

Constance M. Pechura and David P. Rall, Editors, *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite* (excerpt)

U.S. Institute of Medicine, 1993

The Bari Harbor Disaster

The only combat casualties from sulfur mustard in WWII were those injured or killed following a German air raid on the harbor of Bari, Italy, on December 2, 1943 (Alexander, 1947; Cochrane, 1946; Gage, 1946; Harris and Paxman, 1982; Infield, 1976; Perera and Thomas, 1986). Under conditions of secrecy, 2,000 bombs, each of which held 60 to 70 pounds of sulfur mustard, had been loaded on the merchant marine ship *S.S. John Harvey* before it had sailed from Baltimore to Bari. During the raid on Bari harbor, the *John Harvey* was sunk and some of its load of mustard bombs was damaged, causing liquid mustard to spill out into water already heavily contaminated with an oily slick from other damaged ships. Men who abandoned their ships for the safety of the water became covered with this oily mixture that provided an ideal solvent for sulfur mustard. The casualties were pulled from the water and sent to medical facilities unaware of what they carried with them on their clothes and skin. Equally unaware were the medical personnel who treated these casualties. Before a day passed, symptoms of mustard poisoning appeared in both the casualties and the medics. This disturbing and puzzling development was further compounded by the arrival of hundreds of civilians for treatment; they had been poisoned by a cloud of sulfur mustard vapor that blew over the city from some of the bombs that had exploded when the ship sank.

As the medical crisis worsened, little information was available about what was causing these symptoms. U.S. military command did not want to reveal to the enemy its preparations to position sulfur mustard in Europe for possible use against German forces. Eventually, however, the secret could not be kept (Harris and Paxman, 1982). The destroyer U.S.S. *Bistera*, well outside the harbor and undamaged by the raid, had pulled 30 men from the water in a rescue effort. By the next day, the officers and crew of the *Bistera* were blinded from the effects of the sulfur mustard carried onto the ship by those rescued. Bari was overloaded with casualties by then, and the *Bistera* and its crew struggled to nearby Taranto for treatment. Soon the U.S. command had no choice but to confirm the cause of these injuries. With the assistance of Colonel Stewart Alexander, a military physician with extensive knowledge of mustard poisoning, better precautions and treatment were begun. By the end of the disaster, over 600 victims of mustard poisoning were treated from the harbor area alone; of these, 83 died (Alexander, 1947). Close to 1,000 civilians from the town also died (Harris and Paxman, 1982).

Unfortunately, no long-term medical follow-up of survivors of the Bari harbor disaster has been reported.

Constance M. Pechura and David P. Rall, Editors. *Veterans at Risk: The Health Effects of Mustard Gas and Lewisite*. Washington, D.C.: National Academies Press, 1993. Available at: <http://www.ncbi.nlm.nih.gov/books/NBK236059/>.