Caring for Coal Miners- ten years in the Yorkshire coalfield 1975-1986

Professor Ewan B Macdonald OBE Health Working Lives Group University of Glasgow

Occupational history

- Internal medicine then trained in Occupational medicine in Yorkshire coalfield
- Large NCB Medical Service, newly created Institute of Occupational Medicine in Edinburgh
- Personally responsible for Doncaster Area 16000 minersmedical service-2 doctors, 15 Occ Health nurses, 45 Medical room attendants. Ambulance fleet, Local mines rescue service.
- Honorary NHS Consultant in Rehabilitation Firbeck Rehabilitation Centre
- Became Principal Medical Officer for Yorkshire Coalfield -60,000 miners, 50 mines
- Later experience, Aluminium, Chemical, Textile, Military, Rolls Royce, Nuclear, and NHS

Coal mining

- Dirty
- Noisy
- Dangerous
- III People
- Poor communities
- Environmental Pollution

My experience in Coal mining 1975-85 "Coal board could not see anything for dust"- EBM "Miners expected to be knackered by 50"- Bill McCulloch.

- 1975-85 coalmining
- 17,000 mineworkers
- 30 accident deaths
- Pneumoconiosis 1975 -4.5%; 1985 - 0.5%
- Silicosis,Asbestosis,mesotheli oma
- COPD , asthma
- Lung Cancer
- Excess cancers

- 50% back pain and MSK
- Carpal tunnel syndrome
- Pre patellar bursitis
- Skin problems
- Noise induced hearing loss
- Hand arm vibration Syndrome
- Hand arm vibration Syndrome
- Mental Health
- PTSD
- Miners Nystagmus

Mining – the first occupation?

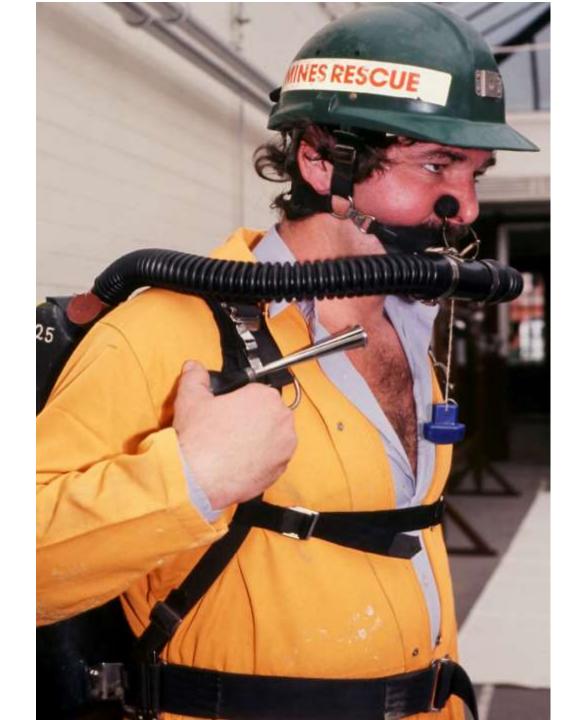
- Flint mining with antler tools
- 7000BC-1000AD slaves , prisoners of war, and criminals
- Miners indentured to owner
- Agricola 1556 De Re Metallica –accidents, lung diseases "in the Carpathian mountains there are women who have married seven husbands"
- Paracelsus 1567- itinerant physician , introduced rational therapeutics, -"one night with Venus followed by seven years of Mercury", studied mining diseases , died in a fight in a pub.
- Ramazzini- 1700 De Morbis Artificium diatriba "have not thought it unbecoming to make my way into the lowliest workshops and study the mysteries of the mechanical arts"

















