How is pollen and mold sampled in Anchorage?

The Municipal Department of Health and Human Services operates a Burkard Volumetric Spore Trap in the Airport Heights neighborhood of Anchorage. The unit samples air for a 24-hour period, after which identification and counting is quickly performed to provide information that is as current as possible.



A vacuum pump draws a constant quantity of air through a small opening oriented by a wind vane. As the air is drawn in pollen, fungus, minerals and other airborne materials adhere to adhesive film placed on a microscope slide which is mounted within the Spore Trap. The slide is collected and returned to the lab, where the sample is stained and examined microscopically. Types and quantities of pollen and mold spores are determined. Pollen is magnified 400 times for identification and counting; mold spores are magnified 1,000 times. Concentrations of tree, weed, and grass pollen and mold spores in the air on sampling day are calculated based on the number counted and the total amount of air that passed through the machine during the sampling period.