

**P194**

**Chapter Twenty-Two: 0:45am (pps194-205)**

*In the biohazard lab*

LG: The virus doesn't feel as threatening as it should. Keep that threat more in the foreground. Mention it in dialogue. PG: I wanted to be more scared of the virus. KF: Elton has devised an elaborate means of keeping the virus absolutely isolated—but it goes wrong, and an improvised solution is put in place that keeps everyone nervous all the time.

KF: If Nigel is eliminated, and Harry is with the gang, it should be Elton who goes into the lab with Kit, and transfers the samples to the squirt gun. Maybe the container should be a ladies' perfume spray (which could be smuggled into a concert hall).

# 0:45 a.m.

Kit was fighting down panic. His plan had collapsed. There was no way the robbery would now go undetected, as he had planned, until the staff returned to work after the holiday. At most, it might remain a secret until six o'clock this morning, when the next shift of security guards arrived. But if Toni Gallo were still on her way here, the time left could be even shorter.

If his plan had worked, there would have been no violence. Even now it was not strictly necessary. The guard Susan could have been captured and tied up without injury. Unfortunately, Daisy could not resist an opportunity for brutality. Kit hoped the other guards could be rounded up without further bloodshed.

Now, as they approached the door to the control room, both Nigel and Daisy drew guns.

Kit was dismayed. "I said no weapons!" he protested.

"Good thing we ignored you," Nigel replied.

Kit stared aghast at the guns. They were small automatic pistols with fat handles. "This makes it armed robbery, you realise that."

"Don't worry, we're not going to get caught."

Kit felt powerless. All he could do was carry on, and try to make sure nothing else

went wrong.

Kit intended to enter the control room first, and had thought about what he would say: "Please stay calm and do what you're told, then you won't get hurt." But as he approached the door, Daisy pushed past him.

She burst into the room shouting. "On the floor—now! Both of you!"

There was only a moment's hesitation, while the two men went through shock and bewilderment to fear; then they threw themselves to the floor.

The door of the equipment room opened, and Elton looked out. He froze.

Daisy screamed at the guards: "Face down, hands behind your backs, eyes closed! Quick, quick, or I'll shoot you in the balls!"

They did exactly as she said but, even so, she drew back her foot and kicked Don in the face with her heavy boot. He cried out and flinched away, but remained prone.

Kit placed himself in front of her. "Enough!" he shouted.

Elton shook his head in amazement. "She's loony fucking tunes."

Kit wagged a finger at her. "You're not in the lab yet, and you won't ever get there if this goes on. Listen to me!" She turned away from his pointing finger, but he went after her. "No more brutality, or I'm out!"

Nigel backed him. "Ease up, girl," he said. "Do as he says. See if you can tie these two up without kicking their damn heads in."

Kit said: "We'll put them in the same place as the woman."

Daisy tied their hands with electrical cable, then she and Nigel herded them out at gunpoint. Elton stayed behind, watching the monitors. Kit followed the prisoners to the airlock and opened the door.

Daisy went through first, then Don—who was bleeding from a nasty <sup>cut on his</sup> ~~abrasion on the~~ forehead—then Stu, then Nigel. Kit followed, and watched Daisy tie the feet of the prisoners and line them up alongside Susan, who seemed still to be unconscious. ✓

They left the three guards and stepped outside.

“Next, Steve Tremlett, at the reception desk,” said Kit. “And no unnecessary violence!”

Daisy gave a grunt of disgust.

They walked along the corridor towards the Great Hall. x

As they passed the door that led to the control room, Kit’s phone rang.

“It might be Toni,” he said to Nigel. “Let me check.” He ran through the control room to the equipment room. His laptop screen said: “Toni calling Fort.” He put the call through to the phone on the reception desk and listened in.

“Hi, Steve, this is Toni. Any news?”

“The repair crew are still here.”

With the phone to his ear, Kit stepped into the control room and stood behind Elton to watch Steve on the monitor, sitting at the desk and speaking into the phone.

“Everything all right otherwise?” Toni said.

“Yeah, I think so.”

“You think so? What’s wrong?”

