

2011 Preventive Roof/Rib Outreach Program

Talking Points

While recent trends have seen roof fall fatalities reduced by about 62% since the 1990s, the incidence of rib fall fatalities has remained approximately constant.

In 2010, the number of fatal rib falls in U.S. underground coal mines exceeded fatal roof falls for the first time ever.

Since 1995, there have been 22 rib fall fatalities (excluding coal burst incidents).

In addition to the fatalities, approximately 100 miners are injured by rib falls every year.

Approximately three-quarters of the rib fall fatality victims since 1995 were roof bolting machine operators or continuous mining machine operators.

Rock partings (rock layers contained within the coal seam) or rock brows (rock layers above the coal seam) were present in nearly every instance where a fatality occurred.

Rib fall injury rates increase substantially as mining height increases.

Four of the fatalities took place during construction activities, including installation of belt drives, overcast construction, and track grading. In each of these cases, an area had been created in which the mining height was considerably greater than normal, but no rib support had been installed.

Rib bolts provide the best protection against rib falls and are most effective when installed on cycle and in a consistent pattern.

Out of the 22 rib fall fatalities, only two had any rib support installed.

Pre-shift and on-shift evaluations should note adverse rib conditions, and rib hazards should be corrected or controlled before work commences.

Adverse rib conditions should be reported to management.