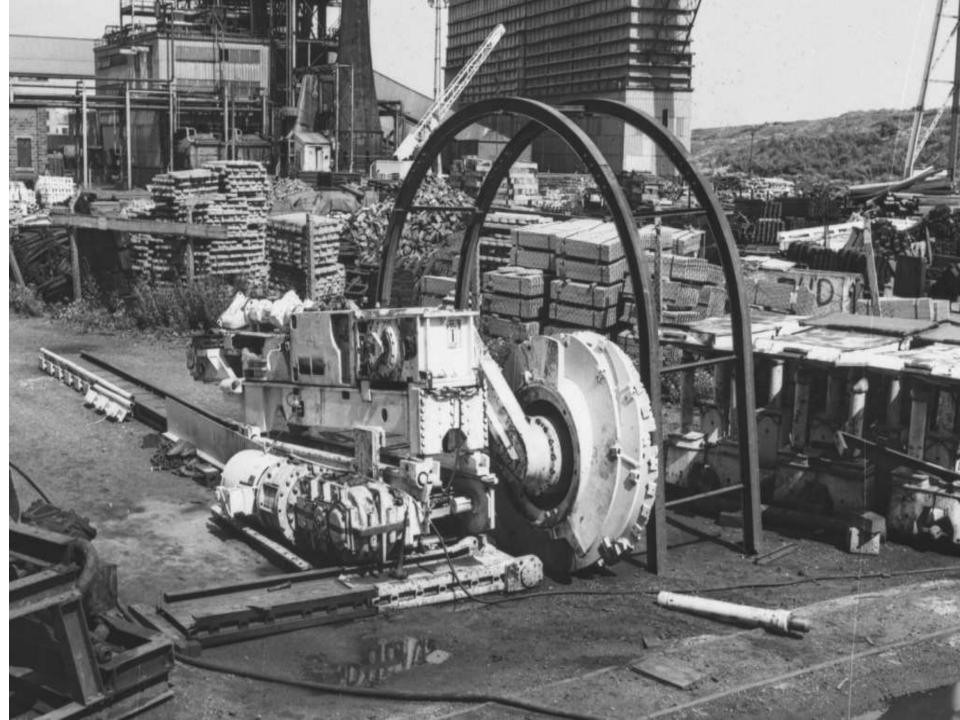


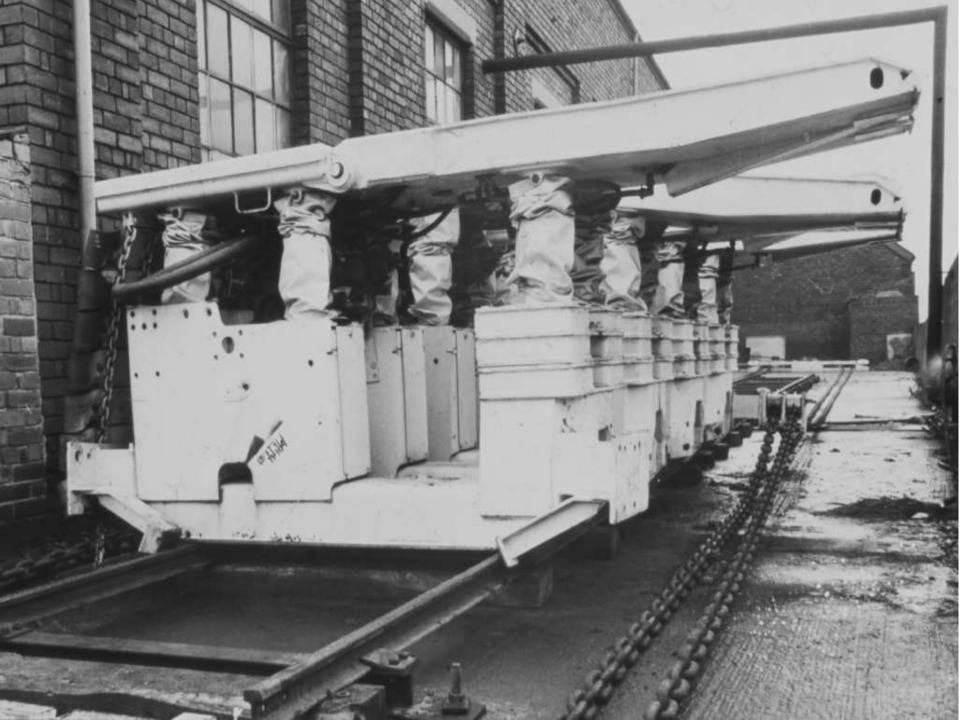












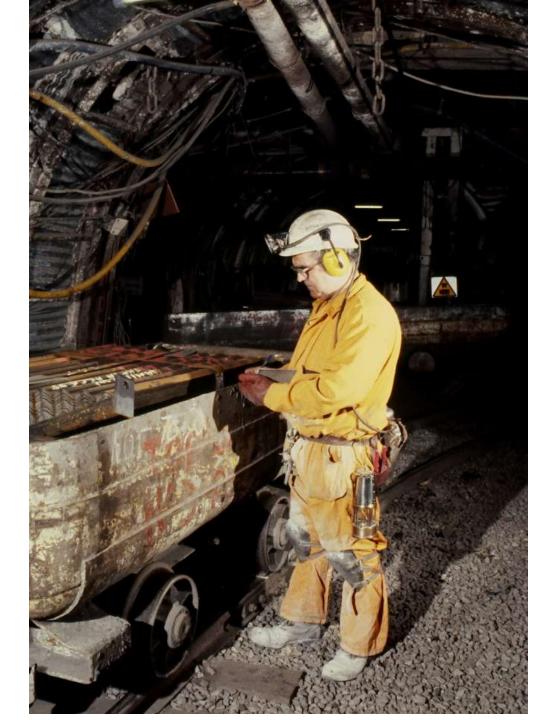


