



# Definition and classification of asthma exacerbations

## Definition of exacerbation

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An exacerbation is a worsening of asthma symptoms and lung function, compared with the person's previous status (i.e. outside the patient's usual range of day-to-day variation).[\[Reddel 2009\]](#)

The term 'exacerbation' covers the range of clinical situations and patient experiences from worsening asthma symptoms manageable by the patient at home to a severe acute asthma managed in the emergency department.

## Description of exacerbations

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The onset of asthma exacerbations is usually gradual, with symptoms and signs becoming progressively worse over days or weeks. However, some people experience a rapid onset, progressing within a few hours from no symptoms to acute asthma requiring urgent care.[\[Reddel 2009, James 2005, Sur 1993\]](#)

# Severity classification for exacerbations

**Mild exacerbation:** Worsening of asthma control that is only just outside the normal range of variation for the individual (documented when patient is well). For example, more symptoms than usual, needing to use reliever medicine more often than usual, waking up with asthma symptoms, or asthma interfering with activities of daily living.


**Moderate exacerbation:** Worsening asthma that is troublesome or distressing to the patient and requires a change in treatment to prevent it becoming severe, but is not life-threatening and does not require hospitalisation. For example, worsening symptoms, needing to use reliever medicine more often than usual, or deterioration in lung function, occurring over at least 2 days but not severe enough to require hospitalisation, and not necessarily requiring systemic corticosteroid treatment. [Reddel 2009]

**Severe exacerbation:** Event that requires urgent action by the patient (or carers) and health professionals to prevent a serious outcome such as hospitalisation or death from asthma. For example, asthma symptoms that fail to resolve despite multiple doses of reliever. [Reddel 2009] In clinical trials, the definition of severe asthma typically includes requirement for oral corticosteroid treatment for at least 3 days, with or without an emergency department visit or hospitalisation. [Reddel 2009]

A different severity classification system is used for acute asthma. For example, a moderately severe exacerbation in the community may be assessed as 'mild' in an emergency department, or a severe exacerbation in the community may be assessed as 'moderate' in an emergency department.

Table

## Severity classification of exacerbations and acute asthma

Exacerbations	Acute asthma			
<p><b>Mild:</b> Worsening of asthma control that is only just outside the normal range of variation for the individual (documented when patient is well)</p>				
<p><b>Moderate:</b> Worsening asthma that is troublesome or distressing to the patient and requires a change in treatment, but is not life-threatening and does not require hospitalisation</p>		<p><b>Mild-moderate: (all of these features):</b> Can walk, speak whole sentences in one breath Oxygen saturation &gt;94%</p>	<p><b>Severe (any of these features):</b> Unable to complete sentences in one breath due to breathlessness Use of accessory muscles of neck or intercostal muscles/tracheal tug/subcostal recession during inspiration Obvious respiratory distress Oxygen saturation ≤94%</p>	<p><b>Life-threatening (any of these features):</b> Reduced consciousness/collapse, exhaustion Cyanosis Poor respiratory effort Oxygen saturation &lt;90% Poor respiratory effort, soft/absent breath sounds</p>
<p><b>Severe:</b> Event that requires urgent action by the patient (or carers) and health professionals to prevent a serious outcome such as hospitalisation or death from asthma</p>				

# Definition of acute asthma

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In this guide, acute asthma refers to clinically significant bronchoconstriction and breathing difficulty due to asthma.

Acute asthma is included within the range of clinical presentations defined as an asthma exacerbation.

A clinical presentation of acute asthma is typically equivalent to moderate or severe exacerbation.

## Other words used in clinics and in the community

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**Flare-up:** Exacerbations are sometimes called ‘flare-ups’.

**Asthma attack:** Patients and the general public often use the term ‘asthma attack’ to describe an exacerbation, especially if the onset was rapid or severe.

**Acute exacerbation:** a sudden-onset exacerbation or acute asthma.

**Status asthmaticus:** former term for a severe episode of acute asthma (called ‘acute severe asthma’ in EDs). The term status asthmaticus is now rarely used in clinical practice guidelines and position statements.



### Alert

Severe asthma does not mean a severe exacerbation. Severe asthma refers to asthma that remains uncontrolled despite maximal treatment or requires maximal treatment to control. Severe and life-threatening exacerbations are not confined to patients with severe asthma. Despite use of the term ‘acute severe asthma’ in medical usage, this label refers to the severity of the episode of acute asthma, not the underlying condition

## References

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