd have had to ask them to be more specific. But with Jenny, he knew she wasn't talking about any random moment the two of them had shared. She was talking expressly about Tisch Hospital on the East Side of Manhattan in the middle of 2000.

\* \* \* \* \*

KPC stands for *Klebsiella pneumoniae* carbapenemase and it is a particularly nasty bacteria, highly resistant to even the most advanced antibiotics, called carbapenems.

Thad was a microbiologist working at New York Presbyterian Hospital in mid-2000 when four intensive care units at Tisch Hospital saw patients developing *Klebsiella* infections resistant to every drug the ICU physicians had at their disposal. They were baffled.

At the time, Thad was already making a name for himself in the world of disease and infection. With three books, several journal articles touting a number of controversial studies, and a speaking tour under his belt, he was the closest thing the medical field had to a celebrity. Tisch Hospital's chief surgeon called Thad and asked if he might advise them on what to do.

When Thad was told of a *Klebsiella* resistant to carbapenems, he was skeptical. But when he arrived at the hospital and saw the test results, he realized he was facing a bacterial strain by which he was woefully outmatched. Within a week of working with Tisch researchers, Thad waved the white flag and called the CDC.

## Dead Fall

The fact the CDC jumped into action with little evidence to back up Thad's claims told Thad this seemed to be a call they had been reluctantly expecting.

Even with the combined efforts of Tisch researchers, the deep pockets of the CDC, and the expertise of Dr. Thaddeus Palmer, it took a full year to get the infection under control.

In the end, when it was determined that the drug needed to fight the infection had yet to be invented, doctors fought back with good, old-fashioned sanitation. They took protocols for sterilization of both people and equipment to a whole new level, and even then the bacteria rebounded more than once before it finally folded.

But it didn't go without leaving its mark. Twenty-four patients were subjected to the KPC strain, ten of which carried it without symptoms. The other fourteen developed pneumonia resistant to drugs, as well as developing bloodstream and surgical infections. Eight of the fourteen died.

In the world of global pandemics, a plague that kills five percent of the people infected by it is considered catastrophic. This new bacteria, even with the world's greatest infectious disease experts working against it, had a mortality rate of thirty-three percent.

And it wasn't finished.

The bacteria swept through several Brooklyn hospitals in 2003 and 2004, infecting more than sixty patients. Seven infections at Harlem Hospital in 2005. Only two patients survived. Soon the bacteria spread beyond New York City, into New Jersey, Chicago, Florida, and Arizona. By 2010, thirty-seven states had patients testing positive for KPC.

It also spread to other parts of the world—Canada, England, Brazil, Greece, China, and many more

countries, starting with a single infected patient in Paris in 2005.

Fortunately, by then, drug companies were finally back in the fight. They developed a new class of antibiotics called glycolcyclines, such as tigecycline, that the bacteria wasn't resistant to. However, this drug was ineffective for urinary tract and bloodstream infections. That forced drug companies to create polymyxins, a class of cyclic polypeptide antibiotics that performed well against bloodstream infections. But even these carried a heavy chance of nephro- and neurotoxicity, causing damage to the kidneys and the brain. By 2009, KPC began to evolve resistance to both drug classes, and only dangerous combinations of both worked to beat back the infection. There were no clear answers.

But one thing was clear. The emergence of KPC was the best thing that could have happened to Thad's career.

The CDC, impressed with his performance at Tisch Hospital, asked him to head a team dedicated exclusively to researching and fighting KPC infections. More books and journal articles were written. He frequented talk shows and news programs. Hospitals all over the country paid ungodly sums of money to have Thad train their medical staff and other personnel in proper sanitation and sterilization techniques in hopes of stopping a KPC outbreak before it began.

Tisch Hospital is also where Thad met Jennifer Laramie, then a junior epidemiologist working for the CDC. Thad found himself enamored by her tenacity for knowledge and admired the impassioned responsibility she felt for civic duty, even if it was overly ambitious.

In him, Jennifer was starstruck at first. But as that faded, she proved to be a formidable challenger to Thad's even more accepted theories. During the time

## Dead Fall

they worked together in eliminating the KPC outbreak, an affectionate friendship blossomed.

