Basement Explodes When Vapors Drift Near Pilot Light

Two finishers were working with a chemical product on a parquet tile floor in a residential basement. The heavier-than-air vapors from the product accumulated and spread to an adjacent room where a gas-fired water heater was located.

When the fumes reached the pilot light of the heater, they caused a fire. The fire flashed back along the vapor trail to the main room and engulfed the two men in flames. Both later died of burn-related injuries. One died of respiratory failure due to secondary infection from his burns. The other died of multiple system failure brought about by the burns covering more than half of his body.

If you have a pilot light on a stove, hot water heater or furnace in your home, and if you ever use flammable substances without fully understanding and guarding against the hazards, then this could happen to you. At home and in the workplace, the formula is the same: Combine flammable vapors from a chemical product and a source of ignition and you have fire and explosion.