



training course, allows for close scrutiny of those non medical professionals supplying "mine health assessments". However some general practitioners offer this service to mining companies and no training occurs for these (other than their "medical training"). The Department does allocate an approved persons number for each doctor, and again quality of their data can be regularly reviewed. Where necessary the mines occupational physician will discuss quality control matters with the individual doctor. The evidence to date does suggest that there is some significant variability between practices. This is of concern and reflects the validity or otherwise; of lung function testing.

CONCLUSIONS:

Historically merely collecting data where the objective for so doing is unclear, or lost in the mists of time, becomes a fruitless exercise and an expensive proposition. It was identified that the conducting of chest x-rays as an "entry criteria", into the mining industry was proving of no value. It did allow information on the incidence of pneumoconiosis, which over the last decade has been extremely low.

Levels of exposure to atmospheric contaminants in the mining industry are below many of the recommended standards set throughout the numerous jurisdictions. The identification of new cases of pneumoconiosis in Western Australia was extremely rare (often imported from another country), and this demanded a review of the justification for continuing with these chest x-rays (as a legislated process).

In choosing the procedures for the health surveillance programme, acknowledgement must be made of the test validity, sensitivity and specificity. Questionnaires administered over time in a standardised fashion provides useful surveillance information. Pulmonary function tests can provide objective, quantifiable measures of lung function. However, test variability is high, though sensitivity is good. Audiometric assessments are sensitive and valid. Chest x-rays are non specific, though validity is good in trained readers. Currently the health surveillance program has no intention of introducing other test protocols and until discussion occurs regarding other possible disease occurrence, then debate on the screening test further modifications of the health program is not anticipated.

The Department of Minerals & Energy of Western Australia through its legislative requirements has commenced on an ambitious long term health surveillance programme (MINEHEALTH), currently assessing lung function and audiometric status. However, provision is made in the same legislation to conduct additional health assessments which are considered valid and necessary along with biomonitoring. The enhancement of the exposure database (CONTAM) and the need to record occupational disease, will provide a powerful mechanism for health improvement in the mining industry. This ultimately will ensure the minimising of long term risk in the mining industry and protection of the community of Western Australia.

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APPENDIX A:

DESIGNATED WORK CATEGORIES

UNDERGROUND MINING WORK CATEGORIES	MINERAL COMMODITY
Foreman/shift boss	All
Production/development	All
Longhole drill and blast	All
Diamond drillers/raise borers	All
Loading/transport	All
Ground/roof support	All
Service occupations	All

SURFACE MINING WORK CATEGORIES	MINERAL COMMODITY
Blast hole drilling	* (see below)
Charging and blasting	*
Exploration activities - drilling/sampling	All
Open cut service occupations (eg. dump spotters)	*
Sample preparation	*
Sampler	*
Sampler plant operator	*
Crushing/screening operator	*

* construction materials (dimension stone, granite and silica sand), gold, nickel and silicon

NON-MINING WORK CATEGORIES
Sandblasting
Tunnelling/road construction
Foundry work
Any occupations involving potential significant exposure to asbestos (eg. asbestos removal occupations)