Once the outbreak was finally quashed, the CDC hired Thad full time. It was then they shared with him the history of the KPC bacterial strain and why they'd anticipated its emergence.

The first KPC was discovered by accident in 1996. The Centers for Disease Control and Fordham University had collected hundreds of samples of bacteria from hospitals in twenty-six states for testing and study. A hospital in West Virginia sent a sample that tested positive for *Klebsiella*, which in itself wasn't particularly unusual. *Klebsiella* is a common nosocomial infection spread in many hospital ICUs.

This particular *Klebsiella* sample, however, was different. Although *Klebsiella* is well known for its resistance to most antibiotics, including penicillin, it had always responded to imipenem and meropenem, two carbapenems. The West Virginia sample responded to them as well, but extremely high doses of the medication would be needed to treat an infection caused by this brand of *Klebsiella*.

Although the discovery of what was dubbed KPC made the epidemiologists at the CDC squeamish, no other samples were found and the CDC filed it away as an isolated incident, but had always kept itself poised to sound the alarm should KPC surface again. That was why the CDC was ready when they received Thad's initial distress call about the New York strain at Tisch Hospital—which was tougher, even, than the West Virginia strain, not responding to imipenem or meropenem in high doses.

The CDC allowed Thad his own office in Manhattan near where most of the KPC bacterial outbreaks were centralized. He also was allowed to choose his own team, and although Jennifer decided to stay in the

Joseph Xand

Atlanta office, the two saw one another regularly. A physical affair inevitably ensued.

As the relationship between Thad and Jennifer became more and more obvious, Thad's marriage disintegrated. But he no longer needed his father-in-law's aid in receiving research grants—the CDC was well-funded and provided him with anything he asked for. Plus there was no denying his feelings for Jennifer were much stronger than he'd ever had for his first wife.

For the first time in his life, Thad was happy in love. He stopped pursuing affairs with random women and one night stands and focused his romantic attentions exclusively on Jennifer. Whereas his daughter Karen settled him into New York so he could be close to her, Jennifer filled him with the unfamiliar desire to settle down completely.

And as often happens, it was their differences that made them the perfect match. He was opportunistic, borderline megalomaniacal, willing to capitalize on the circumstances created by the KPC outbreak to further his reputation, prestige, and wealth. Jennifer, on the other hand, avoided the spotlight, seemed satisfied by her meager salary (by comparison) at the CDC, and took seriously her commitment to the public well-being.

But in the end, the opposing mindsets that brought them together would irrevocably pull them apart. As a microbiologist for the CDC, Thad worked closely with multiple pharmaceutical companies fashioning drugs to fight the vigorous and unyielding KPC bacteria. One of them, Levinson Pharmaceuticals, recognized his natural leadership presence as well as his inclination towards self-aggrandizement and offered him a job with a lofty salary, complete with stock options and other benefits he couldn't ignore.

Jennifer, who wanted to work on the front lines against disease and contagion, was having none of it.

## Dead Fall

She considered the money-grubbing pharmaceutical companies to be part of the problem. She pointed out that the main reason drug companies were so slow to respond to the KPC epidemic was because there was little profit in researching a product it would be able to sell to what amounted to only a handful of people worldwide. In Jennifer's opinion, Thad was selling out. Their relationship floundered.

Until the Liberty Coast Disaster, they'd barely spoken in years.

\* \* \* \* \*

Thad lowered the chart. "Well, obviously the contagion isn't responding to cyclines or polymyxins, or we wouldn't have all this." Thad waved an arm in the air and looked around the room, regarding the entire hospital when he did so.

"Check the micro-shots," Jennifer told him. She leaned against a table and folded her arms as best she could in the bulky, inhibiting biohazard suit.

Thad flipped to the back of the charts where microscope photos showed a still shot of the familiar tubular *Klebsiella* bacteria. Something was different.

