

# Pediatric Asthma Risk Score (PARS)

## What is the purpose of the PARS assessment?

By answering just six simple questions about eczema, wheezing, race, sensitization status and parental asthma history, providers and families can determine a child's personal risk of developing asthma by age seven. The PARS assessment does not replace a formal diagnosis of the disease or guarantee that a child will develop asthma. But it can help providers develop a care plan based on a patient's personal risk.

## Who should take the PARS assessment?

The PARS assessment can be a useful tool in the care of any pediatric patient. Ideally, providers and families will be able to answer all six questions on the child's behalf, ensuring the most accurate score. This involves allergen testing for sensitization, available from a board-certified allergist.

PARS should not be considered diagnostic for asthma. When diagnosing a patient with any wheezing or respiratory illness, providers should consider all potential etiologies, including infections, structural anomalies and others.

## How will a PARS risk score impact the way providers monitor patients for developing asthma?

In general, patients with a moderate- or high-risk score should be monitored for asthma more closely than those whose score is in the low risk range. Close monitoring will allow timely and appropriate interventions if asthma develops, which in turn will likely reduce disease morbidity. Specific recommendations include:

- Regular visits with the provider to monitor for the development of disease.
- Close communication between the family and child's provider when symptoms typical for asthma occur. These symptoms can include recurrent coughing, exercise intolerance, difficulty breathing, etc.
- A referral to a subspecialty provider for evaluation for asthma.

## How can I provide optimal care for patients at moderate risk (5–8 PARS) or high risk (9–14 PARS) for asthma?

Ongoing care for children who are at moderate or high risk for asthma should focus on three key areas: atopic dermatitis (also known as eczema), allergic comorbidities and exposure to environmental triggers.

### Atopic dermatitis care

Patients at moderate to high risk for asthma may have atopic dermatitis. Providers should consider:

- Prescribing a therapeutic skin care regimen, even for skin that appears normal. Daily moisturization with emollients and potentially additional medications at the provider's discretion may be helpful. Improved skin barrier by using emollients also may reduce the development of other allergic diseases, such as food allergies and asthma.
- A referral to a board-certified allergist, who can help provide information on potential triggers for the child's atopic dermatitis and also provide skin care recommendations.

### Allergic comorbidities

Children at high risk for asthma are more likely to have other allergic diseases, which can impact their overall health. Providers should consider:

- A referral to a board-certified allergist to evaluate for other allergic comorbidities and allergic sensitization, and identify triggers.

### Environmental triggers

Many environmental factors can impact children's health and the health of their lungs. Providers should consider educating families about:

- Reducing the child's exposure to his or her specific allergen triggers. This may improve the child's overall health and reduce wheezing episodes.
- Reduce exposure to tobacco from cigarettes or other nicotine-containing devices. Children should have no or very limited exposure to secondary tobacco smoke.
- Other environmental exposures, which may impact asthma development. These may include dust mites, cockroaches, mice and others.

## How can I provide care for children at low risk (0–4 PARS) for developing asthma?

Care for children who are at low risk for asthma focuses on addressing potential environmental triggers. Providers should consider:

- Making a referral to board-certified allergist, who can provide aeroallergen sensitization testing to identify any environmental allergic triggers.
- Educating families about the risks of secondhand smoke from tobacco products. Prolonged exposure to tobacco smoke from cigarettes or other nicotine-containing devices can greatly impact a child's lung development, even if the child is at low risk when the PARS assessment is used. Children should have no or very limited exposure to secondary tobacco smoke.