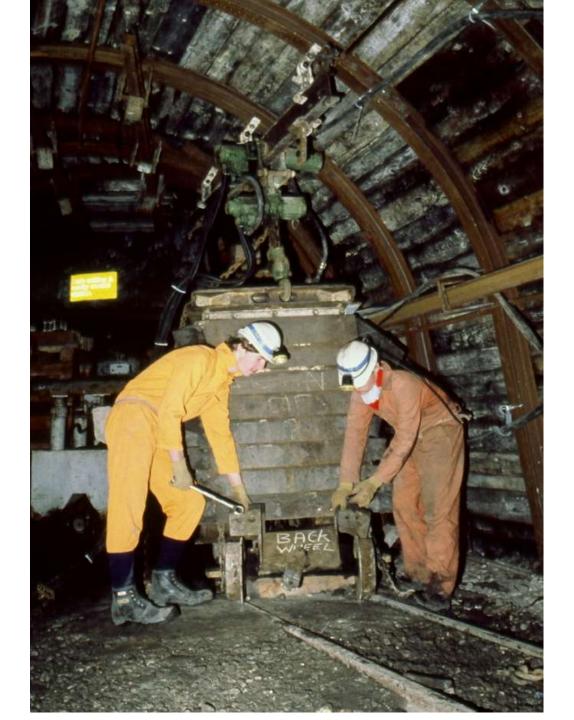














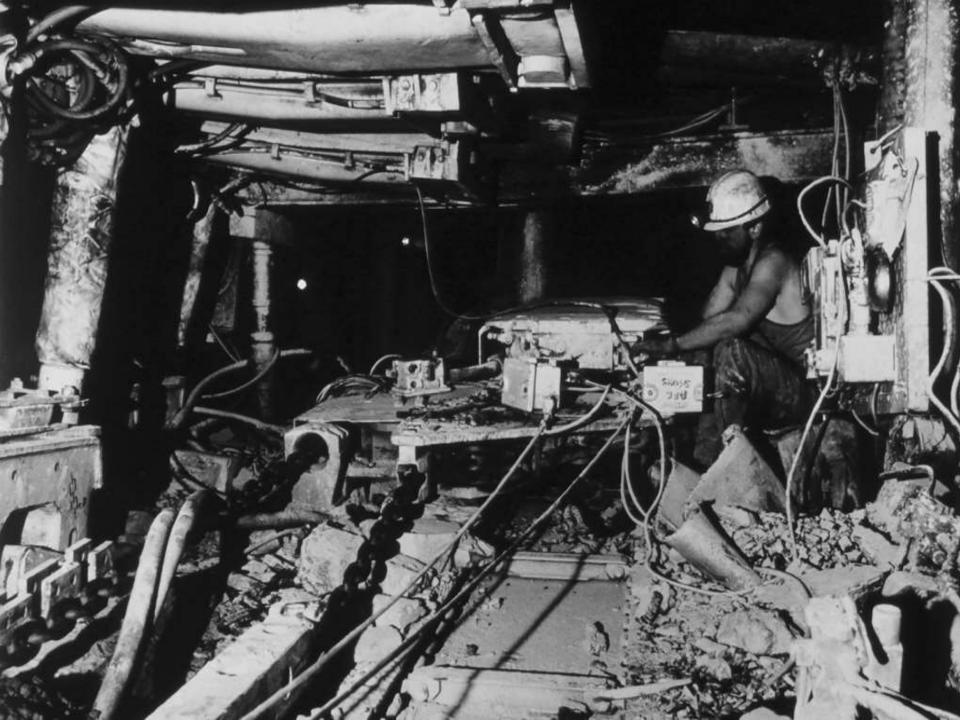




















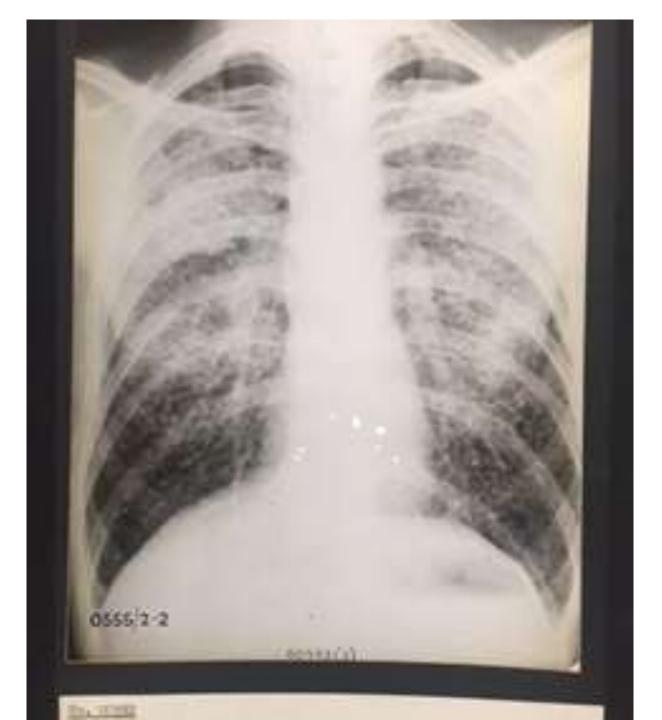
Coal mining

