

POLLEN AND MOLD CALENDAR FOR ANCHORAGE



Knowing pollen and mold levels is valuable for the 10 to 20% of the population who suffer from allergic rhinitis or “hay fever”. Common allergens include tree, grass and weed pollen and mold spores. Allergists can help identify the allergens to which individuals are sensitive, and these individuals can modify their exposure or adjust medications in response to pollen and mold count reports to improve their quality of life. The amount of pollen and mold in the air varies seasonally. For example, in Anchorage tree pollen levels typically peak before grass and weed pollens. We have developed a pollen and mold calendar that shows the typical release dates of specific types of pollen and mold spores in Anchorage. Dates and duration of pollen and mold release can vary dramatically from year-to-year; however, this calendar is meant to provide a rough idea of when these releases usually occur. Daily weather strongly influences pollen levels – pollen releases are often preceded by warm weather, and pollen is dispersed well on dry, windy days.

TREES

1. Birch and willow begin pollination the second or third week of May. In northern latitudes, many consider **birch** the most important allergenic tree pollen, and Alaska concentrations can be the highest in the country. In May of 2010 in Fairbanks, Tanana Valley Clinic counted 3,986 birch pollen grains per cubic meter of air, which approached record levels set in Denmark in 2006. Though the Anchorage peak was only about a third of the Fairbanks’ level, birch pollen levels were still very high and many residents felt the effects. Birch pollen usually remains high for only two or three weeks. Interestingly, peak birch pollen levels occur in alternate years, a high year is usually followed by a low year. **Willow** pollen typically is much lower than birch, but persists longer, for a month or more.
2. **Alder** is of the same family as birch, but typically does not reach the same high concentrations. It has a longer pollination season and can be found for up to two months.

3. **Spruce** often releases prodigious amounts of lime-green pollen in June through mid-July but it is considered less allergenic than other tree pollens.
4. While **cottonwood** 'fluff' can appear like snow over Anchorage in mid-July, pollination occurs much earlier in May and June. The fluff we see is not pollen; it is the means of dispersing seed.
5. A small amount of pollen we see in Anchorage is classified as **other trees**. It originates from non-native ornamentals planted in our gardens and parks. The amount of pollen released may increase as more "exotics" are planted and reach maturity.

GRASS

Grass pollen appears in samples from June through August, and some grass varieties are considered quite allergenic. Though Anchorage levels rarely reach National Allergy Bureau's "high" level of 20 or more grains of grass pollen per cubic meter of air, sensitive individuals are affected. Anchorage reached the 'high' category for grass pollen in one sample (August of 2007) but concentrations below 10 grains are typical.

WEEDS

A variety of **weeds**, such as nettle, plantain and dock are present in Anchorage samples in July and August, typically in the 'low' category. Moderate levels of **Lycopodium** (club moss) spores have been recorded in August for periods less than two weeks. In years gone by Lycopodium spores were harvested as flash powder for photography, for explosives and fireworks.

MOLD

Mold spores are present in nearly all the samples we collect in Anchorage, but concentrations typically peak later in the summer in July or August. Warm temperatures, late summer rain and an abundance of decaying plant material encourage the proliferation of mold.