One of the things that makes *Klebsiella* bacteria carrying the KPC gene so hard to eradicate is that *Klebsiella* cells have a double-layered outer membrane that antibiotics need to penetrate before they can have any effect. KPC enzymes can usually charge and attack the antibiotics before they can infiltrate the double wall. It's not impossible, but it takes a strong drug to withstand the attack.

The micro-shots showed a strain of a KPC-latent *Klebsiella* cell with a quadruple membrane. No drug would ever come close.

Joseph Xand

"Now I think I see why I'm here," Thad said, studying the photo.

"And just what's that supposed to mean?" Jennifer asked, suddenly on guard.

Thad looked at her and smiled. "I'm the best damn microbiologist you know. And you are in way over your head."

"Don't flatter yourself, Palmer," Jennifer shot back. "First off, you're not a microbiologist. Not anymore. You're a pharmacologist. Secondly, I need to know what Levinson's working on. What sort of drugs are in the works that I can possibly use. The CDC director is calling around to the other pharms to see if they've got anything cooking as well."

Thad opened his mouth to speak, but she held up a rubber-encased palm.

"And don't give me some bullshit about corporate privacy or confidentiality agreements. The time for me to threaten you with a warrant is passed."

"I was going to say that there is nothing in the works that I know of. And even if there were," he held up the microscope photo, "it wouldn't even make a dent. A *Klebsiella* strain of this magnitude isn't even on our radar. I doubt it's on anyone's. And even if some drug company with a fortune teller on its payroll were researching a drug to pierce *four membranes*," he emphasized the last two words, "where could they possibly be in regards to human trials?"

"We're not exactly running everything through the FDA with this one."

"That desperate, huh?"

Jennifer gathered in the charts from Thad and hung them back at the end of the patient's bed.

"Come on. Let's continue the tour, and you'll see why."

## Dead Fall

They left the room and continued down the corridor. Nurses in biohazard gear moved between rooms pushing drug carts and bringing in fresh linens and IV bags.

Thad spoke up. "By the way, if the director is calling all the drug companies, then why am I here, if he could have just phoned it in?"

Jennifer considered the question carefully, then finally conceded. "Because you're the best damn microbiologist I know. And I'm in way over my head."

\* \* \* \* \*

They walked the first floor methodically and Jennifer allowed him to inspect the patients at random. Each time he did, he searched for bites and scratches from the attacks on Coney Island and Shoreline Hook beach. He never found any. Finally, his curiosity reached its limit. They stopped in the hallway and leaned against a nurses' station.

"So these aren't victims of the attack?"

"They were there when the attack started, but most of them had absolutely no contact with the assailants. We had some who were bitten. They were admitted straight to the third and fourth floors. Their levels of infection were more advanced, septicity of the blood already set in."

"Had?"

"They died within 24 hours. They are on the fifth floor now"

"My God." Thad turned over what he'd learned so far. Jennifer waited, not wanting to press him.

"Was everyone on the beach infected?" he asked finally.

"No. Our best estimate, roughly fifty-three percent of the people who were in the general vicinity of where

Joseph Xand

the attacks took place are showing or will show signs of the infection."

"But how? How's it being spread?"

Jennifer stared at him blankly as an answer.

"Okay. Well, have you identified patient zero?"

"We've got a cruise ship passenger manifest with more than 2,000 names on it. Ninety-five percent of those are still at the bottom of the Atlantic. Take your pick."

"Christ, what is this?" Thad put his head in his hands and tried to rub his eyes. Impossible in the rubber suit. He glanced over at a tray of blood samples arranged in test tubes, each labeled with a last name, number, and room. He took out one of them and held it up to the light.

"Wait a minute. Fifty-three percent infection rate? That's pretty exact. You couldn't have possibly identified every single person who was present on Coney Island and at Shoreline Hook when the attacks happened."

Jennifer had a sudden look of dejectedness. She exhaled and looked towards a pair of double doors at the end of the hall.

"Let me show you one more area of the first floor, and I'll introduce you to Dr. Amata, who we've placed in charge of the primary care down here. Then we'll head upstairs."

Thad followed her towards the end of the hall. As they went, nurses pushed a bed from a room towards the elevators. Someone had worsened enough to warrant a move to a higher level.

