

Asthma Impairment and Risk Questionnaire (AIRQ[®]) Information for Health Care Providers

AIRQ[®] Indications

The AIRQ[®] is a patient assessment tool intended to help identify patients 12 years of age and older whose health may be at risk because of uncontrolled asthma. This assessment is based on a series of patient-facing questions about asthma medications, respiratory symptoms, and utilization of health care resources. Depending on the patient's responses to these questions, the patient will receive a score reflecting their level of asthma control. After completion of the AIRQ[®], the patient and health care provider should discuss the responses to each of the individual questions, the total AIRQ[®] score, and the patient's level of asthma control and form a treatment plan.

The AIRQ[®] is not intended to:

- Diagnose asthma
- Replace the advice or treatment of a health care provider
- Direct specific actions to treat, mitigate, or improve asthma
- Collect or store any laboratory values or lung function test values

Health Care Provider Instructions for Use

1. Provide your patient with the AIRQ[®] during or immediately prior to their appointment.
2. Examine the responses to each of the individual questions, the total AIRQ[®] score, and the patient's level of asthma control.
3. Discuss responses to each of the individual questions, the total AIRQ[®] score, and the patient's level of asthma control with your patient.
4. Determine a treatment plan with your patient based on the information you've learned during your discussion and clinical assessment of the patient, and through responses to the AIRQ[®] questions.

Information on the Validation and Interpretation of AIRQ[®]

1. AIRQ[®] is a 10-item, equally weighted, yes/no composite asthma control questionnaire that includes 7 impairment and 3 risk items.
2. The AIRQ[®] was validated against a standard of ACT[™] score (impairment) + prior-year, chart-documented exacerbations (risk) in 442 patients 12 years of age and older who were previously diagnosed with asthma.
3. Multivariable logistic regression analyses were used to determine questions with the greatest validity in discriminating between patients of varying levels of control.
4. A total of 10 questions were identified for inclusion in the AIRQ[®].
5. The AIRQ[®] performed well with respect to the ACT[™] + exacerbations standard in identifying well-controlled vs not well-/very poorly controlled and well-/not well-controlled vs very poorly controlled asthma, with area under the ROC (receiver operating characteristic) curves of 0.94 and 0.93, respectively.
6. The combination of selected AIRQ[®] items and cut points of control demonstrated a sensitivity of 0.90 to identify patients whose asthma was well-controlled (cut point of ≥ 2), and a specificity of 0.96 to determine patients whose asthma was very poorly controlled (cut point of ≥ 5).
7. For further information on the development and cross-sectional validation of the AIRQ[®], please refer to Murphy KR, et al. *J Allergy Clin Immunol Pract.* 2020;8(7):2263-2274.e5; and Murphy KR, et al. *J Allergy Clin Immunol Pract.* 2021;9(1):603.



For use by health care providers with their patients 12 years and older who have been diagnosed with asthma. AIRQ® is intended to be part of an asthma clinic visit.

Please answer all of the questions below.

In the past 2 weeks, has coughing, wheezing, shortness of breath, or chest tightness:

- | | | |
|--|------------------------------------|-----------------------------------|
| 1. Bothered you during the day on more than 4 days ? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 2. Woke you up from sleep more than 1 time ? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 3. Limited the activities you want to do every day ? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 4. Caused you to use your rescue inhaler or nebulizer every day ? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |

In the past 2 weeks:

- | | | |
|---|------------------------------------|-----------------------------------|
| 5. Did you have to limit your social activities (such as visiting with friends/relatives or playing with pets/children) because of your asthma? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 6. Did coughing, wheezing, shortness of breath, or chest tightness limit your ability to exercise? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 7. Did you feel that it was difficult to control your asthma? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |

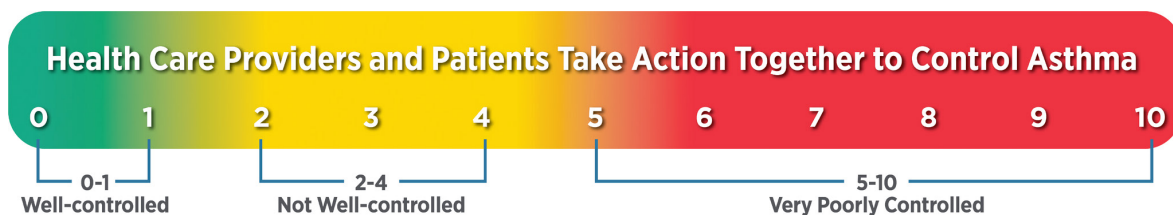
In the past 12 months, has coughing, wheezing, shortness of breath, or chest tightness:

- | | | |
|---|------------------------------------|-----------------------------------|
| 8. Caused you to take steroid pills or shots? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 9. Caused you to go to the emergency room or have unplanned visits to a health care provider? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 10. Caused you to stay in the hospital overnight? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |

Total YES Answers

What Does My AIRQ® Score Mean?

