

## Sound pressure in air

Source of sound	Sound pressure	Sound pressure level
	<a href="#"><u>pascal</u></a>	<a href="#"><u>dB</u></a> re 20 $\mu$ Pa
Shockwave (distorted sound waves > 1 <a href="#"><u>atm</u></a> ; waveform valleys are clipped at zero pressure)	>101,325 Pa	>194 dB
Loudest undistorted sound wave (1 <a href="#"><u>atm</u></a> )	101,325 Pa	194 dB
<a href="#"><u>Krakatoa</u></a> explosion at 100 <a href="#"><u>miles</u></a> (160 km) in air <sup>[<a href="#"><u>dubious</u></a> – <a href="#"><u>discuss</u></a>]</sup>	20,000 Pa	180 dB
Simple open-ended <a href="#"><u>thermoacoustic device</u></a> <sup>[6]</sup>	12,619 Pa	176 dB
<a href="#"><u>.30-06 carbine</u></a> 1 m to shooter's left side	7,265 Pa	171 dB (peak)
<a href="#"><u>M1 Garand</u></a> being fired at 1 m	5,023 Pa	168 dB
<a href="#"><u>Jet engine</u></a> at 30 <a href="#"><u>m</u></a>	632 Pa	150 dB
<a href="#"><u>Threshold of pain</u></a>	63.2 Pa	130 dB
<a href="#"><u>Hearing damage</u></a> (due to short-term exposure)	20 Pa	approx. 115 dB
<a href="#"><u>Jet</u></a> at 100 m	6.32 – 200 Pa	110 – 140 dB
<a href="#"><u>Jack hammer</u></a> at 1 m	2 Pa	approx. 100 dB
<a href="#"><u>Hearing damage</u></a> (due to long-term exposure)	0.356 Pa	78 dB
Major road at 10 m	$2 \times 10^{-1}$ – $6.32 \times 10^{-1}$ Pa	80 – 90 dB
<a href="#"><u>Passenger car</u></a> at 10 m	$2 \times 10^{-2}$ – $2 \times 10^{-1}$ Pa	60 – 80 dB
TV (set at home level) at 1 m	$2 \times 10^{-2}$ Pa	approx. 60 dB
Normal talking at 1 m	$2 \times 10^{-3}$ – $2 \times 10^{-2}$	40 – 60 dB

	Pa	
Very calm room	$2 \times 10^{-4}$ – $6.32 \times 10^{-4}$ Pa	20 – 30 dB
Leaves rustling, calm breathing	$6.32 \times 10^{-5}$ Pa	10 dB
<a href="#">Auditory threshold</a> at 1 kHz	$2 \times 10^{-5}$ Pa	0 dB