They passed through the double glass doors and Thad immediately sensed something. The air was more solemn here. More profound and sincere. An aura of pensive reverence, marked with an almost formal grief. The nurses in the other parts of the first floor were

## Dead Fall

doing their jobs because it was what was expected of them. But the staff here worked as if they were paying their respects.

"Who's on this wing?" Thad asked.

Jennifer looked down the hall, watching the nurses move about. "This is where we keep the staff who've succumbed to infection."

Thad's mouth gaped. "How many are here?"

Jennifer stared into his eyes. "Fifty-three percent of what we started with."

His face became chiseled anger. "What! Were you not utilizing proper protocols for quarantining in the beginning? How on Earth could you allow—"

"Of course we used proper protocols, you jackass! Don't you dare point the finger at me! Every CDC regulation was put in place the moment we walked into this hospital."

"Then who? The nurses? Doctors? Hospital staff from before the CDC arrived?"

"No. CDC personnel have been infected, too."

"But how? With the suits?"

"I don't know..."

"With regulations and procedures for sterilization—"

"I don't know, goddammit! Okay? I don't know!"

The nurses stopped and turned towards them. Regarded them briefly, and then returned to their duties.

Jennifer walked away, stood facing the corner. As if she were told to do so by an angry parent for some childhood infraction. Thad decided to let it go.

"Okay. Okay. Who's here? Who's infected?" Thad asked quietly, moving closer to her. As she answered, he put his hands on her shoulders and turned her slowly.

"Webster. Emory. McMillan. Laurence and Daniels. Blackstone." As she spoke each name she shuttered. When she faced him completely, he could see she was

Joseph Xand

crying. "Paulson. Cox. More who've come in since you left the Center. You don't know them."

He pulled her close and she put her head on his chest as best she could through the biohazard suit.

Finally, she pulled away. She motioned with her hands as if she might wipe her eyes, but then realized it was impossible. She laughed at herself, looking down her body.

"You know, not everyone wears the suits now. They don't seem to be doing any good. Some of us have just shirked them altogether. The higher the floor we visit, the fewer suits we'll see."

He'd noticed how awkward she seemed in the suit despite having had time to get used to it. She was obviously one of those who didn't usually wear the suit. She was wearing it for him.

He also realized something else. If the biohazard suits were useless, then there was roughly a fifty-three percent chance calling him here amounted to a death sentence. She was desperate enough to risk his life.

"I want to introduce you to Dr. Amata real quick. I think you'll like him."

She'd subjected him to peril just by allowing him to walk through the front doors. But it would do no good to have that argument now. Thad took a deep breath.

"Lead away," he said

They walked back to the nurses' station where a nurse was updating a chart.

"Nurse Brown, do you know if Dr. Amata is in his office? I'd like him to meet someone." Jennifer poked a thumb in Thad's direction.

"Actually," Nurse Brown responded, looking up from her work and down the corridor, "I think he's in x-ray. He wanted to run one more MRI on Dr. Emory before bringing him upstairs."

"Emory's gotten that bad?"

## Dead Fall

"Sepsis set in last night. Dr. Amata delayed moving him till this morning. You know. Out of respect. But he could go at any time." The nurse looked at her feet.

Jennifer said nothing, but rather placed a hand on the nurse's arm in consolation.

Looking down the corridor where arrows on the walls pointed in the general direction of the x-ray department, Jennifer and Thad moved along. As they walked, she explained to him that Dr. Amata was the first to take off the biohazard suit, believing them to be useless. Because of that, in the beginning, he'd had to quarantine himself along with the patients. But eventually, as more and more workers got sick, it became evident he was right. More and more staff stopped wearing them.

The signs, sometimes on the wall and sometimes over passageways, turned them left once and then right twice before leading them to a door that warned them of radiation contamination and to take precautions before entering.

They found Dr. Amata in the MRI chamber, bent over his patient, apparently strapping Dr. Emory onto the MRI bed, his back to Thad and Jennifer. Amata was a wide-framed, obese man and his slight jiggling movements were almost comical. Between them stretched the empty hospital bed from which Emory had been transferred.

