THE CHEMISTRY OF DECONGESTANTS

Nasal decongestants are commonly used to provide relief from a blocked nose; this graphic looks at how they work, and some commonly used compounds.

**PSEUDOEPHEDRINE**

Duration: around 8 hours.
Regulated in some countries due to use as precursor for methamphetamine.

**PHENYLEPHRINE**

Duration: around 4 hours.
Alternative to pseudoephedrine, though studies conflict as to its efficacy.

**OXYMETAZOLINE**

Duration: around 7 hours.
Can also be used as a drug to treat nose bleeds and eye redness.

**XYLOMETAZOLINE**

Duration: around 5-6 hours.
Like the other decongestants, use isn’t advised for those with high blood pressure.

**HOW THEY WORK**

Decongestants ease nasal congestion by reducing the swelling of blood vessels in the nose. They do this by acting on receptors to constrict the blood vessels in the tissue that lines the nasal cavity.

Decongestants are available in the form of both nasal sprays and tablets; nasal sprays tend to exhibit a quicker onset of action. However, they can also lead to ‘rebound congestion’, with use of more than a few days worsening congestion when use of the decongestant is stopped.