

SPECIAL REPORT ON CHILDREN BORN TO

HIV-POSITIVE WOMEN IN NEVADA:

2000-2008



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EXECUTIVE SUMMARY

Background

- Centers for Disease Control and Prevention (CDC) published the MMWR for “Revised Recommendations for HIV Testing of Adults, Adolescents, and pregnant Women in Health-Care Settings”¹ in September of 2006 recommending HIV testing during first and third trimesters of prenatal care, as well as opt-out HIV rapid testing during delivery.
- During the 2007 Legislative Session, Nevada passed Senate Bill 266, implementing the Centers for Disease Control and Prevention (CDC) recommended guidelines for HIV testing among women of childbearing age and pregnant women.
- When medications such as ZDV or other antiretroviral medications are administered during pregnancy, delivery, and neonatally as well as an elective cesarean section (c-section), rates of transmission decreases from 25% to 1-2% making the passage of SB 266 an important milestone for Nevada ²

Impact

- Since 2006, Nevada has more than doubled the number of HIV tests administered in Family Planning Clinics. In 2008, 707 HIV tests were administered compared to 336 in 2006.
- Since 2006 when CDC’s guidelines came out, Nevada has had more HIV positive perinatally exposed cases reported. From 2006 to 2008 more pregnant women have learned their HIV status during pregnancy. It is likely the increase is due to testing during prenatal care as recommended in the CDC guidelines.
- Since 2007, after the passage of SB 266, Nevada has had no positive perinatal HIV cases. This could be due to more women being aware of their HIV status during and before delivery and providers appropriately treating HIV positive pregnant women, thus decreasing transmission.
- As a result of an increase in the use of Rapid HIV Tests during delivery, the number of mothers who learned their HIV status during labor doubled from 2006 to 2008.

- From 2006 to 2008, HIV positive pregnant women have shown an increase in early prenatal care, a decrease in vaginal deliveries, and more women and neonates have been receiving treatment which reduces the risk of HIV transmission from mother to child. Increases in these preventive strategies may be the result in the decrease of HIV positive perinatal cases in 2007 and 2008.
- The majority of HIV-positive women in Nevada who gave birth during 2006 to 2008 were between 26-35 years of age, were Black (non-Hispanic), and resided in Clark County.

Future Recommendations

- Due to the success of SB 266 we recommend that there be an overall increase of prenatal screenings to better identify diseases or infections in women of child-bearing age that can be transmitted mother-to-child, especially sexually transmitted diseases/infections with immediate emphasis on congenital syphilis.
- Increase Services to HIV-Positive Women of Childbearing Age.
 - Provide referrals to family planning clinics
 - Educate about perinatal transmission risks
 - Provide prenatal care referrals as needed
- Increase the number of Rapid HIV tests conducted during labor and delivery in hospitals and emergency rooms.
- Recommendations are intended for policy makers, health care providers, and public health professionals.

PURPOSE OF REPORT

- This report looks at the number of children perinatally exposed to **HIV** (Human Immunodeficiency Virus) and/or **AIDS** (Acquired Immunodeficiency Syndrome) born to HIV-positive women in Nevada during the years 2000 to 2008.
- The report will review the preliminary information in response to the passage of SB 266.
- The data for this report was a collaborative effort of the HIV Surveillance Program (HIV Reporting System eHARS), HIV Prevention Program, and Office of Health Statistics and Surveillance Vital Records Birth Registry.
- This report discusses the current status of Nevada’s Prenatal HIV focusing on perinatal HIV Testing, and prevention strategies to reduce transmission from mother-to-child, as well as provides a profile for HIV infected mothers. This report will explore these areas in three sections labeled as the “Key Points:”
 1. Testing of HIV-infected pregnant women.
 2. Prevention strategies for transmission of HIV from mother to child.
 3. Profile of HIV-infected pregnant women in Nevada.
- The intended audiences of this report are policy makers, health care providers, and public health professionals.

SUMMARY OF SENATE BILL 266

- Senate Bill 266 (SB 266) was passed during the 2007 Legislative Session. (See attached)
- Following the passage of SB 266, the Nevada State Health Division (NSHD) provided the medical community throughout Nevada with the information needed to effectively implement this bill into their standards of care.

