are absorbed rapidly and completely from the nasal passages when they have no chance to go either into the digestive system or deeper into the respiratory system

Prevention of lead poisoning is almost entirely a matter of good housekeeping and dust control To prevent ingestion, food or drinks should not be taken into workrooms where lead compounds are handled.

The metal is essentially harmless Although it can be vaporized at high temperatures, such temperatures are not usually attained in casting, soldering, or heat treating baths

Casting and soldering pots should have local exhaust hoods to get rid of lead vapor or lead compounds which may be carried off with volatile fluxes It is at least equally important that the surface of the lead be kept free from dross and that the dross container be enclosed under the same hood so that dross can be removed from the pot and the container covered and removed, all under exhaust

Likewise, on large soldering jobs the soldering operation should be locally exhausted, primarily to prevent nose and throat irritation from acid fluxes More important, the furnaces used for heating the soldering irons should be exhausted because in these furnaces considerable lead is invariably oxidized

Assembly of battery plates and burning-on of the connectors should be done on grille-top tables with down-draft ventilation This installation plus regular air sampling to ensure control of contamination, and physical examinations to keep track of lead absorption by employees, can eliminate lead poisoning from battery plants

The poisoning produced by inhalation of solid inorganic lead compounds commonly causes symptoms of lead colic and lead anemia Stipple cells or other readily stained cells in the circulating blood are good indicators of lead absorption, although not so good as the direct measurement of lead content of the blood or urine Urinalyses for lead can now be run routinely and cheaply and with sufficient accuracy by polarographic or spectrographic methods

Lead tetraethyl and other lead alkyls are likely to be much more rapidly progressive as poisons than the nonvolatile compounds and are much more likely to attack the nervous system than to produce gastrointestinal symptoms These effects are probably typical of the volatile lead compounds, none of which is common in industry

Lethanes—see **Thiocyanates (aliphatic).**

Lindane—see **Hexachlorocyclohexane.**

M

Magnesium is one of the light metals used as a construction material In the early days of its industrial use, there were numerous laboratory reports that fine particles of magnesium, and particularly of magnesium alloys, left in wounds would react with the tissue fluid to produce bubbles of hydrogen gas that would cause severe tissue injury It was stated that when the hydrogen was produced, magnesium hydroxide was also produced and acted as a moderately strong alkali to damage the tissue

This reaction is theoretically possible and has been produced in experimental animals by imbedding magnesium powder beneath the skin It was also seen occasionally a number of years ago when metallic magnesium clips were tried as substitutes for sutures in experimental surgery

Nevertheless, there are no published reports of such tissue injuries from the industrial use of magnesium The reason is not known, it may be that such injuries fail to develop or that the hazard is recognized and special care is taken to eliminate particles of the metal and its alloys from industrial injuries

The magnesium ion is a normal constituent of a number of tissues, and a certain amount of magnesium in the diet is essential to life Excessive amounts are known to be toxic, and injuries and deaths due to medical use of magnesium salts have been reported There have been no reports of industrial intoxication from inhalation of magnesium metal powder or magnesium oxide

Inhalation of freshly produced magnesium oxide fumes has caused metal fume fever, similar to the better known "zinc chills" or "zinc shakes" caused by inhalation of freshly formed zinc oxide fumes

Heavy exposure to magnesium oxide is irritating to the eyes, nose, and throat, but the material is not a severe primary irritant

Finely powdered magnesium is a fire haz-