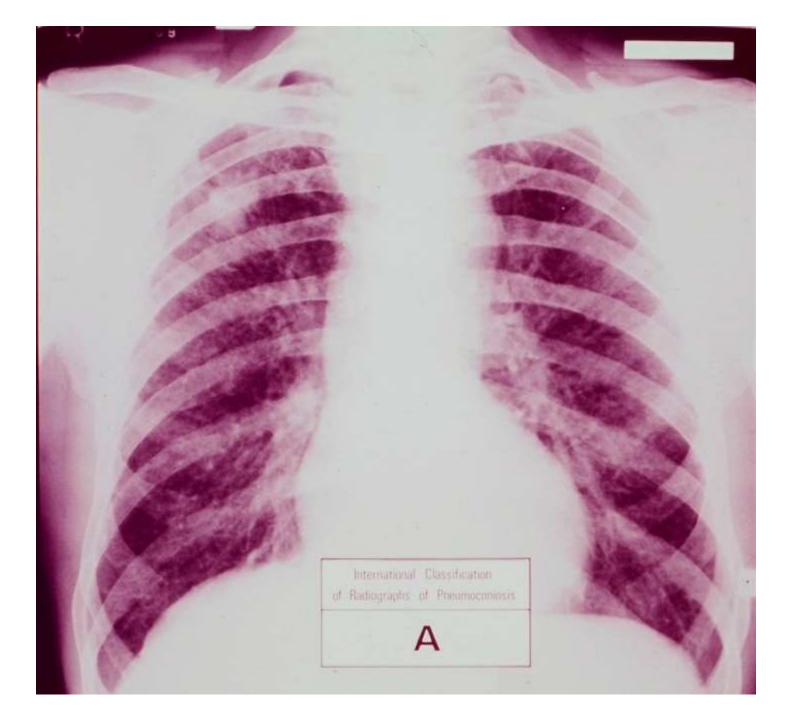
- Dirty
- Noisy
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Occupational health and coal mining-1975

