and Johnson bills is the permissible level of coal dust in a mine. The Johnson bill calls for a standard of 3.0 milligrams of coal dust per cubic meter of air, a figure recommended by the U.S. Public Health Service based on research in England, where it was found that at 3.0 milligrams there was a significant reduction in the incidence of black lung; at 4.5 milligrams there was an increase found for each added milligram. The Nixon Administration bill calls for the 4.5 standard to be reached six months after the bill becomes law and 3.0 as soon as possible. The Johnson bill also sets no specific date for its 3.0 standard to be reached.

The U.S. Bureau of Mines feels that with existing technology, the 3.0 standard is not feasible for all mines, whereas 4.5 is. According to Dr. John Holtz, acting research director for the Health and Safety Research and Testing Center of the bureau in Pittsburgh, the more advanced the technology a mine has, the greater its dust problem. Modern mines with continuous mining machines using high-speed drills grind out more coal dust than those mines with slower equipment that bites off large chunks of coal.

Dr. Holtz feels that 4.5 is easily attainable with present equipment in the larger mines: "I personally feel that if we get in there and carry out practices properly, 4.5 is not an unreasonable figure. The 4.5 could be met today, but 3.0 could not."

Abatement procedures consist of ventilation and damping down the dust by water sprays. Added wetting agents, such as alcohols, cause water to spread more easily over a surface and therefore could assist in holding down dust levels, but few mines employ them.

For the future, the bureau is looking into different types of cutting bits to give larger lumps of coal. Slower machines or slower bits are another answer, but they are not likely. The number of coal mines is decreasing; the remaining mines will have to speed production rather than slow it.

Of the 25 major coal mining states, only four—Pennsylvania, Virginia, Alabama and now West Virginia—have workmen's compensation laws for black lung. Preferring to regard this matter as one between the states and industry, neither the Johnson or Nixon bills provides or requires the states to compensate miners who have been disabled by the disease.

The present Administration's bill is in many respects the more comprehensive. It involves providing standards and requirements for such things as underground shelters, illumination and communications as well as a new section on electrical equipment.

Both bills are actually dual bills, encompassing both health and safety. The UMW has presented two separate bills. Explains president W. A. Boyle, "We are fearful that combining of these two basic questions could very well cause a weakened bill to be voted upon and also could conceivably result in no bill at all."

Secretary Hickel was emphatic about that point when he told the Congress: "Let me at this point make this Administration's position very clear on the subject of a single health and safety bill versus two bills—one on health and one on safety. We recommend and strongly urge one bill covering both subjects. The health and safety of the coal miners are so closely interwoven that it is inappropriate to even contemplate their consideration as separate issues. Miners are dying from accidents in the mines and from occupationally caused disease. In our opinion, those who oppose health legislation are the same people who oppose safety legislation. We firmly believe that the Congress, like the Executive Branch, can consider the subjects simultaneously, one bill covering health and safety. We urge you to do so."

TUBERCULOSIS

Problem-child of alcoholism

People in the upper socio-economic levels of society have thought for years that tuberculosis was a thing of the past. Early treatment with powerful drugs has reduced the number of deaths, but there are still about 350 hospitals in the United States with more than 30,000 beds occupied by TB patients in any one year.

And 22 percent of all these patients are alcoholics.

They are the derelicts who, in every city, live their lives as bed brothers of all kinds of germs and are easy prey to TB. When and if they get cleaned up in a hospital they are problem patients. They tend to go home too soon in spite of doctors' advice, and although they are given prescriptions they are often too intoxicated to remember to take their drugs.

The problem of the hospitalized tuberculous alcoholic "has been of considerable interest since the early 1950's," a team of researchers at the University of Washington in Seattle points out.

Dr. Robert J. Rhodes, now of the Neuropsychiatric Institute of the University of California at Los Angeles Center for the Health Sciences, and his co-workers, sent questionnaires to all hospitals and sanitoria having more than 20 beds.

Ninety hospitals reported that alcoholism greatly complicated the effectiveness of tuberculosis treatment. Eighty-eight said it was a moderate problem and 56 indicated that it was minimal. Only 19 reported that alcoholism was not a problem. This 19 held the fewest number of alcoholics.

The major problem was the high rate of discharge against medical advice and absence without leave, reported by 62 percent of the hospitals polled. Fifty-eight percent of the alcoholic patients posed a disciplinary problem; 53 percent had a higher readmission rate than nonalcoholic patients; 39 percent had a longer hospital stay and 33 percent were uncooperative patients.

Sartwell

Tuberculosis is a skid-row problem.

Dr. Rhodes worked in another study which deals with tuberculous skid-row alcoholics. The findings indicate that it is mainly in the lower socio-economic group that the combination of diseases is found. Those with both problems have higher relapse and lower recovery rates than those who have one or the other disease alone.

These studies are borne out by Dr. Julia Jones, who is head of chest-disease treatment at Harlem Hospital. She finds that few alcoholics among the educated and higher-economic group have tuberculosis because they have not been exposed to infection in the same way their poorer brothers-in-booze have been.

Poor nutrition often exists among alcoholics, and the skid-row types are exposed to all possible germs. Further studies might reveal a tendency among alcoholics to a combination of infectious diseases other than TB.

It has been pointed out that the chief way doctors learn to treat alcoholics is in hospitals. However, alcoholics are still being turned away from most hospitals, and medical schools ignore alcoholism.

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