

Irrigator Struck in Face by Pipe Valve¹

California NURSE Project²

SUMMARY : CASE 192-114-01

Farm irrigators set up and take apart pipes that carry water to fields. An irrigator was taking apart a sprinkler system in a cotton field. His line of sprinkler pipes was connected at one end to the main water line. This connection was made by a valve screwed down on the water line, and a ring clamped over the valve and line.

Just before taking apart the sprinkler system, water was flowing in the main water line into the irrigator's line of sprinkler pipe. To shut off the water to his sprinkler line, the irrigator bent over the connecting valve and began turning its faucet handle. The valve cap on top of the connecting valve came loose. Water pressure from the main water line fired the valve cap into the worker's face. This broke the worker's jaw, knocked out his front teeth, and gave him a concussion. Headaches, dizziness and blurred vision bothered him for weeks after the injury.

How could this injury have been prevented?

- Turn the water off at the main water line, not at the hookup between the main line and the sprinkler pipe.
- Check equipment before using it, including the screw threads and clamps of connecting valves.
- Train workers in safe work methods. This farm did not have a written outline for safety training.

The NURSE (Nurses Using Rural Sentinel Events) project is conducted by the California Occupational Health Program of the California Department of Health Services, in conjunction with the National Institute for Occupational Safety and Health. The program's goal is to prevent occupational injuries associated with agriculture. Injuries are reported by hospitals, emergency medical services, clinics, medical examiners, and coroners. Selected cases are followed up by conducting interviews of injured workers, co-workers, employers, and others involved in the incident. An on-site safety investigation is also conducted. These investigations provide detailed information on the worker, the work environment, and the potential risk factors resulting in the injury. Each investigation concludes with specific recommendations

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