

Sudden loss of water due to contamination

Day 1 Monday

Moderate Impact

It's the beginning of 2nd shift patients are all on the machine and everyone has settled down.

There is an unexpected alarm in the water room. The biomed tech goes to investigate.

There is a News bulletin on the TV and dialysis patients alert the staff that the water department has turned off the water supply to the entire city due to a threat of water contamination. The Mayor commends the swift response of the emergency response team to shut down the city's water system pending further investigation of the incident. The Department of Health (DOH) and the Center for Disease Control (CDC) released a statement that they do not anticipate the contamination has reached the general public and will look at the risk factors (with special attention to fatality for children, the chronically ill and the elderly).

Things are very confusing and the news anchor reports that the CDC is going to give an update on the contamination shortly and asks the viewers to standby for more information.

The CDC and the Mayor of the city jointly reported that there had been a terrorist attack on the city's water system. In accordance with the city's emergency response system, the water system has been shut down. The CDC and the Mayor further explained that it appears to be a targeted attack across the United States and seven other cities were also hit this morning.

With this news alert, dialysis treatments are suspended for the rest of the day.

Discussion Topic: Have your team consider how they would handle request from pts that would want to stay or come in to the facility and complete their treatment.

News Bulletin 1:00 PM: The Mayor and the CDC report that a domestic terrorist group known as the "Covenant" has dumped a biologic parasite called *Cryptosporidium parvum* into the water systems of several big cities simultaneously and have claimed that they will continue to contaminate additional city water supplies over the next week if their demands are not met. The parasite causes a condition called Crypto and leads to severe diarrhea and dehydration and people with weakened immune systems may develop serious, chronic, and often fatal illness. The disease is also easily spread by contact with infected individuals. The CDC and DOH are reporting that doctors are currently working on a specific decontamination and treatment methodology for the biological parasite.

The TV news reports progress throughout the day on the water testing done by the CDC and DOH. The City emergency hazmat response team and terrorist response team as they search the water treatment facility in the city as well as the water treatment facilities in the surrounding counties.

Discussion Topic: Have your team consider how they would communicate with each other so they can plan for the treatment of the patients.

The evening news: The CDC and DOH report that they have determined that dialysis reverse osmosis (RO) systems in conjunction with an additional NSF Standard 58 approved water filter would decontaminate the water and allow the safe dialysis of patients. (Similar water filter systems are also in place at hospitals, nursing homes, and emergency shelters.)

The DOH issued an alert that facilities may want to consider developing a standardized treatment order reducing treatments to twice a week for 3 hours for all patients. (Facilities may also want to consider providing a safe shelter location for the staff and their families, so staff is not worried about their family and they can focus on their work.)

Once humans are infected, the disease must run its course and medications have limited effects. The CDC and DOH reported that the bacterial parasite has not been detected in the fish or any other aquatic life.

Discussion Topic: Have your team consider how this scenario would impact them both personally and professionally.

Day 2 Tuesday

Major impact

Public Health Crisis Declared. Dialysis facilities were able to make the modifications to their water system over night and are now open. Facilities are operating on a shortened treatment schedule and activated their standardized treatment order for all of their patients. Some of the patients refuse to come in for treatment and some patients went to visit family in other cities not affected by the water contamination.

All public gatherings are prohibited and all schools, religious houses of worship, restaurants, malls, movie theaters, are closed.

LDO and SDO will be taking direction from their corporate leaders. Network maybe working with small independents: helping them to optimize their staffing.

Discussion Topic: Have your team consider how limited staff availability would impact the operation of the facility as well as the mood of the remaining staff.

The evening news reported that the city emergency hazmat response team has located two tankers containing the biological contaminate and were able to safely capture one of the tankers.

Unfortunately, the second tanker emptied its biological contaminate into the water system before the response team was able to capture the tanker. The area of water contamination has been isolated and the cleanup has begun. It will be another 24 to 48 hours before the cleanup is complete. Water quality is still hazardous due to the high level of contamination. The water department stated that they will let the public know when it is time for them to purge the water pipes in their homes so that the water will be safe to use again.

Discussion Topic: Have your team consider how they are going to notify all of the patients with regular updates regarding the facilities operation status.

Day 3 Wednesday

Recovery

Dialysis facilities continue to operate. The morning news reported that the water department is asking that everyone to begin purging their water system at 11:00 am this morning.

With this news alert, all patients are notified and dialysis treatments are suspended for the rest of the day.

The facility's water system is purged at 11:00am, and the treatments are rescheduled for the rest of the week (Thursday, Friday, Saturday and Sunday).

Recovery will vary facility to facility and may take a few days for all patients to resume their normal treatment schedule.

Discussion Topic: Have your team consider the probability of sudden water loss occurring and how that scenario might play out at your facility.

Hot Wash

Discuss the mock drill with your team and use your notes from both the mock drill and the hot wash to write up the after action report.