

Developing outreach and training resources to reduce the occupational risk of coal dust

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Reducing risks from Occupational exposure to Coal Dust (ROCD), is a 10 partner, 3-year EU Research Fund for Coal and Steel contract (No 754205) to address concerns about the occupational health impacts of dusts in coal mines, see partner list and further details at www.exeter.ac.uk/csm/rocd.

Coal dust continues to impact the health of thousands of miners worldwide, despite strict regulations and the availability of modern and efficient dust control and respiratory protective equipment. According to a publication by the KOMAG Institute of Mining Technology, Poland (ROCD partners), there were over 4500 cases of pneumoconiosis over the last 10 years in Polish mines. In the USA, there has been an increase over the last ten to fifteen years in the number and severity of coal dust-related lung diseases, despite huge efforts in the 1990s to reduce these. The rise has been variously attributed to cuts in control measures and enforcement, and, with the depletion of thicker coal units, the exploitation of thinner seams containing higher proportions of components such as quartz which is potentially carcinogenic.

ROCD outreach and teaching materials are being developed to promote a wider understanding of the health impacts of coal mine dusts and for incorporation into workplace training programmes, most importantly to encourage the constant and efficient use of modern dust control systems and dust masks. Online E-training modules will contain all information necessary to safely perform work in environments where there is a potential dust hazard. Educational engagement and outreach will focus on: (1) Coal mine workers who need to understand the benefits of dust control and protection and implement methods that will work operationally; (2) mine managers who can deploy the results of the ROCD project to improve health protection; (3) Regulators to start dialogue at a national level on dust hazards and implications for mine health and safety legislation; (4) the general public to understand that coal mining is a vital part of the economy in many countries and that there is work underway to make it safer and more responsible; (5) The scientific community to encourage the development of more efficient dust control and respiratory protective equipment.