“Well, Susan Mackintosh should have finished her patrol by now, but she’s not back.”

Kit cursed.

Toni said anxiously: “How late is she?”

On the monitor, in black-and-white, Steve checked his wristwatch. “Four minutes.”

**P197**

IT 1.4 'youths' better than 'boys'?  
1.13 typo 'It was one o'clock'

“She may have gone to the ladies’ room. Give her a few more minutes, then go and look for her.”

“Okay. Where are you?”

“Not far away, but I’ve had an accident. A car full of drunk boys clipped the rear end of the Porsche.”

I wish they’d killed you, Kit thought.

Steve said: “Are you okay?”

“Fine, but my car’s damaged. Fortunately, another car was following me, and he’s giving me a lift.”

“When will you be here?”

“Ten or fifteen minutes.”

Kit felt weak at the knees. Ten minutes! Fifteen at the most! He looked at his watch. It was a one o’clock. He had until ten past one, maybe quarter past.

Toni said goodbye and hung up.

Kit ran across the control room and out into the corridor. “She’ll be here in a few minutes,” he said. “We have to move fast.”

They ran along the corridor. Once again, Daisy burst through the door first. She screamed: “On the floor—now!”

*Which door is this?  
Is there one at reception?*

Kit and Nigel ran in after her and stopped abruptly.

Steve was not here.

“Shit,” said Kit.

Steve had been at the desk twenty seconds ago: he could not have gone far.

Kit looked around the low-lit room, at the chairs for waiting visitors, the coffee table

with science magazines, the rack of leaflets about Oxenford Medical's work, the display case with models of complex molecules. He stared up into the dimly-lit skeleton of the hammer-beam roof, as if Steve might be hiding among the timber ribs.

Nigel and Daisy ran along radiating corridors, opening doors.

Kit's eye was caught by two stick figures, male and female, on a door: the toilets. He ran across the hall and darted through the door. There was a small lobby leading to separate men's and ladies' rooms.

Kit went into the men's room. It appeared empty. "Mr Tremlett?" he said, using the surname to pretend he did not know the man. There was no reply. He pushed open all the cubicle doors. There was no one there.

He stepped outside just as the door to the hall banged shut. Steve must have been in the ladies' room—searching for Susan, Kit guessed. He threw open the door to the hall.

Steve was returning to the desk. He turned around, hearing Kit. "Looking for me?" he said.

"Yes." Kit realised he could not easily apprehend Steve without help. Kit was younger, and athletic, but Steve was a fit man in his thirties, and might not give up without a fight. "Something I need to ask you," Kit said, playing for time. He made his accent more Scots than was natural, in the hope Steve would not find it familiar.

Steve lifted the flap and entered the oval of the reception desk. "And what would that be?"

"Just a minute." Kit turned away and shouted after Nigel and Daisy: "Hey! Back in here!"

Steve looked troubled. "What's going on? You lot are supposed to working on the

phones, not wandering around the building.”

“I’ll explain in a minute.”

Steve looked hard at him and frowned. “Have you been here before?”

Kit swallowed. “No, never,” he said.

“There’s something familiar about you.”

Kit’s mouth went dry and he found it hard to speak. “I work with the emergency team.” Where were the others?

“I don’t like this,” Steve said, and he picked up the phone on the desk.

Where were Nigel and Daisy? Kit called them again. “Get back in here, you two!”

Steve dialled, and the mobile phone in Kit’s pocket rang. Steve heard it. He frowned, thinking, then looked astonished. “You messed with the phones!”

Kit said: “Stay calm, and you won’t get hurt.”

Steve acted quickly. He leaped over the desk and ran toward the door.

Kit yelled: “Stop!”

Steve stumbled, fell, and got up again.

Daisy came running into the hall, saw Steve, and turned toward the entrance, heading him off.

Steve saw that he could not make it to the door and turned instead into the corridor leading to BSL4.

Daisy and Kit ran after him.

Steve sprinted down the long corridor. Where was he going? There was an exit towards the back of the building, Kit recalled. If Steve made it outside they might never catch him.

**P200**

EF: I thought Daisy was pretty fit. Swimming?

