Worker Dies from Carbon Monoxide Poisoning And Smoke Inhalation



A hospital maintenance worker was repairing a broken hand held hair dryer. He asked a co-worker to assist in locating some acetone to remove epoxy from his hands. His co-worker did not know where to get acetone, but he did know of an unmarked one gallon container stored under the counter in the paint storage room.

Grabbing this container, he proceeded to unscrew the lid, tipping the can over to pour the substance onto his hands. The bottom of the can slipped off the counter and hit the floor, splashing the liquid from its spout. The maintenance worker jumped to the back part of the room while his co-worker jumped out the doorway. In the panic, the co-worker pulled the door partially closed to contain the splashed liquid.

A small, portable, electrical heater was running in the same room. Within seconds, a flash fire erupted, followed by an explosion, blowing the door shut and trapping the maintenance worker inside. The burning liquid flowed under the door, spreading the fire. The co-worker attempted to rescue him by opening the door, but the supply of fresh oxygen caused a further flash and sent thick smoke into the rest of the building. Another explosion occurred within the room, filling portions of the building completely with smoke.

The exterior of the door was engulfed in flame and the fire was spreading. The co-worker could get no verbal response from inside, and a second attempt to enter the room was unsuccessful when the door would not yield, even when he tried kicking it. During this attempt to rescue the victim, the co-worker received burns to his hand and burned the hair on his head. He became dizzy and disoriented and had to crawl out of the building. He went to the hospital nursing station, but in his disorientation could not remember why he was there or what had happened.

An autopsy on the charred remains of the deceased maintenance worker confirmed that he was alive at the time of the flash fire, and that he died of carbon monoxide poisoning and smoke inhalation. The autopsy ruled out any pre-mortem injurious trauma and pre-existing disease conditions which may have otherwise contributed to his death. Positive identification had to be confirmed through a comparison of his upper dental plate.

A lack of safety awareness combined with the complacency of flammable and combustible Materials was likely the main cause of this fatality.

Solvents will usually burn at relatively low temperatures and are therefore a potential fire hazard. It is important to remember these materials may cause a fire when exposed to heat, flames or friction sparks.

The proper storage, handling and labeling of solvents will greatly reduce the danger of leaks, fire and explosions. They should be stored away from ignition sources, in tightly closed and properly labeled safety containers. And you should never smoke when working with or near them.