In the past seven years many reports of illness allegedly due to beryllium compounds have appeared in the scientific literature.[14] The absence of a sensitive analytical method for determining minute quantities of beryllium handicapped many investigators.[13] The "Spectrographic Determination of Beryllium in Biological Material and Air," published by Cholak and Hubbard in 1948,[15] has been most valuable. This year Stokinger and others reported animal experiments from which they concluded that "sufficient evidence has been adduced . . . that the toxic manifestations observed are the result of the action of beryllium itself and not mainly the result of the associated anions of its acidic salts." [16]

Nonoccupational berylliosis has been reported to have occurred in residents living in the vicinity of a beryllium-producing plant. Extensive air analyses indicated that these residents were exposed to concentrations in the range of 0.1 microgram per cubic meter of air.[17] It should be pointed out that this was an exposure of 24 hours a day. However, this illustrates the great toxicity of beryllium. In fact, it has been said that beryllium "is toxic in such small quantities as to be among the most toxic chemically of all elements yet investigated." [16] Owing to the limited knowledge of the toxicity of beryllium, a tentative maximum allowable concentration has not been proposed by any of the usual organizations which have promulgated such standards in the past. Therefore, it is recommended that, by the use of extensive engineering control methods and personal protective equipment, the inhalation of beryllium and its compounds be avoided if possible.

In conclusion, if consideration is given to individual susceptibility, duration and rate of working, and the presence of other toxic materials, maximum allowable concentrations are useful criteria in evaluating and maintaining safe working environments.

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14. Van Ordstrand, H. S.; Hughes, R., and Carmody, M. G.: Chemical Pneumonia in Workers Extracting Beryllium Oxide: Report of 3 Cases, Cleveland Clin. Quart. **10**:10-18 (Jan.) 1943. Kress, J. E., and Crispell, K. R.: Chemical Pneumonitis in Men Working with Fluorescent Powders Containing Beryllium, Guthrie Clinic Bulletin, Sayre, Pa., 1944, vol. 13, no. 91. Van Ordstrand, H. S.; Hughes, R.; DeNardi, J. J., and Carmody, M. G.: Beryllium Poisoning, J. A. M. A. **129**:1084-1090 (Dec. 15) 1945. Hardy, H. L., and Tabershaw, J. R.: Delayed Chemical Pneumonitis Occurring in Workers Exposed to Beryllium Compounds, J. Indust. Hyg. & Toxicol. **33**:197-211 (Sept.) 1946. Gardner, L. U.: Generalized Pulmonary Granulomatosis Occurring Among Workers Believed to Be Exposed to Beryllium or Its Compounds, Transactions Bulletin no. 8, Industrial Hygiene Foundation Inc., 1946, pp. 89-94. Hardy, H. L.: Delayed Chemical Pneumonitis in Workers Exposed to Beryllium Compounds, Am. Rev. Tuberc. **57**:547-556 (June) 1948. Martland, H. S.; Brodkin, H. A., and Martland H. S., Jr.: Occupational Beryllium Poisoning in New Jersey (with Special Reference to Its Incidence, Diagnosis and Compensation), J. M. Soc. New Jersey, **45**:5-14 (Jan.) 1948. Machle, W.; Beyer, E., and Gregorius, F.: Berylliosis, Occup. Med. **5**:671-683 (June) 1948.

15. Cholak, J., and Hubbard, D. M.: Spectrographic Determination of Beryllium in Biological Material and in Air, Analyt. Chem. **20**:73-76 (Jan.) 1948.

16. Stokinger, H. E.; Sprague, G. F.; Hall, R. H.; Ashenberg, N. J.; Scott, J. K., and Steadman, L. T.: Acute Inhalation Toxicity of Beryllium, Arch. Indust. Hyg. & Occup. Med **1**:379-397 (April) 1950.

17. Eisenbud, M.; Wanta, R. C.; Dustan, C.; Steadman, L. T.; Harris, W. B., and Wolf B. S.: Non-Occupational Berylliosis, J. Indust. Hyg. & Toxicol. **31**:282-294 (Sept.) 1949.