Steve ran like a hare. Kit was not gaining on him, he realised; and Daisy was far behind, panting with the ragged gasps of a cigarette smoker. Steve was going to get away.

Then, as Steve drew level with the door that led to the control room, Elton stepped into the corridor in front of him. Steve was going too fast to take evasive action. Elton stuck out a foot and tripped Steve, who went flying.

As Steve hit the ground, face down, Elton fell on him, with both knees in the small of his back, and pushed the barrel of a pistol into his neck. "Don't move, and you won't get shot in the face," he said.

Steve lay still.

Elton stood, still pointing the gun at Steve. "That's the way to do it, Daisy," he said. "No blood."

She said nothing.

Nigel came running up. "What happened?"

"He got suspicious and made a break for the back door," Kit said. "Elton stopped him."

"Good lad," said Nigel.

Kit looked at his watch. It was five past one. "Skip the compliments, we're running out of time," he said. He turned to Elton: "Get my laptop from the equipment room and wait for us in the van."

Elton left.

Kit said to Nigel: "We need to get inside BSL4 now. Let's go." He pointed at Daisy. "Bring the guard."

Kit ran along the corridor to the air lock and opened it.

GK 201



## P201

GK: Just confirming that this is an accurate estimate of the required time to get into the suits.

GK: At USAMRIID, we do not use disposable underwear, but do wear something akin to a loose fitting surgical suit, comprised of a loose fitting top with snaps down the front and elasticized cuffs, and a loose fitting set of pants with a drawstring. There is no need for leather gloves if you are not specifically going to be working with the animals in the animal holding rooms. What generally happens is that you are wearing a set of surgical gloves as the first layer, and then a second set of slightly heavier gloves, like a butyl plastic on the outside that have to be taped to the suit. The leather gloves for handling animals would stay inside the suite, and just be taken off and stored there until next needed by the animal caretaker. Leather does not do well in an autoclave, which would be the way that the gloves would need to be decontaminated. So, the process of just wearing street clothes is going to work, as long as you have the gloves in place. This will keep the positive pressure gradient inside the suit in place.

SE: Kit and Nigel cannot go into the lab without hooking up to the airhoses they would either suffocate from the CO2 or fog up the face screens with condensation. Suffocating is a given. Hooking up really wouldn't slow them down. All of your other short-cuts were great – I also like the analogy/imagery of driving 130mph!

Sentence reads – “They went through another airlock”. Change this to “They went through the chemical shower next. To save time and by-pass the prerequisite 12 minute cycle, Kit depressed the emergency door release button. The normal alarms were silent.” Your reference to ears popping is exactly what would happen here –particularly since they opened the doors much quicker than the mechanical exhaust and supply valves can react/compensate – in fact, it may even be a quite painful ear pop.

All of the doors (both shower doors) could be left open to ease their escape – door over-ride alarms would have been silenced by Kit earlier in the control room. Not that there is anyone to react to the alarms anyhow.

You made reference to opening the refrigerator with the bolt cutters – consider using “the Vault”. I suppose somewhere toward the first reference to “the vault” you may need to detail the slang for the reader (??).

While Daisy took Steve through, holding a gun to his head while the doors opened and closed, Nigel said: "What about the guards at the gate—don't we need to deal with them, too?"

"No time—and no need," Kit said. "They don't know what's happened here, and they're not likely to find out—they're supposed to stay in the gatehouse all night." Kit opened the door again. Nigel picked up his tool box, which was on the floor where he had left it, and went through. A moment later Kit followed.

Daisy was tying Steve up with the other guards. Kit said: "When you've done that, get in the van and wait."

He took Nigel into the men's changing room. Kit had done the biohazard training course, to help him design the security system, but Nigel knew nothing about it. Some kind of briefing was needed even for a thief to go in. "Listen," Kit said. "Getting into BSL4 normally takes twenty minutes, and we haven't got that much time. We either have to abandon the whole thing right now, or take short cuts, at some risk to our safety. Choose."

"Tell me about the short cuts," Nigel said.

