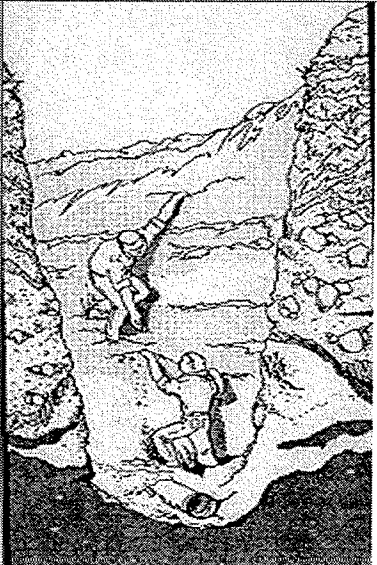


ACCIDENT REPORT FATAL FACTS

ACCIDENT SUMMARY No. 31

Accident Type:	Cave-in	
Weather Conditions:	Cloudy and Dry	
Type of Operation:	Trenching and excavation	
Size of Work Crew:	4	
Collective Bargaining:	No	
Competent Safety Monitor on Site:	Yes	
Safety and Health Program in Effect:	Yes	
Was the Worksite Inspected Regularly:	Yes	
Training and Education Provided:	No	
Employee Job Title:	Pipe Layer	
Age & Sex:	32-Male	
Experience at this Type of Work:	9 Months	
Time on Project:	2 Weeks	

BRIEF DESCRIPTION OF ACCIDENT

Employees were laying sewer pipe in a trench 15 feet deep. The sides of the trench, 4 feet wide at the bottom and 15 feet wide at the top, were not shored or protected to prevent a cave-in. Soil in the lower portion of the trench was mostly sand and gravel and the upper portion was clay and loam. The trench was not protected from vibration caused by heavy vehicle traffic on the road nearby. To leave the trench, employees had to exit by climbing over the backfill. As they attempted to leave the trench, there was a small cave-in covering one employee to his ankles. When the other employee went to his co-worker's aid another cave-in occurred covering him to his waist. The first employee died of a rupture of the right ventricle of his heart at the scene of the cave-in. The other employee suffered a hip injury.

INSPECTION RESULTS

Following investigation, citations were issued alleging three willful, four serious and two non-serious violations of construction standards. Had the trench been shored to prevent slides or cave-ins and had employees been trained to recognize and avoid unsafe conditions, the accident could have been prevented.

ACCIDENT PREVENTION RECOMMENDATIONS

1. Employers must instruct employees on how to recognize and avoid hazardous conditions and on regulations applicable to the work environment (29 CFR 1926.21(b)(2)).
2. Excavated and other materials must be effectively stored and retained at least two feet from the edge of the excavation (29 CFR 1926.651(i)(1)).
3. The employer must ensure that the walls or side of trenches in unstable or soft material 5 feet or more in depth, be shored, sheeted, braced, sloped, or protected in some manner to prevent cave-ins and to protect employees required to work within them (29 CFR 1926.652(b)).
4. When excavations are subjected to vibrations from highway traffic, additional precautions must be taken to prevent cave-ins (29 CFR 1926.652 (e)).
5. Ladders must be provided as a means of exit when employees are required to be in trenches 4 or more feet deep (29 CFR 1926.652(h)).

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NOTE: The case here described was selected as being representative of fatalities caused by improper work practices. No special emphasis or priority is implied nor is the case necessarily a recent occurrence. The legal aspects of the incident have been resolved, and the case is now closed.