

## Partnerships to Reach At-Risk Populations

*At-risk populations are those people most at risk of severe consequences from a public health emergency, including societal, economic, and health-related events. This factsheet series describes populations and partnerships with which state and territorial health agencies work to reach at-risk populations. State and territorial health agencies recognize the value of working with particular populations to ensure effective messaging in reaching as many people in the community as possible. Health agencies also recognize the importance of working through different partnerships to reach myriad populations with messages and countermeasures. These factsheets focus on the value of these partnerships and reaching diverse populations and include examples of how public health agencies have successfully done so.*

### ■ Population

Pregnant women and infants less than six months old have an increased risk of experiencing influenza complications and are also at higher risk of contracting vaccine-preventable diseases like pertussis and diphtheria.<sup>1</sup> Therefore, vaccination during pregnancy is an important way to support and protect the health of pregnant women and infants. The majority of morbidity and mortality related to pertussis infection occurs in infants three months of age or younger,<sup>2</sup> who may contract the disease from their mothers and other household and caregiving contacts.<sup>3</sup> However, pregnant women who are vaccinated for certain diseases can confer some immunity to their newborns for their first several weeks of life.<sup>4</sup>

Influenza vaccinations can prevent or reduce illness in both mothers and infants.<sup>5</sup> The influenza vaccine is recommended for women who are or will be pregnant during the influenza season, regardless of trimester. The American Congress of Obstetricians and Gynecologists (ACOG) recommends that pregnant women receive inactivated vaccines, and breast-feeding women can either receive the inactivated or live vaccine.<sup>6,7</sup>

In October 2012, the Advisory Committee on Immunization Practices (ACIP) issued [recommendations](#) for healthcare personnel to administer a dose of Tdap during each pregnancy, regardless of the patient's prior history. Tdap protects against tetanus, diphtheria, and pertussis. Ideally, Tdap should be administered between 27 and 36 weeks, but it can be given any time during pregnancy.<sup>8</sup> These recommendations are also [supported](#) by ACOG.

Pregnant women may have concerns about vaccine safety and the effects vaccinations have on their health or their babies. However, no evidence exists of adverse effects on the fetus from vaccinating pregnant women with an inactivated virus or bacterial vaccines or toxoids, and a growing body of

data demonstrates safety of these types of vaccines.<sup>9</sup> Furthermore, there is no evidence that suggests that vaccines increase the risk of autism or adverse effects due to exposure to traces of thimerosal, a mercury-containing preservative sometimes found in vaccines.<sup>10,11,12,13</sup>

### ■ Partnerships

Improving immunization rates among pregnant women requires developing partnerships between state health agencies and healthcare providers, hospitals, state Medicaid agencies, vaccine manufacturers, and others. During the 2013–14 influenza season, 52.2 percent of pregnant women were vaccinated before or during pregnancy.<sup>14</sup> Many women use their OB-GYN as their primary care provider, which presents providers with an important opportunity to educate women about the benefits of vaccination and administer vaccines. However, OB-GYNs may face several challenges when implementing vaccination programs in their clinics, including lack of storage facilities for vaccines, lack of information about immunizations for pregnant women, and lack of access to local immunization resources.<sup>15</sup> State health agencies can support partner efforts to strengthen vaccination programs in OB-GYN practices by:

- *Maintaining a state immunization registry:* Including adults in state immunization registries can allow state health agencies to monitor immunization rates. Registry data can be improved by actively encouraging healthcare partners to report to the registry.
- *Providing information and education for the public:* Developing materials and messaging about the safety, efficacy, and benefits newborn babies receive from immunizing pregnant women is important for educating the public.

- *Working with the state Medicaid agency and private payers to establish coverage for recommended adult vaccines:* Reimbursement for providing vaccines will incentivize healthcare providers to incorporate vaccine programs in their practices.
- *Recommending vaccines in OB-GYN practices:* State health agencies can provide information to OB-GYNs about the risks of vaccine-preventable illnesses, share current recommendations and evidence about the benefits of vaccination, and train OB-GYNs on the best ways to talk with patients about vaccines. This communication is particularly important during outbreaks, such as influenza. For example, the Massachusetts Department of Public Health found that among pregnant women in Massachusetts receiving the H1N1 vaccine, almost 72 percent received it in an OB-GYN office.<sup>16</sup> State health agencies may have difficulty accessing OB-GYN practices due to the sheer number of practices, lack of provider champions, and other issues. Partnerships with state medical associations can greatly improve access to these types of healthcare providers.
- *Supporting vaccine program implementation in obstetric practices:* Health agencies share “Dear Provider” letters to address logistical challenges related to vaccine stocking and administration, update providers about new immunization policies or recommendations, provide information on outbreaks and steps providers can take to address them, and share resources clarifying provider liability issues.<sup>17</sup> In addition, state health agencies can promote healthcare systems changes, including establishing standing order sets in healthcare facilities and influenza vaccination reminders in medical record systems. For example, a new law in New York state requires “all general hospitals with newborn nurseries or obstetric services to offer and provide vaccination against *Bordetella pertussis* (whooping cough) to parents and anticipated caregivers of all newborns being treated in the hospital following their births.” The New York State Department of Health sent a letter to hospital CEOs advising them of the requirement, providing background information, and offering assistance if needed.<sup>18</sup>

