Smelly Gas May Save Lives

Physics

Addition of a smelly gas to the nearly odorless methyl chloride, which has caused a few deaths from leakage from automatic refrigerators in various parts of the country, may be one means of preventing further accidents of this nature. So says a joint announcement of the U. S. Public Health Service, the Bureau of Standards and the Bureau of Mines, just issued. Other remedies suggested are the entire replacement of methyl chloride with less dangerous gases, or the mechanical improvement of the refrigerating systems so that the gas will not leak into rooms used to sleep in. However, compared with the great number of refrigerators in use, the number of accidents has been very small, it was stated.

All these refrigerating systems make use of a gas or refrigerant in the coils of the machine. Ammonia, sulphur dioxide and methyl chloride are the most popular.

"None of the three refrigerants mentioned, ammonia, sulphur dioxide or methyl chloride, can be breathed with impunity, but none are violent poisons when breathed for a short time in low concentrations," says the report. "If the same amount of the three substances is considered, methyl chloride is the least poisonous of the three; but because their physiological effects are quite different it is hard to make a quantitative comparison. Sulphur dioxide and ammonia both have strong odors which are easily recognized and are so irritating that no one is likely to breathe much of them if escape is possible. Methyl chloride has a slight and rather pleasant odor, which would probably not awaken a sleeping person and might not be recognized by one who was awake. To this fact can be attributed any greater hazard from methyl chloride than from other commonly used refrigerants."

The report emphasized that the gas used as a refrigerant has nothing to do with the fuel gas used to run certain types of refrigerator. In all types in which a flame of illuminating gas is used to heat the refrigerant, the latter is ammonia. In most of the electric types, where a motor compresses the refrigerant, sulphur dioxide is used, though a few makes use methyl chloride. It is the latter that present any danger, especially where used in a large plant to supply a number of apartments.

Science News-Letter, August 10, 1929

Heart Disease Less Fatal to Young

Medicine

Heart disease is taking fewer and fewer lives among the younger people of our country. While the general death rate from this disease is rising, figures collected by the Metropolitan Life Insurance Company show that this increase is chiefly among older people. In the younger age groups, up to 45 among men and up to 65 among women, distinct improvement in the cardiac death rate has occurred during recent years.

This encouraging decrease is evidence of the strides made in controlling diphtheria and scarlet fever and of the better and more intelligent care given to infectious diseases, including rheumatism, to diseased tonsils and to dental hygiene, officers of the company believe. The preventive aspects of heart disease are chiefly concerned with early life and are most effective then. Heart disease usually kills after 45, but it is during childhood that it is most often acquired.

At present over 225,000 persons die of heart disease in this country every year. However, another encouraging factor in the picture is that much of the increase in heart disease deaths after age 65 is probably the result of change in style of reporting deaths. Where formerly the physician would have given old age as the cause of death he now gives heart failure or cardiac degeneration. About 80 per cent. of the cardiac deaths occur in the age range above 65. At this age degeneration of the heart is more a natural than a disease process. Degeneration of the heart, kidneys and blood vessels is characteristic of old age and tens of thousands of old people die of such conditions every year. A great many of these deaths are therefore really the result of senility in which the heart impairment is merely an accompaniment of the breaking down of the other organs. But if the physician states on the death certificate that there is cardiac degeneration, these deaths are classed under heart disease in the mortality statistics.

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Answers to Test

Psychology

(Stop! If you have not taken the test, do not read further, but turn to page 79.)

Answers: 1. (3); 2. There is no correct answer to this question. It is designed to determine whether you tend to make guesses or "snap judgments"; 3. 12.25 oz.; 4. (1), (3), (4), (5); 5a. inconsistent, 5b. consistent; 6. The answers to this question cannot be rated right or wrong, but they indicate whether you have a bent for experiment or research in books, or whether you are inclined to depend on the opinions of others; 7. Any reaonable plan is given credit, the question is a test of ingenuity when faced with a difficult situation.

Science News-Letter, August 10, 1929

Poison in Silver Polish

Toxicology

The shiny, freshly polished spoon or fork may not be the best one to pick out in a cafeteria or hotel dining room, it now appears. A number of cases of acute cyanide poisoning have been traced to polish used on table silver and other metal kitchen or eating utensils in various hotels in New York, the State Department of Health has just reported. No deaths have been reported so far, but a number of persons have been made ill.

When several cases of illness, apparently food poisoning, were reported occurring in persons who had dined at an upstate hotel, health officers began investigations, following every clue that might lead to discovery of the guilty substance that had caused the illness, whether food or germ. They found that the hotel's silver had just been polished. Chemical analysis of the silver polish used showed that about one-fifth of it was composed of poisonous sodium cyanide. Further investigations disclosed that other hotels and restaurants in the state and in New York City were using this or another cyanide-containing polish for their silver.

One woman, whose work entails considerable traveling, reported having suffered twelve different attacks during a year while stopping at hotels in various cities. Some hotels have already reported that attacks of similar illness among their guests have ceased to occur since this type of silver polish has been discarded.

Science News-Letter, August 10, 1929