Cats and dogs are able to hear a wider range of sounds, and softer sounds than humans. The pitch of a sound is measured in Hertz (Hz) and the comparative hearing ranges of dogs, cats and humans are the following:

- Humans: 20 Hz – 23 KHz
- Dogs: 60 Hz – 45 KHz
- Cats: 45 Hz – 64 KHz

To give you a practical example of this: 64 Hz (roughly the lowest note a dog can hear) is the pitch of the lowest key on a piano. For every doubling in Hz, the pitch goes up an octave. Cats, with the top range of 64 KHz vs 23 in humans, can thus hear sounds at least two and a half octaves higher than humans can! This is why dogs and cats respond to dog whistles. The sound is too high for us to hear, but still within their hearing range.

Cats and dogs also respond to a much lower intensity of sound than humans. Sound intensity is measured in decibels (dB). Dogs can hear five times more acutely than humans; and cats about twice as acutely as dogs. Like Hz, dB also increases exponentially, so 30 dB is ten times as loud as 20 dB, and 40 dB is 100 times as loud. A practical example is that a whisper weighs in at about 30 dB, and a dog can hear that from almost three times as far away as a human. Cats are even more sensitive than dogs to these soft sounds. This also explains why dogs and cats are so scared by the sound of fireworks which, to us, do not seem so loud. They are in fact at least 5 times louder to our pets!

Dr M. E. de Vries (BVSc)

**THE EXPLOSIVES ACT No 26 OF 1956**

This law applies nationwide with no exceptions. It is unlawful to discharge any firework in any building, on any public thoroughfare or in any public place or resort without prior written permission of the local authority. (Section 10.34)

Section 10.35 relates to public displays of fireworks and states that no person may do so on any premises without the written permission of the Chief Inspector of Explosives (commonly known as “having a permit”). This written permission will stipulate conditions and any non-compliance with them is a criminal offence.

In terms of the Explosives Act, no person shall allow or permit any children under the age of 16 to handle or use fireworks except under the supervision of an adult person. This Act is enforced by the South African Police Service (SAPS) not by the SPCA. Please report any offences to your nearest SAPS, giving as many details as you possibly can and quoting the Act name and number plus the relevant section as given above.

Ignorance of the law is no excuse – penalties are severe do not be afraid to report offenders

**FIREWORKS ON PRIVATE PROPERTIES**

We are referring to domestic properties in this section and to shop-bought fireworks. Whether or not it is legal to set off fireworks on a person’s own property is governed by the local by-laws. In some areas, no firework may be set off at any time without the written permission of the local authority. In other areas, it is permitted to set off fireworks on specified dates between certain times on domestic properties.

Please check local by-laws and make sure the by-laws you examine or are referred to, are the most up-to-date ones. Many Municipalities amended their by-laws recently specifically on the issue of fireworks. Your Council or your local SPCA should be knowledgeable on the situation in your area.

In some areas, the discharging of fireworks could be an offence in terms of noise pollution. It is worth checking - and it is always worth reporting any untoward or hooligan use of fireworks.

Discuss the matter with a local councillor, advise and call your security company and do not be afraid to submit complaints and reports to your local SAPS.
SALE OF FIREWORKS
This falls under the Explosives Act and conditions for sale are strict.

It is not possible for any informal sale of fireworks (hawkers, roadside or any open-air sellers) to conform with this Act. It is imperative that any informal displays of fireworks for sale or sellers of fireworks in the open air are reported to the SAPS as quickly as possible.

In addition to the principles and ethics involved, there is a real danger if fireworks are displayed, handled and sold in the open air.

Any seller of fireworks must be in possession of a current licence issued by the Chief Inspector of the Department of Explosives. This licence (often referred to as a permit) is not transferable. That is, a shop with a permit to sell fireworks may not remove stock to a market or roadside and then claim “We have a permit.” The licence refers to the premises stated on this permit. Don’t be fooled

Fireworks may not be displayed in a window or any other place where fireworks can be interfered with by the public. This means that fireworks in a licensed shop must be either under the counter or locked in a cabinet. It is an offence to display or place fireworks where a shopper can pick them up or handle them in any way – including being able to put them into a shopping basket or trolley.

If you see fireworks displayed in a way that violates the law – report it!

There are strict regulations relating to signage (NO SMOKING, for example) and the necessity of having exits (preferably two) unlocked and unbolted whilst fireworks are on sale and that a clear passage must exist between counters holding fireworks and the exits. The Act states that if a firework dealer has only one exit, the fireworks must be placed at the rear (relative to the exit) of the building.

PACKAGING
This is important and an often overlooked aspect of the issue. Reports confirm that fireworks have been sold at tuck shops, having been taken out of their packaging, much in the way that individual cigarettes are sold at spaza shops.

Fireworks must be marked, labelled, packed and sold in accordance with regulations and fireworks must be in the original packaging complete with instructions when sold. It is an offence in terms of the Explosives Act to interfere with the packaging of fireworks or to permit the packaging to be interfered with.

If you come across fireworks for sale that look as if the packaging has been interfered with or removed, please report it. You could be saving a life or preventing severe injuries.

PYROTVVICS (ORGANISED “DISPLAYS”)
The SPCA movement said in the past that it preferred organised fireworks events to the random, individual use of fireworks. But this cannot be taken to mean that pyrotechnics events meet with SPCA approval. In fact, it is our opinion that the vast majority of them are inappropriate and that each one should be judged on its own merits.

Perhaps this is another example of events or issues when the SPCA says, “It may be legal but we strongly oppose.” If you do too, then please do not be afraid to make your view known to the organiser (shopping centre etc), local newspapers, councillors in your area and the community whose peace will be shattered by the planned event.

Never underestimate the power of public opinion. And it’s never too soon to start lobbying. If this year’s event disturbed you, let them know NOW before they plan next year’s event. Stay positive. Tell them how much support will be given if they abandon fireworks.

YOUR PETS
Not left to the end through lack of importance but because we are sick and tired of telling responsible people how to care for traumatised pets, when we should be telling idiots they are breaking the law and ought to wake up and be responsible. Our handy guide to pet owners is below:

- Ensure all animals have identification.
- If possible, stay home with them if you suspect fireworks fiends are about.
- If you can’t be home with them, keep them inside and preferably in a room such as the kitchen where the windows are higher (and more difficult to jump through)
- Attempt to mask any noise by drawing curtains and playing calming music at a reasonable volume.
- Put familiar and comforting things around them such as toys, baskets etc.
- Provide them with something to do such as giving your dog a chewy bone or lots of catnip or a catnip toy for felines.
- If your pets do react badly to fireworks, then seek professional advice from your veterinarian.
- Why not ensure your pets have a hearty and nutritious meal around nightfall. This will make them more likely to be sleepy!

Sponsored by the Thompson Educational Trust