- Industry obsessed with Pneumoconiosis
- Musculo-skeletal / back pain
- Skin
- COPD
- Mental Health
- Sickness Absence



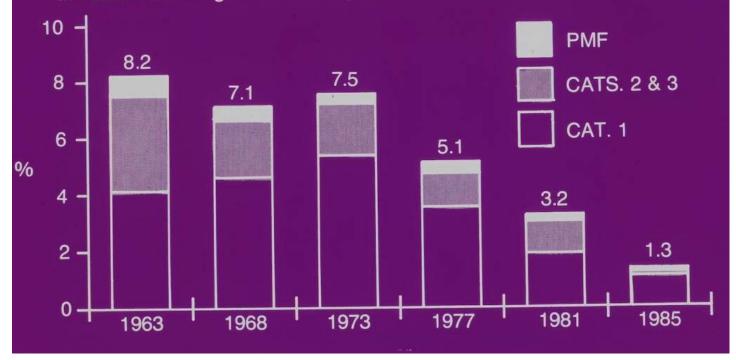




Pneumoconiosis- Role of the NCB Medical service

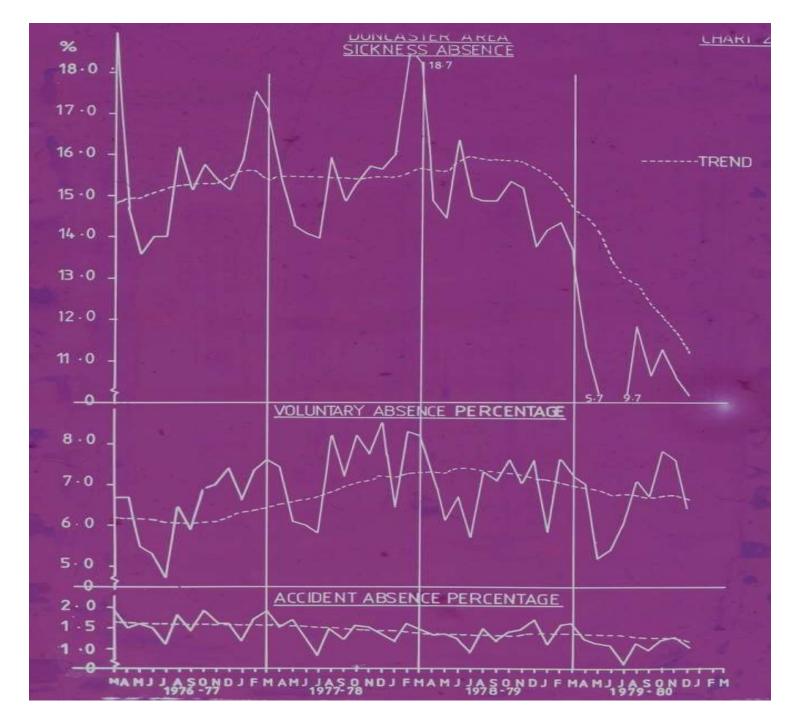
- 4 yearly CXR and clinical review
- F to F consultation, clinical assessment, PFT's, review of CXR, lifestyle, smoking, HP advice etc
- COPD, Emphysema
- General health
- Cat 1 monitor review in 2 years, dust mask
- Redeploy option
- Hearing protection

Prevalence of all categories of pneumoconiosis in men aged under 60 at the same 30 collieries surveyed in 1985, in 1981, in 1977, in 1973, in 1968 and in 1963. Percentage of men X-rayed.



