



**Acute Exposure Health Effects of Sulphur Dioxide
 October 2006**

Concentration of SO ₂ (ppm)	Acute exposure health effects
0.1	- transient bronchoconstriction in sensitive exercising asthmatics individuals
0.2 – 1	- breathing difficulty in mild to moderate asthmatics with moderate exercise - possible incapacitating effects in the most sensitive asthmatics with moderate exercise - possible detection by taste or smell
1.0 – 2.0	- transient lung function changes in healthy non-asthmatic individuals
3.0	- easily detected odour
6.0 – 12.0	- may cause nasal and throat irritation
10.0	- upper respiratory irritation
20.0	- definitely irritating to eyes; chronic respiratory symptoms develop at this level; respiratory protection is necessary
50.0 – 100.0	- maximum tolerable exposure for 30 – 60 minutes
>100 ppm	- immediate danger to life

Source: Modified from Ellenhorn and Barceloux 1988 and WHO 1979 (In ATSDR 1999) with changes

References:

ATSDR, 1999. Toxicological Profile for Hydrogen Sulfide. Agency for Toxic Substances and Disease Registry. U.S. Public Health Service.