

One of the most popular means of self defense is pepper spray. Pepper spray is affordable and very easy to use. There are many different kinds of pepper spray on the market today and they come in a variety of different containers and sizes. There is wildfire, mace, tear gas, pepper foam and pepper gel and they are in containers that range all the way from a ring and lipstick pepper spray up to mace pepper gun. It is extremely effective and has been used by law enforcement agencies for many years. The most effective use of a defense spray if possible would be spraying the attacker directly in the eyes. This could temporarily blind them and cause them to have very hard time breathing. This would allow you plenty of time to get away or help to get there.

The strength of pepper spray is determined by the chemical composition and the SHU (scoville heat units). There are three basic chemical compounds used in pepper sprays, CS (Orthochlorobenzalmalonitrile), CN (Alphachloroacetaphenone) and OC (Oleoresin Capsicum). CS and CN are irritants to membrane tissue. They cause stinging pain and tearing, but take from 5 to 30 seconds to be effective. The reduced ability of CS and CN to subdue those who can't feel pain, coupled with their longer working time, make these two chemicals too unreliable for use by untrained, possible physically limited, persons. OC is not an irritant, it is an inflammatory agent. When a person is sprayed with OC two things happen instantly. First, the person's eyes clamp shut, but if they do manage to force them open they still can't see because the OC dilates the capillaries and causes temporary blindness. Second, an immediate fit of uncontrollable coughing doubles the person over. The OC causes instant inflammation of the breathing tissues, restricting all but life support breathing. An assailant that is sprayed with OC stops what they are doing and thinking, period.

If you are going to purchase pepper spray, the American Security Institute recommends spray containing OC over a CN or CS based spray.

There has been a study of the exposure of OC and how it effects your vision. It was concluded that a single exposure is harmless but repeated exposure to the corneal can result in long lasting effect to the sensitivity of the corneal. OC cannot be washed out with water, even large amounts. If you have been sprayed the best thing to do is blink vigorously to produce tears which will flush out your eyes.