Items provided to hospitals and providers are as follows:

- A copy of the law along with a detailed letter explaining SB 266 and the statutes that changed as a result of passing of this bill;
- Contacts for legal guidance; and
- Twenty-five (25) copies of an informational brochure in English (distributed September 2007) and Spanish (May 2008) were provided to each hospital statewide with the web link to the online version of the brochure allowing additional copies to be downloaded and printed.

NEVADA PERINATAL HIV/AIDS TRENDS

Table 1

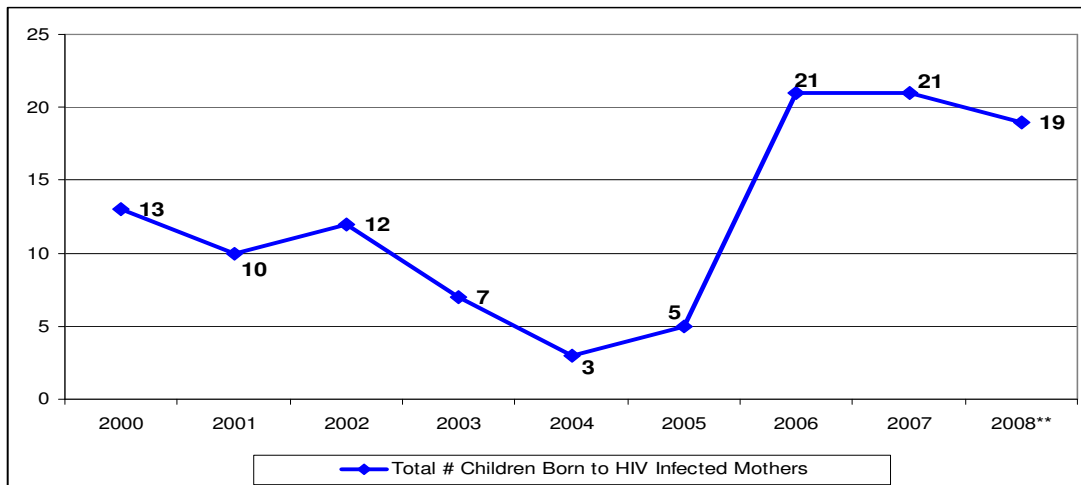
Total Number of Children Born to HIV-Infected Mothers and Current HIV Status (Perinatally HIV Exposed, Pediatric HIV, AIDS, or Seroreverter), Nevada: 2000-2008**					
	Total # of Children Born to HIV-Infected Mothers	HIV Status Unknown*	Pediatric Seroreverter‡	Positive Pediatric HIV Cases†a	Positive Pediatric AIDS Cases†b
Year Born	N= 111	n=23	n=76	n=4	n=1
2000	13	2	11	0	0
2001	10	3	7	0	0
2002	12	2	10	0	0
2003	7	1	6	0	0
2004	3	0	2	1	0
2005	5	0	3	2	0
2006	21	2	17	1	1
2007**	21	9**	12	0	0
2008**	19	19**	n/a	0	0
Total	111	38	68	4	1

Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

**Note: Seven of the unknown HIV status cases in 2007 and all cases in 2008 data are preliminary, an 18 month time period is required for children born to HIV-infected mothers to either convert to HIV/AIDS or seroreverter.

- Data from Table 1 shows that from 2000 to 2008 a total of 111 children were exposed to HIV as a result of being born to an HIV-infected mother.
 - 85 cases that were born to HIV-positive mothers from 2000 to 2007 have met the 18 month window from time of birth to have a documented HIV status.
 - 26 cases that were born to HIV-positive mothers from 2007 to 2008 have not met yet the 18 month time period at the time of this report to have a known HIV status.
- Among 111 cases born to HIV-positive mothers, 38 (34%) have an unknown HIV status.
 - 12 (all cases from 2000 to 2006 and two of the 2007 cases) of the 38 cases have unknown HIV status due to “lost to follow-up.”
 - 26 (seven of the 2007 cases and all of the 2008 cases) of the 38 cases with unknown HIV status are due to an insufficient amount of time passing from time of report to the 18 months needed for cases to convert to either HIV/AIDS positive or a seroreverter status.
- Among 85 cases from 2000 to 2007 who meet the appropriate time period, 68 (80%) cases seroreverted and have a negative HIV status.
- Among 85 cases who meet the appropriate time period, five children converted to HIV/AIDS. In 2007 and 2008 there are no confirmed positive HIV/AIDS cases.