Kit spoke rapidly, one eye on the clock on the wall. "Normally, you take off all your street clothes, including underwear and jewellery, and put on disposable underwear, socks and surgical gloves; then a helmet with intercom, a biohazard suit, overshoes, and leather gloves to protect you from bites. We're going to keep our street clothes on and just wear the biohazard suit over them."

"All right."

"In the lab, there are air hoses on tracks in the ceiling. They provide pure air and also keep the suit at a slightly higher air pressure, so that any leaks are outwards. We're not going

p202

GK:

- To the best of my knowledge, there are no suits used in BSL-4 suits that have an air filter per se built into them. Another design that does not require use of the air lines is to have a PAPR (power air purifying respirator), however, these are belt mounted, or self contained in a hood that is separate from the suit. The suit that you see in the picture is a proper one piece suit. This allows for positive air pressure to be maintained.
- Proper exit procedures is first to shower with a decontamination solution (generally a quaternary ammonium compound solution - but that is obviously too much detail). You pull a chain and the shower starts with a spray that comes from every direction. After that you do a rinse with plain water to get rid of the chemical. There is no need for a water first shower since you are trying immediately to decontaminate the suit. There may also be a vessel with extra decon solution and a brush for doing your boots. The system is set up to run for a predetermined time, like a car wash, to ensure that you have done an adequate amount of contact time with the decon solution.  
<http://www.hc-sc.gc.ca/pphb-dgsp/MSDS-ftss/MSDS53e.html>
- Of course, if you come into contact with the outside surface of the suit, and it is contaminated with live virus and if then you rub an eye, put your fingers in your nose, or have an open wound, you stand a chance of infecting yourself

to use them. The air filter built into the suit will protect us.”

“Anything else?”

“On the way out, you normally shower in your suit, first with water, then with detergent, then water again. Then you strip naked and shower again for five minutes, scrub your nails, blow your nose, and clear your throat and spit before dressing. We’re going to skip the showers, take off our suits and run.”

“How dangerous is it?”

“Like driving your car at a hundred and thirty miles an hour, it might kill you, but it probably won’t.”

“Let’s do it.”

Kit took two of the light-blue suits out of a locker. He helped Nigel into one then put on the other. They went through another airlock, their ears registering a further drop in pressure as they did so; then they were in the lab. Nigel carried his tool box.

Kit took him to the hazardous materials refrigerator. It was locked with a simple, but large, padlock. Nigel opened his tool box. There were two objects inside. One was a small hard-sided briefcase made of burgundy leather, expensive-looking. The other was a bolt cutter. Nigel took out the bolt cutter and severed the hasp of the padlock. Then he opened the door of the refrigerator.

Measured doses of the precious antiviral drug were kept in disposal syringes, ready for use. The syringes were packaged in small cardboard boxes. Kit pointed to the shelf. “This is the drug,” he said.

“I don’t want the drug,” Nigel said.

Kit was mystified. Why had they gone to all this trouble, if not to steal a priceless

**p203**

AZ: Kit should have a bigger reaction to what Nigel has done. KF: Kit should vocalise his feelings, perhaps even have a row with Nigel.

AZ: What is his fantasy now of what will happen to him?

SE: Consider change of reference "...sprayed into biosafety cabinets to infect animals" to "...atomized (or nebulized) into Class III Gloveboxes to infect animals".

Consider changing "cardboard boxes" to "boxes of small, graduated pyrex bottles".

Consider changing "clear plastic tubes" to "small, graduated pyrex bottles".

GK:

- If Madoba-2 is an Ebola virus, and since the infectious dose for Ebola is likely less than several hundred virus particles, then it would be very likely that the ""aerosol container"" would have hundreds to thousands of human infectious doses."
- I would say the following: "Nigel turned off the UV light source that sterilized the interior of the cabinet and switched on the motor that created a protective curtain of downdraft air against the interior glass pane of the cabinet. He put the sample boxes into the cabinet, and delicately tipped a dozen clear plastic tubes out of each."

sample of a money-spinning new drug?

