

# Cheyne-Stokes Breathing



## Breathing pattern

**Ascending phase** - the frequency and depth of respiration increases;

2. **Descending phase** ;

3. **Apnoeic** pause (not a condition)<sup>[1]</sup>.



Cheyn-Stokes breathing

**Cheyne-Stokes Breathing** is an abnormal breathing pattern that presents with a crescendo-decrescendo pattern of tidal volume followed by a period of apnea.<sup>[2]</sup>

**Cheyne-Stokes** respiration is characteristic of damage to the respiratory center located in the medulla oblongata and pons, in the brainstem. Other causes include heart failure and central sleep apnea. It requires immediate provision of vital signs<sup>[1]</sup> if the patient is Unconscious at the same time. Similarly, wavy breathing occurs when staying in an alpine environment (especially in sleep). This is due to the different irritability of the respiratory center to the level of CO<sub>2</sub> and oxygen (its content is low at high altitude, this is compensated by hyperventilation resulting in lower CO<sub>2</sub> tension in the indoor environment). A similar phenomenon can be observed in a more advanced stage of atherosclerotic CNS disease even when the patient is fully conscious.

## Links

### Related articles

- Biot's Breathing ■ Kussmaul's breathing
- Dyspnoea ■ Tachypnea ■ Bradypnea ■ Apnea ■ Hyperpnea ■ Orthopnea

### Reference

- ws:Cheyneovo-Stokesovo dýchání

1. LEBL, Jan – PROVAZNÍK, Kamil – HEJCMANOVÁ, Ludmila, et al. *Preklinická pediatrie*. 2. edition. Praha : Galén, 2007. pp. 106-107. ISBN 978-80-7262-438-6.
2. <https://next.amboss.com/us/search/Cheyne-Stokes>