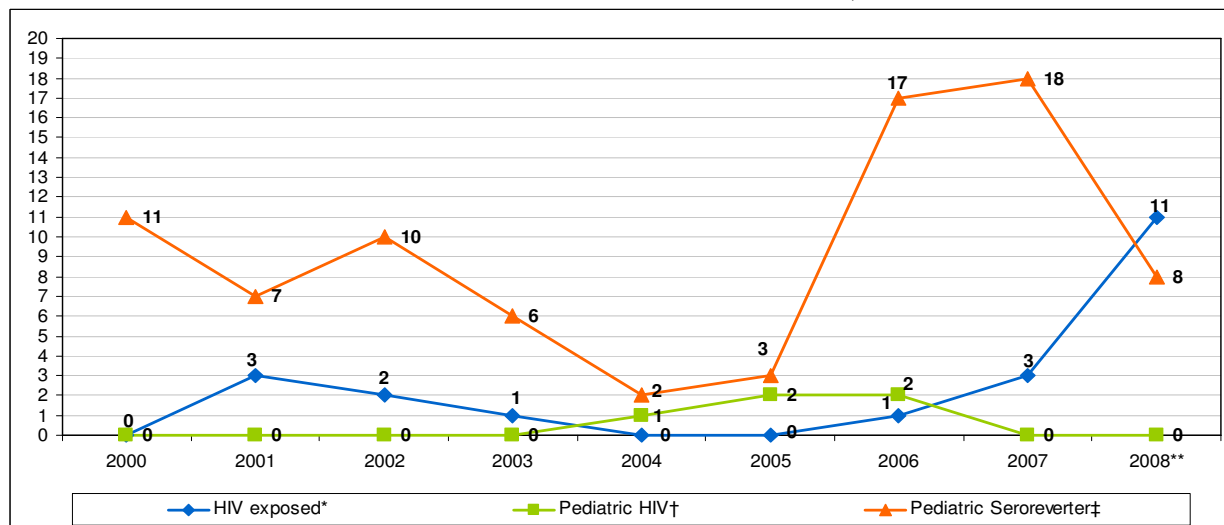
Figure 1
Number of Children Born to HIV-Infected Mothers, Nevada: 2000-2008**



Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

** 2008 data is provisional and subject to change.

Figure 2
Status of Children Born to HIV-Infected Mothers, Nevada: 2000-2008**



Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

** 2008 data is provisional and subject to change.

*A child less than 18 months born to an HIV-infected mother will be categorized as having perinatal HIV status as unknown if the child does not meet the criteria for HIV infection or the criteria for "not infected with HIV."

‡ A child who is born to an HIV-infected mother and who: has been documented as HIV-antibody negative (i.e., two or more negative EIA tests performed at 6–18 months of age or one negative EIA test after 18 months of age); and has had no other laboratory evidence of infection (has not had two positive viral detection tests, if performed); and has not had an AIDS-defining condition.

† a) A child less than 18 months of age who is known to be HIV seropositive or born to an HIV-infected mother and has positive results on two separate determinations (excluding cord blood) from one or more of the following HIV detection tests: HIV culture, HIV polymerase chain reaction, HIV antigen, or meets criteria for acquired immunodeficiency syndrome (AIDS) diagnosis based on the 1987 AIDS surveillance case definition.

b) A child 18 months of age born to an HIV-infected mother or any child infected by blood, blood products, or other known modes of transmission (e.g., sexual contact) who: is HIV-antibody positive by repeatedly reactive enzyme immunoassay (EIA) and confirmatory test (e.g., Western blot or immunofluorescence assay [IFA]); or meets any of the criteria in a) above.

Please see MMWR for complete guidelines for complete case definition: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4813a2.htm>

KEY POINTS

In order to assess the impact of SB 266, the Key Points section of the report will focus on the years 2006 to 2008. These years were chosen in order to explore the changes from the time the CDC guidelines¹ were established in 2006, through the passage of the SB 266 in 2007, to the most recent calendar year of data (2008).