On the second shelf were samples of various viruses ready to be sprayed into biosafety cabinets to infect laboratory animals. The samples were in cardboard boxes, neatly labelled. Nigel looked carefully at the labels, then selected a sample of Madoba-2.

“What the hell do you want that for?” Kit asked.

Without answering, Nigel took all the remaining samples of the same virus from the shelf, twelve boxes altogether.

One was enough to kill a man. Twelve could start an epidemic.

Kit said: “I thought you were working for one of the pharmaceutical giants.”

“I know,” Nigel said.

Nigel could afford to pay Kit a quarter of a million pounds for tonight’s work. Kit did not know what Elton and Daisy were getting, but even if it was a smaller fee than Kit’s, Nigel had to be spending something like half a million tonight. To make that worth his while, he must be getting at least a million from his customer, probably two million. The drug was worth that, easily. But who would pay a million pounds for a deadly virus?

As soon as Kit asked himself the question, he knew the answer.

Nigel put the sample boxes into a biosafety cabinet, opened them, and tipped a dozen clear plastic tubes out of each. *sample box?* <sup>?</sup>

Next, he opened the burgundy leather briefcase. It was lined with cotton wool. Lying on the cotton wool, like a precious jewel, was a plastic spray gun of the kind used for cleaning fluid.

“Simple, but effective,” Nigel said. “And it doesn’t show up on airport X-ray machines.”

**P204**

SE:

- Double bag the spray bottle. Nigel's really a bold fellow...
- Consider double gloving Nigel at the BSC. "Nigel stripped off his **outer** gloves and left them at the biosafety cabinet"

GK: The act of pouring the virus into the spray gun indicates that the material is stored in liquid form - so earlier comments about the virus being an aerosol are not consistent. Secondly, this will create an aerosol that is going to contaminate the outside of the plastic spray device. Unless the outside surface of the device is wiped down with a disinfectant, it will be too hazardous to handle once it is taken outside. Finally, the materials will need to be kept cold at least, although in blood specimens, Ebola virus can stay stable at room temperature for several weeks.

Also in the briefcase were a pair of disposable kitchen gloves and a plastic sandwich bag.

Nigel put the spray gun and the sandwich bag into the biosafety cabinet with the virus samples. Working quickly, he poured the liquid from all the tubes into the spray gun.

The result was a weapon that could kill thousands.

Nigel's customer was not a pharmaceutical company, it was a terrorist group.

Kit said: "Who are you working for?"

Nigel put the spray gun into a plastic sandwich bag and sealed it, then put the bag in the briefcase. "You know that saying, I could tell you but then I'd have to kill you? In this case, it's not a joke."

"Oh, fuck," Kit said.

*Why?*

Nigel stripped off his gloves and left them in the biosafety cabinet.

Kit looked at his watch. It was ten past one.

Nigel picked up the burgundy briefcase, and Kit led him out into the showers. They stripped off their biohazard suits and left them on the floor. They left BSL4 and ran down the corridor to reception, Nigel carrying the briefcase containing the spray gun. There was no sign of Toni Gallo.

The van was outside the door, its engine running. Elton was at the wheel, Daisy in the back. Nigel and Kit jumped in.

Elton roared off. The snow lay thick on the ground, and the van immediately skidded and slewed sideways, but Elton got it back under control, and drove more slowly to the gate.

Kit hoped a guard would just open it, without asking questions, but one of them leaned out of the booth. "All fixed?" he said.

Kit wound down the window. "Not quite," he said. Curbing his impatience, he explained: "We need some parts. We'll be back."

"It's going to take you a while, in this weather," the guard conversationally.

From the back, Daisy said in a low voice: "Shall I shoot the bastard?"

"We'll be as quick as we can," Kit said, and wound up the window to end the exchange.

After a moment the barrier lifted, and they drove out.

Elton turned north. As they joined the main road, Kit looked to the south and saw a car approaching. He watched its headlights in the mirror as Elton gradually picked up speed.

The car turned into Oxenford Medical.

Toni Gallo, Kit thought. A minute too late.

Bad action scene. But Kit  
 should have a far bigger reaction  
 to what Arjel has done.  
 And what is his fantasy now of  
 what will happen to him?