

# The Implementation of the CDC's Revised Recommendations For HIV Testing In Medical Settings: A Rhode Island Update and Call For Action

*Nicole E. Alexander, MD, Brian Alverson, MD, Robin Neale, MT (ASCP) SM, Curt G. Beckwith, MD*

**The Centers for Disease Control and Prevention (CDC)** report 1 to 1.2 million people are living with HIV and AIDS in the United States, and HIV infection is a leading cause of illness and death.<sup>1</sup> An estimated 25% (252,000—312,000 persons) are unaware of their HIV infection, and therefore may unwittingly transmit the virus.<sup>2</sup> Marks and colleagues report that persons unaware of their HIV infection are more likely to engage in high-risk sexual behavior, with an HIV transmission rate 3.5 times higher compared to those aware of their HIV infection.<sup>3</sup> Therefore, although there have been significant advances in HIV treatment and life expectancy among HIV-infected persons, the estimated number of new infections in the United States in 2006 was 56,300—a significant increase over the reported annual number of incident infections during the previous decade.<sup>4</sup>

It is reasonable to conclude that the HIV/AIDS epidemic can be lessened substantially by alerting more HIV-positive persons to their status.<sup>4</sup> The percentage of patients ever tested for HIV was 38% in 1997, but increased minimally to 40% in 2006.<sup>5</sup> In September 2006, the CDC published revised recommendations for HIV testing in all health-care settings in order to foster earlier detection of the virus.<sup>1</sup> Previous HIV screening strategies focused on testing for only persons perceived to be at high risk (such as injection drug users, men having sex with men, and persons with other sexually transmitted infections), and those living among populations with increased HIV prevalence. HIV testing based upon risk assessment alone has resulted in a significant number of HIV infected individuals remaining undiagnosed, despite multiple opportunities for testing. Beckwith and his colleagues assessed patients newly diagnosed with HIV when admitted to the hospital with additional illness: 65% of these patients did not re-

port traditional risk factors for HIV infection and were missed in previous tests.<sup>6</sup>

Because estimates of HIV incidence have not decreased with risk-based HIV testing, and because significant numbers of patients are diagnosed only after hospital admission with advanced AIDS, the CDC took several important steps toward reducing barriers to testing. The 2006 revised recommendations support routine “opt-out” HIV testing in health care settings for all patients between the ages of 13-64. Opt-out testing means that a provider informs a patient that HIV testing will be completed as part of their routine medical care unless the patient declines testing. The CDC recommended that informed consent for HIV testing be included in the consent for general medical care and that separate written informed consent for HIV testing should not be required. In this scenario, after patients are informed of the HIV test and given the opportunity to decline, the verbal consent for general medical care should be sufficient to incorporate consent for HIV testing. These guidelines also apply to pregnant women who should have HIV screening included in the routine panel of prenatal screening tests, without need for a separate signed consent form.

At the time the 2006 CDC recommendations were released, 20 states, including Rhode Island, still required separate written informed consent for HIV testing. Since that time, 11 states have enacted new legislation to streamline the consent process in order to increase uptake of testing.<sup>8</sup> In California, the San Francisco Public Health Department eliminated the requirement for separate written informed consent for HIV testing within all Public Health Department health care facilities and subsequently documented a highly significant increase in HIV testing and identification of new infections.<sup>9</sup> The mean monthly rate of HIV tests per 1000 patient-visits increased 4.5 times after the

requirements for consent were changed. This dramatic increase in HIV testing served as the impetus for the State of California to enact new legislation in October 2007 to eliminate separate written informed consent for HIV testing. Rhode Island, however, remains one of the few states that still requires written consent for HIV testing.

In 2004 the CDC highlighted Rhode Island as one of the jurisdictions that had an elevated incidence of HIV or AIDS among women 15—45 years of age.<sup>7</sup> In addition, Rhode Island was one of the 21 states that surpassed the threshold of 17 new HIV diagnoses and 9 AIDS diagnoses per year per 100,000 women aged 15—45 years. Nevertheless, only 52.8% of pregnant women at the largest birthing hospital in Rhode Island had a known HIV status documented at time of delivery in 2006.<sup>10</sup> This testing rate is unacceptable since vertical transmission of HIV infection is preventable with the use of antiretroviral therapy. Vertical transmission of HIV infection from mother to child can be decreased from 25% with no intervention to less than 2% with antiretroviral therapy given in the perinatal period.<sup>11</sup> Unfortunately, in 2006, three infants were born with HIV infection in Rhode Island.

The concurrence of newborn HIV cases in 2006 and the release of the revised CDC recommendations for HIV testing created momentum to change Rhode Island's HIV testing legislation. After caring for a newborn whose HIV diagnosis was missed at birth, a concerned group of physicians coordinated efforts with the Rhode Island Department of Health, HIV/AIDS activist organizations, and other healthcare providers to pass a new law in July 2007.<sup>12</sup> The legislation was crafted by a wide group of advocates and put forward by Representative Eileen Naughton and Senator Charles Levesque. The law changed HIV testing among pregnant women from an opt-in to an opt-

out approach. The requirement for separate written informed consent for HIV testing during pregnancy was eliminated. Verbal consent for HIV testing is now permitted. In order to protect the rights of the patient, the legislation required that no woman be tested for HIV without her knowledge, and patients have the right to decline testing.

An analysis of HIV testing among pregnant women is underway at Women and Infants' Hospital where more than 9400 deliveries per year are performed, comprising over 72% of the deliveries in Rhode Island.<sup>13</sup> Hospital infection control personnel are surveying randomly selected obstetrical charts; and preliminary results indicate that prenatal HIV testing rates have increased to over 90% since passage of the legislation.<sup>14</sup> Since passage, there have also been no known vertical HIV transmissions in Rhode Island.

