Noise

Noise may be defined as "unwanted sound" Under certain conditions, it can produce a hearing loss similar to that of normal aging Noise is an important part of industrial hygiene because (1) hearing loss is compensable in some states, (2) there are a greater number of workers exposed than in the past, and (3) more knowledge of methods of control and safe noise levels is becoming available All aspects of the problem are fully discussed in Chapter 43, "Industrial Noise."

Biological Agents and Other Occupational Infections

Tuberculosis

Tuberculosis and other infections may be an occupational disease when they are contracted by nurses, doctors, or attendants caring for tuberculosis patients, or during autopsy or laboratory work where the bacilli may be present. It is not considered occupational under other conditions.

Fungus infections

A number of occupational infections are common to workers in agriculture and in closely related industrial jobs. Grain handlers who inhale grain dust are likely to come in contact with some of the fungi which contaminate grain from time to time Some of these fungi can and do flourish in the human lung and on other parts of the body and produce disabling disease.

Fine, easily spread fungi, such as rust and smut, can be contacted once the covering of infected grain is broken and may produce sensitization. Infections from some of these fungi are endemic (of local nature) in the Southwest and are not necessarily industrial.

Anthrax

Among people handling imported hides, and bristles, the most feared occupational disease is anthrax, a highly virulent bacterial infection. In spite of considerable effort in quarantining infected animals and in sterilizing of animal products, this disease remains a problem. With prompt detection and modern methods of treatment, it is much less likely to be fatal than it was a few years ago

"Q fever"

There have been reports of infection—"Q fever"—with a rickettsial organism among meat and livestock handlers It is similar to but apparently not identical with "tick fever," which has been known for many years. The exact mode of transmission is not known, but there is evidence that "Q fever" may come from contacting freshly killed carcasses or droppings of infected cattle. Probably in the latter case transmission is by inhalation of the infectious dust Prevention undoubtedly depends primarily upon recognition and elimination of the disease in the animal host.

Brucellosis

Brucellosis (undulant fever) has long been known as an infection produced by drinking unpasteurized milk from cows suffering from Bang's disease (infectious abortion). Since it can also be contracted by handling the animals or their flesh and is also transmitted by swine and goats, it is an occupational ailment of slaughterhouse workers as well as of farmers, although more common among the latter Here also, preventive measures are primarily proper testing and control of the animals to eradicate the disease

Erysipeloid

The other major bacterial infection to which slaughterhouse workers and fish handlers are subject is erysipeloid, which seems to be especially virulent when contracted from the slime of fish

Upper respiratory tract infections

Workers exposed to dusts from vegetable fibers such as cotton, bagasse (sugar cane residues), hemp, flax, or grain may develop upper respiratory tract infections ranging from chronic irritation of the nose and throat to bronchitis, complicated by asthma, emphysema or pneumonia, or a combination.

Dusts from many of these fibers may also be a source of allergens, histamine, and toxic metabolic products of microorganisms. However, most of the cases of illness arising from handling these fibers have been reported in the foreign literature *

---

*Maxy, Kenneth F, editor *Preventive Medicine and Public Health*, 8th ed. New York City, Appleton-Century-Crofts, 1956.