This section of the report is broken down into three key points. The first point examines the changes in HIV testing for pregnant mothers in Nevada from 2006 to 2008; the second point explores the changes in HIV prevention strategies to reduce transmission from mother-to-child for HIV-positive mothers from 2006 to 2008 and is broken into three sections to further examine the factors associated with reducing the risk of transmission during pregnancy, labor, and after birth; and the third point details the profile for HIV infected mothers in Nevada from 2006 to 2008.

KEY POINT #1: Testing of HIV-Infected Pregnant Women

1) From 2006 to 2008, Nevada saw a significant increase in the number of HIV tests being administered to women during prenatal care visits at Family Planning Clinics. Since 2006, Nevada has detected more cases of children who were exposed to HIV through HIV positive mothers. More pregnant women are learning their HIV status during pregnancy and labor allowing of treatment for both mother and child. Data shows that there has not been an increase in the number of positive perinatal HIV cases among children exposed to HIV through mother-to-child transmission even with the increase in HIV-positive mothers.

Table 2

Number of HIV Tests Administered in Family Planning Services, Nevada: 2006-2008			
2006	2007	2008	% Change 2006-2008
336	407	707	110.4%

Source: Nevada State Health Division HIV Prevention Program

- The number of HIV tests administered in family planning services in Clark County and Washoe County has more than doubled (110%) from 2006 to 2008 (Table 2).

Table 3

Number of Children Exposed to HIV through Mother-to-Child Transmission, Nevada: 2006-2008			
2006	2007	2008	% Change 2006-2008
21	21	19	-9.5%

Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

- The number of detected children exposed to HIV through mother-to-child transmission has decreased from 2006 to 2008 by almost 10% (Table 3).
- Prior to 2006, the number of detected HIV-exposed children ranged from thirteen cases in 2000 to five in 2005 (Table 1).
- From 2006 to 2008, Nevada has identified more perinatally HIV exposed children due to the significant increase in HIV testing during prenatal care statewide.
- One might expect the number of HIV-infected children to increase as well, but due to proper testing and care, rates of new HIV-infections has not increased.

KEY POINT #1: Testing of HIV-Infected Pregnant Women (Cont.)

Table 4

Number of Perinatal HIV Positive, Seroreverter Cases and Among Children Exposed to HIV through Mother-to-Child Transmission, Nevada: 2006-2008				
	2006[†]	2007**	2008**	% Change 2006-2008
	N=21	N=21	N=19	
HIV/AIDS Positive Perinatal Cases	2 (9.5%)	0 (0%)	0 (0%)	-100.0%
Pediatric Seroreverter Cases	17 (81%)	12 (57%)	n/a	n/a
HIV Status Unknown	2 (9.5%)	9 (43%)	19 (100%)	n/a

Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

** Data for seven of the 2007 cases and all of the 2008 cases are provisional and subject to change.

[†] In 2006, one case has an unknown status

- From 2006 to 2007, there was a decrease in the number of positive perinatal HIV/AIDS cases (Table 4).
- In 2006, only two children (one with HIV one with AIDS) perinatally exposed to HIV converted to HIV/AIDS while 17 (81%) of exposed HIV cases seroreverted.

Table 5

Time Period in Which HIV Positive Mothers Learned Their HIV Status, Nevada: 2006-2008				
	2006	2007	2008	% Change 2006-2008
	N=21 # (%)	N=21 # (%)	N=19 # (%)	
During Delivery	1 (5%)	1 (5%)	2 (11%)	100%
During Pregnancy	4 (19%)	2 (10%)	5 (26%)	25%
Before Pregnancy	16 (76%)	18 (86%)	12 (63%)	-25%

Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

- The number of mothers who learned their HIV status during labor doubled from 2006 to 2008 as a result of an increase in the use of Rapid HIV Tests during delivery.
- From 2006 to 2008, there was a 25% increase in the number of pregnant women who learned their HIV status during pregnancy.
- More than a third of the women between 2006 and 2008 knew they were HIV-positive prior to their pregnancy.

