In 2012, the Independence Health Department (Independence, Missouri) identified an increase in antibiotic resistant infections in the community that warranted improved policies addressing antibiotic use in schools and childcare facilities. The department began participating in an Antibiotic Stewardship Program organized by the Public Health Foundation (PHF). Promoting optimal antibiotic use through both the public health and healthcare systems, the Public Health Antibiotic Stewardship Driver Diagram provided the backbone for this pilot initiative. Because of their excellent working relationship with Centerpoint Medical Center, the health department collaborated with the hospital to address antibiotic resistant infections; it was a natural next step in their growing partnership.

The public health team in Independence kept the driver diagram nearby to guide initial brainstorming as they created a series of logic models to pinpoint opportunities for intervention. Independence devised a multi-pronged approach which focused on two points of intervention: healthcare providers and childcare providers. PHF’s technical assistance enabled the use of quality improvement in selecting interventions to promote optimal antibiotic use as outlined in the driver diagram.

Collaborating with Healthcare Providers

The Independence team designed resources that can be easily integrated into practitioners’ work with the goals of increasing multidisciplinary communication, cooperation, and awareness with minimal effort by the providers themselves. These efforts include:

- An interdisciplinary reporting system for alerts and advisories related to antibiotic resistant disease incidence and news.
- Quick reference pocket cards to guide physicians about the safest and most effective treatment for common diagnoses at the moment they write an antibiotic prescription, if indicated.
- An educational 3x5” card developed and distributed as part of the Centers for Disease Control and Prevention (CDC) Get Smart campaign for pharmacists to give patients who receive antibiotics; the headline “You’ve just had a prescription filled, here’s what you need to know” signals the importance of safe antibiotic use.
- An educational prescription pad developed and distributed as part of the CDC Get Smart initiative for providers to give patients who do not receive antibiotics; this prescription pad provides information on diagnosis, general instructions, and medications that may ease symptoms.
- Continuing Medical Education programs for professionals in both healthcare and public health provided in coordination with Centerpoint Medical Center.
- A grant application to the Healthcare Foundation of Kansas City to secure funding for coordination and expansion of various elements of the Antibiotic Stewardship Program.
Collaborating with Childcare Providers

The Independence team created clear standards that childcare providers can implement when working with families in the community. Using public recognition as an incentive and thoughtfully incorporating accessible language for instructions and explanations, they are initiating the following efforts:

- The Missouri Department of Health and Senior Services created the *Prevention and Control of Communicable Diseases: Guide for School Administrators, Nurses, Teachers, Child Care Providers, and Parents or Guardians* which includes resources about everything from a “cover your cough campaign” to hand washing reminders, to lessons about the misuse of antibiotics and antibiotic resistant disease. Locally, the Communicable Disease staff in the Independence Health Department promotes and shares this excellent resource with schools and childcare providers.
- A new Start Right Rating System to publicly recognize childcare centers that cooperate with standards as well as those taking extra steps to ensure that safe antibiotic use practices and policies are followed.
- Basic education for childcare providers and parents about the risk of antibiotic resistant infections with the goal of reducing inappropriate antibiotic use and overall reduction in the need for antibiotics.

Using the Public Health Antibiotic Stewardship Driver Diagram as a guide, the Independence Health Department is off to a strong start in raising awareness of antibiotic resistant infections and how to keep them at bay in the community. In the coming months, they plan to further develop these programs and expand the collaboration between public health and healthcare systems so that they are sharing more information about diagnoses of antibiotic resistant infections and the rate of antibiotic prescription use. In 2014, they will survey physicians and child care centers to measure the impact of these initiatives, and work with pharmacies to assess whether there has been a decrease in prescriptions for antibiotics.

**Success Factors**

- Prior relationship between healthcare organization and public health department
- Identify receptive points of intervention for implementation

**Related Resources**

- [Public Health Antibiotic Stewardship Driver Diagram](#) — The driver diagram used by the Independence Health Department to guide their strategies for this program.
- PHF provides customized training, facilitation, and workforce development services to public health agencies and other groups that protect the public’s health. To inquiere about technical assistance, please visit PHF at [www.phf.org/TechnicalAssistance](http://www.phf.org/TechnicalAssistance) or call 202-218-4415.

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