

abstract: Although seasonal allergies caused by airborne pollen are detrimental to physical and mental health and impair daily activity, discussion on their social cost is scarce in the economics literature. Large amounts of airborne pollen can not only increase health care costs and reduce worker productivity, but also cause people to stay at home, thereby stagnating economic activity. This study uses daily purchase records from scanner data to investigate the effect of pollen exposure on consumption behavior. Exploiting the daily variation in the pollen counts at 120 observation stations in Japan, I find that consumption expenditure decreases by about 2% on days when airborne pollen is unusually high. A reduction in consumption due to pollen exposure is also observed in estimates using weekly and monthly panel data. This finding suggests that exposure to pollen may reduce total expenditure as opposed to delay spending. The results highlight the overlooked economic burden of pollen and seasonal allergies. Hence, they underline the importance of urban planning to reduce airborne pollen and health policy to deal with seasonal allergies.