"Dr. Amata? When you have a minute, there's someone I'd like you to meet," Jennifer called out to the doctor from just inside the doorway. Thad stood beside her, his eyes casing the room as best he could through the plastic face shield without turning his body.

Dr. Amata didn't turn around, nor did he speak or acknowledge them in any way. Instead, his body remained slumped over the patient, jerking occasionally, seemingly from his work.

Joseph Xand

When Dr. Amata didn't answer, Thad fixed his eyes on the doctor. Something seemed off. "Why is he strapping down an unconscious patient? Was Dr. Emory spasming?"

Jennifer didn't answer, but looked from Thad back to Dr. Amata. "Dr. Amata, can I help you with that?" Jennifer took a step towards the doctor. As she did, Thad leaned down instinctively and peered under the hospital bed—and saw a large puddle of blood spreading slowly beneath the MRI slab.

"Jenny! Wait!" He ran forward and grabbed her shoulder. At the sound of his voice, Dr. Emory—what had been Dr. Emory—lifted his head and peeked past Amata's shoulder at Thad and Jennifer. Emory released Amata, and Amata slid to the floor with a heavy thud. Emory leaned up and reached for them, his right arm and head unrestrained. His left arm and both legs were secured to the bed.

Jennifer ran around the hospital bed and slid down next to Amata. Blood pulsed from a large hole in his neck. The doctor's eyes were wide, staring at her. Thad sprinted to the other side of the MRI bed. Emory was trying to reach Jennifer's hair. Thad grabbed Emory's shoulder and slammed him back down.

"Don't let him bite you!" Jennifer screamed. Emory snapped at Thad's hand, who moved it away just in time. Thad remembered Emory from the CDC. But this crazy-eyed, gray-skinned psychopath was not the God-fearing family man Thad remembered. Emory waved his arm, grasping for Thad. Thad grabbed him by the wrist and tried to wrestle his arm to the side of the bed and into the awaiting straps. As he fought with Emory, Thad looked down at Jennifer as she snagged the pillow from the gurney, swept it out of the pillow case, and attempted to apply the pillow case as a compress to Amata's mangled neck.

## Dead Fall

"Jennifer, you need to get to a phone and get us some help in here."

"I've got to try and stop the bleeding."

Thad looked at Amata. He'd slipped from consciousness.

"We've got to get that man into surgery now! Now go!"

Jennifer stood and ran to the MRI control room, her yellow biohazard suit streaked with blood. As she did, Thad finally managed to hold down Emory's arm long enough, while dodging the patient's biting teeth, to tighten a strap loosely around his wrist. Thad looked up to see Jennifer on the phone, pacing the small control room. He grabbed up a steel mesh mask that had been sitting on a small, stainless-steel table next to the MRI machine and attempted to harness Emory's head with it, attacking the weaving, biting jaws from various angles. As he did so, he heard an announcement over the loudspeaker outside, Jennifer's voice, paging emergency personnel to x-ray and requesting an OR be prepped stat.

In his peripheral vision, Thad noticed Dr. Amata stand up and looked over at him. But perhaps because he was having such a hard time holding down Emory's head, even with all his medical expertise and training, he failed to notice that blood no longer pulsed from Amata's gaping neck wound.

"Dr. Amata, my name is Dr. Palmer, and you shouldn't be standing up. But since you are," Thad finally had Emory's head flat on the MRI slab and had to lean all his weight against the iron mesh mask to hold it down while he attempted to secure one of the four latches, "try to climb onto the hospital bed. Help is on the way."

Joseph Xand

From the control room, Jennifer heard Thad talking and looked up from the phone. Through the glass partition, she saw Dr. Amata. She dropped the phone.

"Thad!" she whispered loudly.

Thad heard her, barely, and looked past Dr. Amata and made eye contact with her. She had a bloody hand pressed to the glass, streaking it with gore. Obviously and acutely disturbed, she shook her head. Thad looked back slowly to Amata, Emory bucking beneath the wire mask.

"Dr. Amata?"

