

INTERMITTENT INHALED CORTICOSTEROIDS

Scheduled, daily inhaled corticosteroid (ICS) treatment is the currently preferred pharmacologic controller therapy for persistent asthma in individuals of all ages. Intermittent ICS dosing includes courses of ICS treatment used for brief periods, usually in response to symptoms or as an add-on with or without a long-acting beta₂-agonist (LABA). Recommendations for ICS treatment are organized by age.

Children Ages 0–4 Years with Recurrent Wheezing

KEY POINT

In children ages 0–4 years with recurrent wheezing, a short (7–10 day) course of daily ICS with as-needed inhaled short-acting beta₂-agonist (SABA) for quick-relief therapy is recommended starting at the onset of a respiratory tract infection.

IMPLEMENTATION GUIDANCE AND CONSIDERATIONS FOR SHARED DECISION-MAKING

- **Target population:** Children ages 0–4 years with recurrent wheezing (at least three episodes of wheezing triggered by apparent infection in their lifetime or two episodes in the past year with no symptoms between infections) and who are not taking daily asthma treatment.
- **Treatment:** One regimen used in two reviewed studies is budesonide inhalation suspension, 1 mg twice daily for 7 days at the first sign of respiratory tract infection-associated symptoms.
- **Potential benefits:** The main benefit during respiratory tract infections is a reduction in exacerbations requiring systemic corticosteroids.
- **Potential risks:** This treatment could affect growth. Carefully monitor growth in children who use this treatment.
- **Other considerations:** Caregivers can initiate intermittent ICS treatment at home without a visit to a health care provider when they have clear instructions.



RECOMMENDATION

In children ages 0–4 years with recurrent wheezing triggered by respiratory tract infections and no wheezing between infections, the Expert Panel conditionally recommends starting a short course of daily ICS at the onset of a respiratory tract infection with as-needed SABA for quick-relief therapy compared to as-needed SABA for quick-relief therapy only.

Individuals Ages 4 Years and Older with Persistent Asthma

KEY POINTS

- For individuals with **mild to moderate** persistent asthma who are taking daily ICS treatment (likely adherent with prescribed daily ICS) as a controller, increasing the regular daily ICS dose for short periods is not recommended when symptoms increase or peak flow decreases.
- For individuals with **moderate to severe** persistent asthma already taking low- or medium-dose ICS, the preferred treatment is a single inhaler with ICS-formoterol (referred to as single maintenance and reliever therapy, or “SMART”) used both daily and as needed.

Individuals Ages 12 Years and Older with Persistent Asthma

KEY POINTS

- For individuals with **mild** persistent asthma, either of the following two treatments are recommended as part of Step 2 therapy: 1) a daily low-dose ICS and as-needed SABA for quick-relief therapy, or 2) intermittent as-needed SABA and ICS used one after the other for worsening asthma.
 - ✓ One approach to intermittent therapy is 2–4 puffs of albuterol followed by 80–250 mcg of beclomethasone equivalent every 4 hours as needed for asthma symptoms.
 - ✓ Intermittent therapy can be initiated at home with regular provider follow-up to ensure that the intermittent regimen is still appropriate.
 - ✓ Individuals with either low or high perception of symptoms may not be good candidates for as-needed ICS therapy. Daily low-dose ICS with as-needed SABA may be preferred.
- For individuals with **moderate to severe** persistent asthma already taking low- or medium-dose ICS, the preferred treatment is a single inhaler with ICS-formoterol (referred to as single maintenance and reliever therapy, or “SMART”) used both daily and as needed.

RECOMMENDATIONS (AGES 4+)

- In individuals ages 4 years and older with mild to moderate persistent asthma who are likely to be adherent to daily ICS treatment, the Expert Panel conditionally recommends against a short-term increase in the ICS dose for increased symptoms or decreased peak flow.
- In individuals ages 4 years and older with moderate to severe persistent asthma, the Expert Panel recommends ICS-formoterol in a single inhaler used as both daily controller and reliever therapy compared to either a higher-dose ICS as daily controller therapy and SABA for quick-relief therapy or the same-dose ICS-LABA as daily controller therapy and SABA for quick-relief therapy.

RECOMMENDATIONS (AGES 12+)

- In individuals ages 12 years and older with mild persistent asthma, the Expert Panel conditionally recommends either daily low-dose ICS and as-needed SABA for quick-relief therapy or as-needed ICS and SABA used concomitantly.
- In individuals ages 12 years and older with moderate to severe persistent asthma, the Expert Panel conditionally recommends ICS-formoterol in a single inhaler used as both daily controller and reliever therapy compared to higher-dose ICS-LABA as daily controller therapy and SABA for quick-relief therapy.