Role of the NCB Medical service

- National service , local responsibility
- Member of Management / Union, H & S and general consultation meetings
- Direct access to senior management
- Liaison with Radiological service ,IOM, Bretby (ergonomics)
- Hon consultant in Rehabilitation, Miners Rehabilitation centre
- National committees
- Control of Pneumoconiosis was informed by research and achieved by with a multidisciplinary team of engineers, hygienists ventilation specialists, dust suppression techniques, and trade Unions



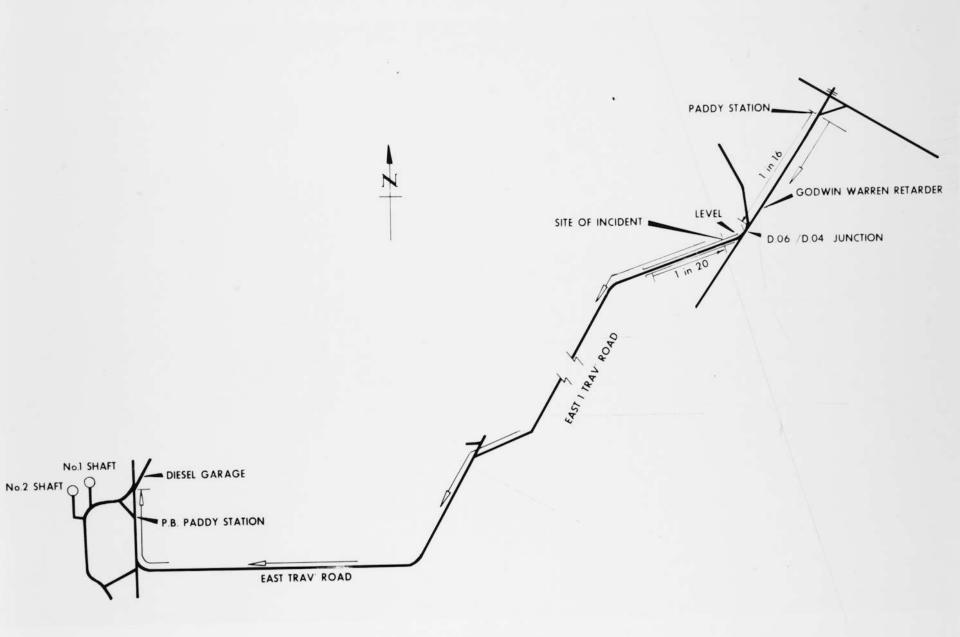
YEAR	(MANPOWER)	ACCIDENTS		
	AVERAGE	FATAL		All AcodentRate
1947	703 9	-	-	-
1948	716.5	-	-	-
1949	712 5	432	2.2.69	136.2
1950	690 8	476	1,982	139.8
1951	692 6	473	1,903	134.6
1952	709.7	409	2,073	133 5
1953	711.5	364	1,907	134.0
1954	701 8	359	1,825	128 3
1955	689 7	408	1.850	127 0
1956	697-4	318	1.731	129.7
1957	703-8	391	1,900	116.6
1958	692 7	315	2,037	130.7
1959	658-2	343	1,662	1438
1960	602 1	316	1,553	143.7
1961	570 5	234	1,464	148.2
1962	550.9	255	1,541	161.8
1963	544-3	236	1/506	161.0
1964	517.0	253	1,325	180 7
1965	491.0	181	1,276	186.0
1966	455.7	217	1,156	210-3
1967	4194	146	1,000	1973
1968	391.9	130	975	191.2
1969	336-3	115	788	182.5
1970	305-1	82	672	172.9
1971	2872	92	599	135 8
1972	281 5	58	578	123 3
1973	268 0	79	56.9	123.0
1974	2 52 0	60	461	122 5
1975	246 0	56	576	105 5
1976	247 1	59	538	105-3
1977	242.0	38	515	100 0
1978	240 5	48	520	97.9
1979	234.9	72	473	94.6
1980	232.5	30	456	81.9
1981	229-8	39	601	71.0
1982	218-5	33	826	62.5
1983	207-6	44	807	52.8
1984	191-3	22	744	42.6

Basic questions for occupational health professionals

• What makes your workforce sick?