The AIRQ® is meant to help your health care providers talk with you about your asthma control. The AIRQ® does not diagnose asthma. Whatever your AIRQ® score (total **YES** answers), it is important for your health care team to discuss the number and answers to each of the questions with you. All patients with asthma, even those who may be well-controlled, can have an asthma attack. As asthma control worsens, the chance of an asthma attack increases.¹ Only your medical provider can decide how best to assess and treat your asthma.



¹Global Strategy for Asthma Management and Prevention: ©2024 Global Initiative for Asthma



For use by health care providers with their patients 12 years and older who have been diagnosed with asthma. AIRQ[®] is intended to be part of an asthma clinic visit.

Please answer all of the questions below.

In the past 2 weeks, has coughing, wheezing, shortness of breath, or chest tightness:

- | | | |
|--|------------------------------------|-----------------------------------|
| 1. Bothered you during the day on more than 4 days ? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 2. Woke you up from sleep more than 1 time ? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 3. Limited the activities you want to do every day ? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 4. Caused you to use your rescue inhaler or nebulizer every day ? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |

In the past 2 weeks:

- | | | |
|---|------------------------------------|-----------------------------------|
| 5. Did you have to limit your social activities (such as visiting with friends/relatives or playing with pets/children) because of your asthma? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 6. Did coughing, wheezing, shortness of breath, or chest tightness limit your ability to exercise? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 7. Did you feel that it was difficult to control your asthma? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |

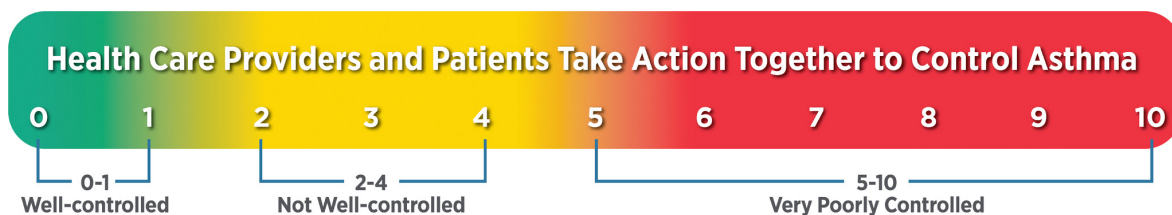
In the past 12 months, has coughing, wheezing, shortness of breath, or chest tightness:

- | | | |
|---|------------------------------------|-----------------------------------|
| 8. Caused you to take steroid pills or shots? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 9. Caused you to go to the emergency room or have unplanned visits to a health care provider? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |
| 10. Caused you to stay in the hospital overnight? | <input type="button" value="Yes"/> | <input type="button" value="No"/> |

Total YES Answers

What Does My AIRQ[®] Score Mean?

The AIRQ[®] is meant to help your health care providers talk with you about your asthma control. The AIRQ[®] does not diagnose asthma. Whatever your AIRQ[®] score (total **YES** answers), it is important for your health care team to discuss the number and answers to each of the questions with you. All patients with asthma, even those who may be well-controlled, can have an asthma attack. As asthma control worsens, the chance of an asthma attack increases.¹ Only your medical provider can decide how best to assess and treat your asthma.



¹Global Strategy for Asthma Management and Prevention: ©2024 Global Initiative for Asthma

The Asthma Impairment and Risk Questionnaire (AIRQ®): Information for Patients with Asthma

The Asthma Impairment and Risk Questionnaire (AIRQ® pronounced “air” – “Q”) is a set of 10 *yes or no* questions that is designed to help you and a health care provider talk about your asthma control. AIRQ® is intended to help patients with asthma who are 12 years of age or older. The survey asks questions about your asthma medicines, asthma symptoms, and asthma attacks.

The assessment of your level of asthma control is based on your answers to the AIRQ® questions. The goal is for your asthma to be well-controlled. Your chances of having an asthma attack go up when your asthma control worsens. Even patients with asthma that is well-controlled can have asthma attacks.

It is very important to discuss your answers to each of the 10 AIRQ® questions, your total AIRQ® score, and your level of asthma control with your health care provider. You should not change your treatment based on your AIRQ® score unless you and your health care provider discuss and agree a change is needed.

The AIRQ® is NOT intended to:

- Diagnose asthma
- Be used to assess asthma control in children younger than 12 years of age
- Take the place of advice or treatments given to you by your health care provider
- Tell you which asthma treatments are best for you
- Collect or store any of your personal health information

Instructions for Use:

1. **Take AIRQ®:** Using a paper or digital form, answer all 10 questions.
2. **Get Your AIRQ® Score:** The total number of “yes” responses is your AIRQ® score.
3. **Talk to a Health Care Provider:** Discuss your answer to each of the 10 AIRQ® questions, your AIRQ® score, and your level of asthma control.
4. **Discuss a Treatment Plan:** You and your provider can use your AIRQ® results along with information from your office visits and medical history to assess your asthma control to decide a treatment plan that is best for you.