Essential Oils Guidance for Healthy Classrooms



Many people use essential oils as aromatherapy with the intent to treat various health conditions like pain, anxiety, asthma, and ADHD. However, systematic reviews of essential oils research have not found enough evidence to suggest they successfully treat any health issue (8).

Are Essential Oils Safe to Use?

Essential oils can adversely affect the health and safety of students and staff in the classroom and can be dangerous. They contain compounds that can aggravate asthma in students; they emit hazardous volatile organic compounds such as acetaldehyde, limonene, toluene, pinene, and camphene, all of which worsen asthma (9; 10; 1; 6; 3). They can cause respiratory irritation, headaches, and throat, eye, and nose irritation. Inhaling certain essential oils can cause pneumonia (6; 3).



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Keeping essential oils in the classroom can be dangerous. When swallowed, eucalyptus, sage, and camphor oil can cause seizures, and lavandin oil can cause a coma (12). Additionally, lavender oil and tea tree oil were shown to cause abnormal or premature breast development in girls and boys when applied to the skin or inhaled (5; 11).

How to Avoid Allergies

Essential oils can cause allergic reactions when applied to the skin. This table adapted from (2), contains examples of essential oils that have caused allergic contact dermatitis (allergy). All essential oils should be avoided for a healthy classroom environment.

| Cassia Cedarwood | Elemi Eucalyptus | Juniper berry | Neem | Rosemary | Tangerine |
|---------------------|---|---|--|--|--|
| | Fucalyntus | | | | |
| Ch | Lucutyptus | Laurel leaf | Neroli | Rose | Tea tree |
| Chamomile | Frankincense | Lavandin | Niaouli | Rosewood | Thuja |
| Cinnamon | Galbanum resin | Lavender | Nutmeg | Sage | Thyme |
| Citronella | Geranium | Lemongrass | Orange | Sandalwood | Turpentine |
| Clary sage | Ginger | Lemon | Palmarosa | Silver fir | Valerian |
| Clove | Grapefruit | Litsea cubeba | Patchouli | Spearmint | Vetiver |
| Coriander fruit | Guaiacwood | Lovage | Peppermint | Spike lavender | Ylang ylang |
| Costus root | Hinoki | Mandarin | Petitgrain bigarade | Star anise | Zdravetz |
| Cypress | Hyssop | Melissa | Pine needle | Sweet basil | |
| Dwarf pine | Jasmine absolute | Myrrh | Ravensara | Sweet marjoram | |
| | Citronella Clary sage Clove Coriander fruit Costus root Cypress | CinnamonresinCitronellaGeraniumClary sageGingerCloveGrapefruitCoriander fruitGuaiacwoodCostus rootHinokiCypressHyssopDwarf pineJasmine | CinnamonresinLavenderCitronellaGeraniumLemongrassClary sageGingerLemonCloveGrapefruitLitsea cubebaCoriander fruitGuaiacwoodLovageCostus rootHinokiMandarinCypressHyssopMelissaDwarf nineJasmineMyrrh | CinnamonresinLavenderNutmegCitronellaGeraniumLemongrassOrangeClary sageGingerLemonPalmarosaCloveGrapefruitLitsea cubebaPatchouliCoriander fruitGuaiacwoodLovagePeppermintCostus rootHinokiMandarinPetitgrain bigaradeCypressHyssopMelissaPine needleDwarf pineJasmineMyrrhBayensara | CinnamonresinLavenderNutmegSageCitronellaGeraniumLemongrassOrangeSandalwoodClary sageGingerLemonPalmarosaSilver firCloveGrapefruitLitsea cubebaPatchouliSpearmintCoriander fruitGuaiacwoodLovagePeppermintSpike lavenderCostus rootHinokiMandarinPetitgrain bigaradeStar aniseCypressHyssopMelissaPine needleSweet basilDwarf nineJasmineMyrrhRayensaraSweet |

Recommendations

Avoid using all essential oils and other fragranced products in the classroom. Use fresh air and good ventilation to reduce exposure to respiratory pathogens, chemicals, and odors. Increased fresh air supply and air filtration have been shown to improve health and test scores. Open windows for additional air or use fans pointed out of windows and doors to improve ventilation, being careful not to circulate across students.

Some schools, school districts, or early learning programs have established policies or procedures that may prohibit essential oils. School districts and private schools should adopt a policy or procedure prohibiting staff from bringing in and using any chemicals that are not preapproved or provided by the school or district. Always consult with your school, program, or school district to ensure compliance with their policies and procedures.

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