

REACH Notes

Recent Developments to Promote Judicious Antibiotic Prescribing

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Judicious antibiotic use: improving public health or reducing individuals' risk?

We're in it now...

In the midst of this respiratory tract infection season, we all are inundated with infectious illnesses in our pediatric patients, and the challenge of prescribing antibiotics judiciously.

The need for judicious antibiotic prescribing is often framed as a public health issue: the more antibiotics we use in our communities, the more likely we are to promote resistance among the prevalent organisms. But, parents faced with a miserable child with an upper respiratory tract infection, and the potential loss of work and school days, may not be very concerned about the broad public health impact of one more course of amoxicillin. They might (quite reasonably) take the view that even if an infection has a low (but not zero) probability of a bacterial etiology (e.g. a middle ear effusion without acute inflammation, or 8 days of nasal discharge that doesn't meet your criteria for the diagnosis of bacterial sinusitis), they would prefer antibiotic treatment, despite the community-wide risks.

What should we tell parents...

Remind parents that antibiotic resistance occurs in individuals, not just communities:

1. The risk of carrying a resistant organism is increased for up to several months after a child receives antibiotics. If they get another infection (mild or serious) during this period, they are more likely to need broader spectrum antibiotics or have initial treatment fail.
2. Antibiotic use (for otitis media, for example) is associated with side effects such as diarrhea, vomiting, or rash in 1 out of 6 patients (compared to 1 out of 10 patients given placebo).
3. These risks are worth taking if an infection is likely to improve with antibiotic treatment, but not worth taking if antibiotics are not indicated.

As clinicians, we are always faced with weighing risks and benefits of treatment to our patients, and explaining the rationale for our treatment decisions. We hope that REACH parent education materials (available in your office) can help parents understand judicious use of antibiotics as protecting the health of each child, especially their own.