Without warning Amata hissed and barreled towards Thad, arms extended, teeth exposed. Thad fell backward, releasing Emory who sprang up, snapping at Thad as he fell. Amata slammed into the MRI bed, toppling over Emory. Thad scuttled out of the way just in time, Amata hitting the floor where he had been.

Thad stood and bolted behind and around the MRI machine as Amata regained his feet, but Thad tumbled again when he rolled his ankle on a bundle of power cords. He screamed in pain and hit the floor hard. He scrambled beneath the hospital bed just as Amata shot around the corner of the MRI machine and dove under the gurney after him. Thad kicked Amata's head. In spite of the bulky suit, Thad maneuvered quickly to the other end of the bed. He emerged out the other side and popped onto his feet, forgetting his damaged ankle, and nearly collapsed again from the pain.

He hobbled towards the control room, and Amata swiped at his legs from under the bed, nearly knocking him down again. Thad reached the control room door just as Amata slid out from under the bed. Amata raced full speed towards the door, reaching it as Thad slammed it shut. The tall but thin window on the door shattered inward and Amata's head and right arm extended through it, his skull somewhat misshapen

## Dead Fall

from having been forced through the six-inch wide opening. Amata hissed and groaned, staring intently as Thad and Jennifer huddled together and pressed against the far wall of the small room, his fingers less than a foot away, stretching to reach them.

And he was still coming.

His clavicle snapped and his ribs splintered as Amata pressed himself slowly through the narrow passage.

Thad held onto Jennifer and scanned the small room for something, anything, to use as a weapon. His eyes lighted on a keyboard and he snagged it up, ripping it away from its wiring. Just as he raised it to bat at the bloody hand, light filtered through the glass from behind them, and Thad turned to see a soldier, halfway into the x-ray room door, pointing a pistol through the glass towards Amata.

"No, wait!" Thad yelled at the soldier. He nearly threw himself between Amata and the gun when three shots ripped through the glass partition, raining sparkling shards down on Thad and Jennifer as they cowered.

When it was over Thad looked at Amata. His head was littered with bullet holes. His arm slobbered against the floor. His torso slid slowly down the opening, glass from the window's sides ripping new gashes as he did.

Thad turned to the soldier, filled with rage. "You idiot! You didn't have to kill him! We could have saved him! He just needed to be restrained!"

Jennifer grabbed the head of Thad's bio-suit, found his face, and forced him to look her in the eyes. "No, Thad. No, we couldn't have saved him."

"But he—" He tried to turn back to the soldier, pointing. Jennifer wouldn't let his head move. Wouldn't let his eyes leave hers.

"There's nothing else we could have done."

Joseph Xand

"But why?" he asked, focused completely on her now.

"Because," she let go of his face and wanted to run a hand through his hair, as she knew Thad was known to do to his daughter when she was upset, "he was already dead."

Thad looked down at Amata again, not as shocked as he'd expected, but still not believing, then melted into a roll-away office chair.

He thought of the cruise ship passengers. Walking out of the ocean after spending days underwater. Their faces and hands bloated.

He remembered something. Something that sounded like it was out of some morbid, bizarro Dr. Seuss book.

*Vengeful ghosts of the Liberty Coast.*

Thad's heart was pounding. His breathing erratic. His ankle throbbed.

There was so much going on here he didn't know. That he'd never seen. Jennifer still had so much to show him.

They were only on the first floor, the tour barely begun.

It was going to be a long day.

# About the Author

---

Joseph Xand has been (in no particular order) a carpenter, pizza deliverer and cook, psychology clerk, dishwasher, resident assistant, security guard, community organizer, CAD designer, cabinet maker, line feeder, forklift driver, warehouse worker, hall director, political organizer, writing instructor, screenplay analyst, reach truck driver, editor, non-fiction author, granite fabricator, secretary, janitor, Union organizer, website and graphics designer, convenience-store clerk (for one day), cashier, record-store clerk, screenplay club founder, and computer tech.

Now he can add novelist to the list.

He lives in Texas with his wife, three kids, three dogs, and three cats.

For information on the rest of the book, please visit [JosephXand.com](http://JosephXand.com)