Separate written informed consent for HIV testing was acting as a barrier to testing among pregnant women in Rhode Island; removal of this barrier has led to increased testing rates. However, *separate written informed consent is still required in other medical settings within Rhode Island.* The HIV testing laws are still not in compliance with the CDC recommendations and violate humanitarian values. Despite substantial evidence presented to lawmakers, attempts to introduce legislation that would allow for routine opt-out HIV testing without separate written informed consent in all health-care settings failed in 2008. Opponents argued that discrimination and stigma pertaining to HIV still exist, and that elimination of the requirement for separate written consent may result in patients getting HIV-tested without their knowledge.

Stigma and discrimination toward HIV-infected persons are still a problem almost 30 years after the recognition of the epidemic in the US. We cannot allow persons who are unknowingly infected to remain undiagnosed when effective therapy is available. HIV treatment is both life-sustaining and life-saving. HIV treatment is available to all Rhode Islanders who need it through the AIDS Drug Assistance Program. Barriers to testing must be removed in order to expand the proportion of persons who are tested. Making HIV testing a routine part of medical care will reduce the

stigma associated with HIV testing. Furthermore, a recent study has suggested that increasing testing and increasing the use of HIV medication could have a meaningful impact on eliminating the HIV epidemic as a whole.<sup>15</sup>

---

## Routine opt-out HIV testing in medical settings needs to be implemented in Rhode Island, including the elimination of separate written consent

---

Routine opt-out HIV testing in medical settings needs to be implemented in Rhode Island, including the elimination of separate written consent. To do this, a variety of parties including lawmakers, AIDS activists, community service organizations, healthcare providers, patients, families of patients, and healthcare organizations must be involved in further legislative efforts. With a sense of urgency, there must be a willingness to agree on a consensus that will best achieve the goals that are important to all, namely, to decrease transmission of HIV and to increase knowledge of HIV serostatus. We are optimistic that the upcoming legislative session will see a collaborative effort to pass HIV testing laws in Rhode Island that will address the epidemic of 2009 and for years to come.

### Acknowledgement

This project was supported in part by the Lifespan/Tufts/Brown Center for AIDS Research (P30AI042853), NIH Training grant (T32DA013911), and Dr. Beckwith is supported by the National Institute on Drug Abuse (5K23DA021095).

### REFERENCES:

1. Branson BM, Handsfield HH, et al. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. *MMWR Recomm Rep* 2006;55(RR-14):1-17; quiz CE11-14.
2. Glynn M, Rhodes P. Estimated HIV prevalence in the United States at the end of 2003 [Abstract]. Presented at the National HIV Prevention Conference, June 12-15, 2005, Atlanta, Georgia.

3. Marks G, et al. Estimating sexual transmission of HIV from persons aware and unaware that they are infected with the virus in the USA. *AIDS* 2006;20:1447-50.
4. Hall HI, et al. Estimation of HIV incidence in the United States. *JAMA* 2008;300:520-9.
5. CDC. Persons Tested for HIV — United States, 2006. *MMWR Recomm Rep* 2008; 57:845-9.
6. Beckwith CG, et al. Routine HIV testing among inpatients. *Arch Intern Med* 2002; 167: 2252-3.
7. CDC. Cases of HIV infection and AIDS in the United States, 2004. *HIV/AIDS Surveillance Report* 2005;16:16-45.
8. Bartlett JG, et al. Opt-out testing for human immunodeficiencyvirus in the United States. *JAMA* 2008;27;300: 945-51.
9. Zetola NM, et al. Association between rates of HIV testing and elimination of written consents in San Francisco. *JAMA* 2007;297:1061-2.
10. Ballard-Dwan J. Women with HIV status documented at time of delivery, January 2007. Unpublished data.
11. Cooper E, et al. Women & Infants Transmission Study, 1990-1999. *JAIDS* 2002;29:484-94.
12. <http://www.rilin.state.ri.us/BillText/BillText07/SenateText07/S0841Aaa.htm>
13. [http://www.womenandinfants.org/documents/2008\(2\).pdf](http://www.womenandinfants.org/documents/2008(2).pdf)
14. Neale R, et al. Women and Infants' 2008 HIV Testing in Pregnancy. Unpublished data.
15. Granich RM, et al. Universal voluntary HIV testing with immediate antiretroviral therapy as a strategy for elimination of HIV transmission. *Lancet* 2009; 373:48-57.

*Nicole E. Alexander, MD, is a Combined Adult-Pediatric Infectious Disease fellow, The Warren Alpert Medical School of Brown University.*

*Brian Alverson, MD, is Assistant Professor of Pediatrics, The Warren Alpert Medical School of Brown University.*

*Robin Neale, MT (ASCP) SM, is an Infection Control Practitioner, Women & Infants Hospital.*

*Curt G. Beckwith, MD, is Assistant Professor of Medicine, The Warren Alpert Medical School of Brown University.*

### Disclosure of Financial Interests

Nicole E. Alexander, MD, Brian Alverson, MD, and Robin Neale, MT (ASCP), SM, have no financial interests to disclose.

Curt Beckwith, MD. Grant Research support: Gilead Sciences, Inc.

### CORRESPONDENCE

Nicole E. Alexander, MD  
The Miriam Hospital  
164 Summit Ave  
Providence, RI 02906  
Phone: (401) 444-8360  
e-mail: [nalexander2@lifespan.org](mailto:nalexander2@lifespan.org)