

Fluorine is a pale, yellowish gas at room temperatures, is extremely active and highly poisonous. Fluorides of calcium, strontium, and barium are insoluble, silver fluoride is soluble. There is no possible oxide of fluorine.

Fluorine has been proven as the cause of so-called "mottled" teeth. Professors at the University of Arizona in their laboratory tests have developed mottled teeth in dogs and also in rats through inclusion of fluorine in the animals drinking water. It has been proven conclusively that the endemic conditions of mottled teeth among the children of St. David, Arizona

came from presence of fluorine in the town's water supply. The source of the fluorine in this case has not been determined. At Colorado Springs, Arizona where the same endemic conditions prevailed, a large deposit of cryolite on Pikes Peak is suggested as the source of the contamination of the water supply. Mottled teeth conditions have been found in a number of widely spread districts, throughout Colorado, Arizona, Texas, Virginia, Italy, Holland, China, Mexico, Spain, etc. The scientist Gauthier has analyzed waters from many different sources for fluorine and has shown that waters in volcanic regions, waters produced eruptively, and so-called mineral waters contain higher concentrations of fluorine.

The symptoms of "mottled" teeth enamel is characterized by dull white or paper white patches scattered irregularly over the surface of the tooth. In some cases the whole surface shows this unglazed appearance. In many cases the enamel becomes badly pitted. It is found chiefly among the children of the community affected.