**Why You Should Be Utilizing An Essential Oil Homeopathic Spray In The Prevention Against The Cold and Flu Virus (4 minute read)**

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**A serious growing problem is the widespread outbreaks of cold and flu viruses along with the increase of airborne *pathogens.***

***Pathogen: a bacteria, virus or other microorganism that can cause disease***.  We send our kids to school sick and we, in fact, ourselves go to work sick.  This is often due to not being able to afford to stay home with our kids or miss work.  As a result, we have outbreaks of these illnesses that cannot be treated with antibiotics. The impact of this, is outbreaks across the U.S. infecting thousands.  **According to the CDC**, the flu season of 1976 to the flu season of 2007, **deaths from the flu** ranged from a low of 3,000 to a high of about 49,000.  In the years since then, **deaths have continued to increase** to a high of 56,000 in a single year.

How can we more effectively combat this dilemma?  People will never start staying home at first sign of a sniffle or even when they are outright in full on cold and, at times, even flu mode. The majority of people don't even know they are becoming ill.  In fact, the **flu is most contagious before symptoms even start.**  This leaves everyone around the infected person (host) susceptible to contracting the flu themselves before the person is even aware that they are sick.  When a person is sick, the CDC recommends they wash their hands, clean surfaces, stay home and avoid people.  While this is all great advice, many do not follow it.  Did you know, becoming infected with the cold or flu virus is not primarily acquired through surfaces contaminated by the virus?

**According to the CDC, viruses such as the cold and flu is spread primarily by**

when we **cough, sneeze and even talk**.  The virus is carried by the saliva expelled by these actions. The viruses then travel far throughout the air in minute saliva droplets that we breathe in.  A virus can also survive and continue to travel on airborne bacteria.  So how can we combat this if it's everywhere around us in the air that we breathe?  Through proper dispersion of essential oils into the air, we can begin a **preventative** approach against the spread of the cold and flu virus, thereby, also reducing our chance of getting sick significantly.

**Through proper dispersion of essential oils,**

we can significantly reduce cold and flu viruses and other pathogens naturally and effectively achieving the desired result.  Several studies have shown the positive effects of dispersing of essential oils into the air.  The foremost is their ability to kill viruses that cause the cold and flu, bad bacteria and other airborne microbes.  Studies have shown essential oils **reduce** airborne **pathogens** by up to **nearly 90%**  in a room and have shown to completely kill certain viruses and gram-positive (bad) bacteria up to one hundred percent.  With such staggering increases in deaths from the flu, why are we not using essential oils as a preventative and thereby significantly decrease the spread of some of the most common illnesses? Proper education, use, and awareness are the main reasons.

**Why dispersing of essential oils through a spray is the most effective,**

**convenient and cost-efficient** way to defend against airborne cold and flu viruses and other susceptible pathogens.

Essential oils are highly volatile ({of a substance} easily evaporated at normal temperatures.).  What this means is while essential oils travel very far through the air they will evaporate quicker than a non-volatile substance such as water or saliva carrying a virus.  Due to the volatile nature of essential oils, a **proper emulsification blend** added to a water-based mixture **extends the life of the essential oils** that are dispersed into the air.

*How does emulsification work and why is it important?*  In short, emulsification works by allowing polar and nonpolar compounds to attach and then combine as one mass (i.e. oil and water).  Droplets of oil will be surrounded by molecules from the emulsifier leaving hydrophilic ends exposed allowing oil molecule's to now mix among water molecules.  Now that the essential oils are evenly dispersed with the water they can be expelled at a proper centration when sprayed, as opposed to sitting on top of the water as they do in a DYI blend.  In addition, a once**volatile oil is now a more stable compound** that is protected by water that is prolonging its susceptibility to evaporation.

Due to this protective coating, the essential oils can now travel much further, spreading about a space and remain longer in the air destroying airborne pathogens for several hours as opposed to minutes.

By dispersing essential oils through a properly formulated spray, a **lesser concentration** of essential oils are required than would be needed in a diffuser.  Ultimately **cutting cost by more than triple**.  In order to achieve the level of essential oil put out by a spray, a diffuser would need to use up to a full 5 ml bottle of oil every 4 to 8 hours (amount is dependent on the type of essential oil).

A properly formulated spray will **immediately release** the essential oils into the air, making **this method far more effective** than that of a diffuser.  Diffusers only expel 40-50 ml of vapor in an hour and most are for use in small 300 sq ft space.  Essential oils, when used in a diffuser, are evaporating before enough new oils can be put out into the air to create a high enough concentration to sufficiently fight off pathogens in a room.

When choosing a homeopathic essential oil spray, be sure you are checking that it has an emulsification system allowing it to mix with water.  Some people will sell them with alcohol(vodka), witch hazel and other additives as the base or as their emulsifier.  However, most of these are not very effective emulsifiers or beneficial to essential oils.  In the case of vodka and witch hazel(14% alcohol), these are both irritants and volatile substances that offer no protection in extending the life of essential oils.  If a spray says to shake vigorously before use no emulsification system is used and very little essential oils will be put out by them.

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