## ■ In Practice: Stories from the Field

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*The [South Carolina Birth Outcomes Initiative \(BOI\) Quality and Safety Workgroup](#), convened by the South Carolina Department of Health and Human Services, seeks to improve immunization rates among pregnant women. The BOI consists of public and private sector stakeholders who have a commitment to improve healthy birth outcomes, including the state health agency, payers, providers, and March of Dimes. This initiative uses a multi-component approach to ensure Medicaid coverage for Tdap and other vaccines for adults, support hospitals to screen and vaccinate pregnant women, and develop post-partum order sets to check immunization status and administer vaccines. Additionally, BOI supports OB-GYN practices with establishing immunization programs and conducting outreach campaigns targeting healthcare providers, pharmacies, pregnant women, vaccine manufacturers, and other stakeholders. Through the South Carolina Immunization Registry, BOI monitors the impact of vaccination rates among women of childbearing age.*

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*During the 2009 H1N1 outbreak, the Massachusetts Department of Public Health (MADPH) coordinated with the obstetrical provider community and Massachusetts chapter of ACOG (MAACOG) to identify barriers providers face with offering the influenza vaccine to pregnant patients. They identified several types of obstacles, including: (1) logistical and administrative barriers related to vaccine purchasing and procurement through the MADPH immunization program, vaccine handling and documentation, and billing and reimbursement, (2) behavioral barriers related to lack of provider experience with incorporating vaccination into clinical practice flow and lack of training, and (3) provider beliefs about vaccine safety during pregnancy and that vaccination is better suited to internal medicine or another primary care setting, and concerns about patient reluctance to receive vaccines. To address these barriers, MADPH and MAACOG disseminated information to providers and patients through a public education campaign using targeted messaging. MADPH also prioritized distribution of the vaccines to obstetrical care sites, and as a result, demand for the influenza vaccine increased among pregnant women and more providers recommended it. Data collected during the 2009-2010 and 2010-2011 influenza seasons demonstrated a twofold increase in immunization of pregnant women.<sup>19</sup>*

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*During the 2009-2010 influenza season, the Rhode Island Department of Health actively recruited prenatal healthcare providers and other providers to ensure that the influenza vaccine was accessible to pregnant women statewide. Pregnancy Risk Assessment Monitoring System (PRAMS) data indicate that these efforts may have contributed to a dramatic increase in vaccination among pregnant women, from 18.2 percent in 2002 to 73.5 percent in 2010, with the biggest increases occurring in the 2009-2010 season. The percentage of women who received a healthcare provider's recommendation to get vaccinated increased from 33 percent in 2004 to 91.2 percent in 2010.<sup>20</sup>*

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*State health agencies in ACOG District V (Indiana, Kentucky, Michigan, Ohio, and Ontario) partnered with ACOG and 60 OB-GYN practices to create and expand office-based immunization programs. The project goals were to increase the types and doses of immunizations given in OB-GYN practices and build sustainable partnerships with participating state health agency immunization programs.<sup>21</sup> Participating state health agencies, in coordination with ACOG, developed materials for on-site trainings, covering key topics jointly identified by state health agency staff and ACOG. After participating in the on-site trainings, 29 percent of practices report that they increased vaccine doses from their pre-training rate, 48 percent of practices from Indiana, Michigan, and Ohio are now participating in their states' immunization registries and an additional 12 percent are interested in enrolling, and 83 percent of practices report that they now have the name of a state health department contact person they can reach with questions about immunizations (a 48% increase). As a result, 83 percent of participating practices have an immunization coordinator, up from 53 percent.<sup>22</sup>*

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## Sources

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## Share Your State Or Territory's Story

ASTHO's "Have You Shared" initiative systematically collects and disseminates stories that highlight promising and useful practices and implementation strategies developed by state and territorial health agencies. If your jurisdiction has a project or program that may be of interest to other states or territories, complete a brief web form describing the story you would like to share at <http://www.astho.org/Forms/HaveYouShared/>. An ASTHO staff member will follow up with you for more information. A complete archive of ASTHO's state stories is available at [www.astho.org/stories](http://www.astho.org/stories).