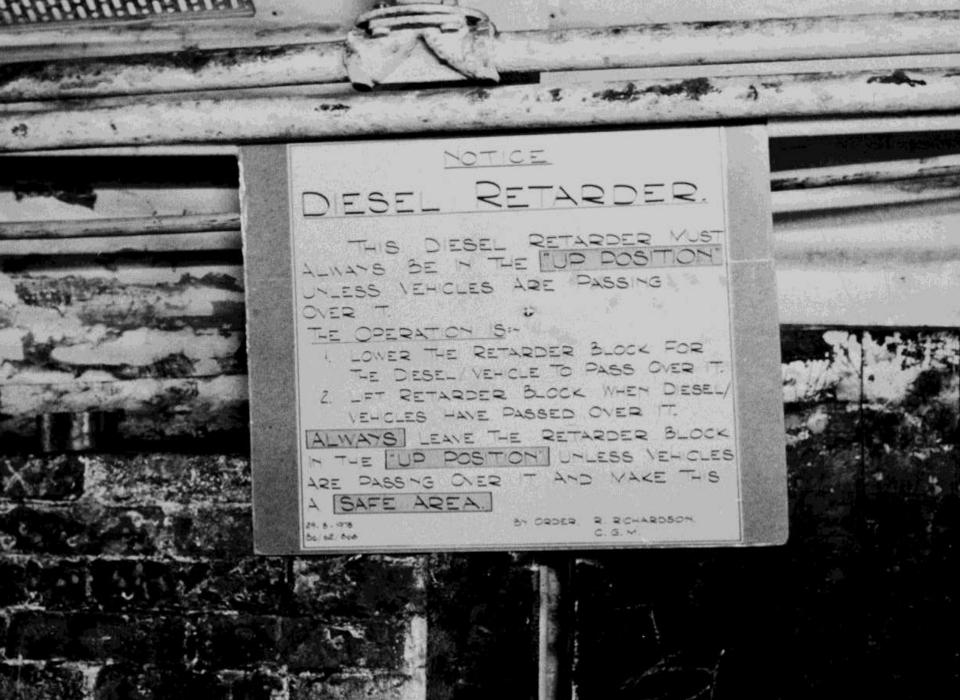
• Why do they retire?

• Why do they die?



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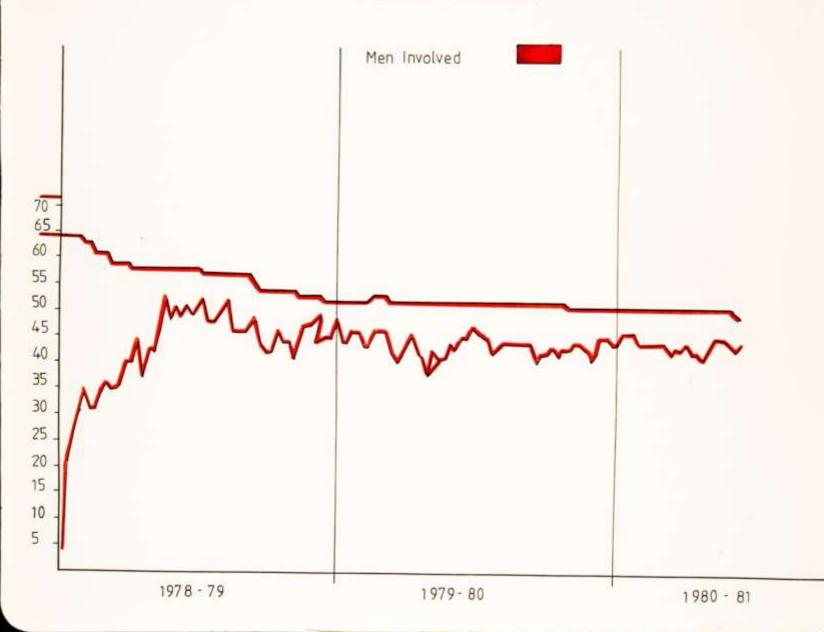
CASUALTY LIST - II

Killed Sent to Hospital Minor Injuries No physical injury

71

TOTAL

PADDY INCIDENT 1978





Throughout history mining was associated with that gut wrenching anxiety experienced by mothers, fathers, partners and family members who know that their loved one has not come home as anticipated and who hurry to the pit....

or in Aberfan to the school. May they rest in peace.