

69. Cats. Four cats inhaled the long-fiber asbestos dust for periods of 14, 25, 33 and 42 months, respectively, and were immediately sacrificed. Two other cats, after being exposed to dust for 18 months, lived in a normal atmosphere for an additional 24 months.

70. Rate and Type of Reaction. Exposure for 14 months was sufficient to produce cellular accumulations of phagocytes around terminal bronchioles and peripheral arterioles together with compact collections of similar cells in the tracheobronchial lymph nodes. At that time there were no typical asbestosis bodies, but smooth pointed yellow fibers were seen very rarely. With continued exposure, up to 42 months, reaction in the locations noted progressed to the formation of cellular connective tissue which made well-defined sheaths about the respiratory bronchioles and arterioles, marked lymphoid hyperplasia and lymphoid infiltration of bronchiolar walls. The bronchiolar epithelium was low and flattened, giving the tubes a smooth contour. Typical asbestosis bodies were not formed although there was an occasional yellow, smooth, pointed fiber. No pleurisy was present. The reaction was similar in location to that in the guinea pigs, but fibrosis was much slower in development and had not reached the same degree of maturity.

71. X-ray Changes. Roentgenograms of three cats were made after exposure periods of 25, 33 and 42 months, but tissue changes were not dense enough to be seen on an X-ray film.

72. Rats. Although 20 rats were placed in the dust room, many died from pneumonia and were not suitable for study. Five animals, of which one was exposed for 19 months and four for 25 months, were free from pulmonary infection and offer a basis for conclusions.