KEY POINT #2: Prevention Strategies to Reduce Perinatal HIV Transmission

2) From 2006 to 2008, Nevada has experienced an increase in preventive strategies aimed at reducing the transmission of HIV from mother to child, as well as a decrease in HIV-exposed children born of low birth weight. From 2006 to 2008, HIV positive pregnant women have shown an increase in early prenatal care, a decrease in vaginal deliveries, allowing more women and neonates to receive treatment that reduces risk of HIV transmission.

2. a) From 2006 to 2008, Nevada data shows that more HIV-positive women are receiving early prenatal care, with one-third to one-half of HIV positive women receiving Zidovudine or other antiretroviral treatment during pregnancy.

Table 6

Prenatal Care for Children Exposed to HIV through Mother-to-Child Transmission, Nevada: 2006-2008				
	2006	2007	2008	% Change 2006-2008
	N=21 # (%)	N=21 # (%)	N=19 # (%)	
No Care	1 (5%)	2 (10%)	3 (16%)	200.0%
First Trimester	10 (48%)	10 (48%)	12 (63%)	20.0%
Second Trimester	9 (43%)	2 (10%)	3 (16%)	-66.7%
Third Trimester	0 (0%)	0 (0%)	0 (0%)	0.0%
Unknown	1 (5%)	7 (33%)	1 (5%)	0.0%

Source: Nevada State Health Division Vital Record Birth Registry

Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

- From 2006 to 2008, prenatal care beginning during the first trimester for HIV positive women increased by 20%, with 48-63% of women receiving care during the first trimester (Table 6). No HIV positive pregnant women began receiving prenatal care during the third trimester.
- Between 2006 and 2008, less than 20% (Table 6) of all HIV positive women received no prenatal care. The status of prenatal care for one-third of these women is unknown.

KEY POINT- #2: Prevention Strategies to Reduce Perinatal HIV Transmission (Cont.)

- CDC Guidelines recommend HIV testing during the first and third trimester of pregnancy. Early prenatal care is predictive of receiving the appropriate tests and medications to prevent transmission of HIV.

Table 7

Number and Percent of HIV Positive Women who Received ZDV or Other Antiretroviral Medications During Pregnancy, Nevada: 2006-2008				
	2006	2007	2008	% Change 2006-2008
	N=21 # (%)	N=21 # (%)	N=19 # (%)	
Yes	12 (57%)	13 (62%)	14 (74%)	17%
No	5 (24%)	3 (14%)	4 (21%)	-20%
Unknown/Missing	4 (19%)	5 (24%)	1 (5%)	-75%

Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

- Between 2006 and 2008, 57-74% (Table 7) of HIV-positive pregnant women received medications (ZDV and ART) that have been shown to reduce this risk of transmission of HIV from mother-to-child.

From 2006 to 2008, there was a 17% (Table 7) increase in the number of women who received medications (ZDV and ART).

2.b) From 2006 to 2008, Nevada has seen a decrease in the number of vaginal deliveries of HIV positive women and an increased use of treatment to the new born; both reduce the risk of HIV transmission from mother to child during labor and delivery.

KEY POINT #2: Prevention Strategies to Reduce Perinatal HIV Transmission (Cont.)

Table 8

Method of Delivery for Children Exposed to HIV through Mother-to-Child Transmission, Nevada: 2006-2008				
	2006	2007	2008	% Change 2006-2008
	N=21 # (%)	N=21 # (%)	N=19 # (%)	
C-Section/ Repeat C-Section	15 (71%)	18 (86%)	15 (79%)	0.0%
# (%) Vaginal	6 (29%)	3 (14%)	4 (19%)	-33.3%

Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

Source: Nevada State Health Division Vital Record Birth Registry

- From 2006 to 2008, the percent of children born to HIV infected mothers through vaginal delivery has decreased by more than 33% (Table 8). The number of children who were delivered by cesarean section (c-section) has varied marginally from 2006 to 2008.
- Of the two positive perinatal HIV cases in 2006, one case was delivered vaginally and the other case was delivered via c-section (data not shown).

Table 9

Number and Percent of HIV Positive Women who Received ZDV or Other Antiretroviral Medications During Labor, Nevada: 2006-2008				
	2006	2007	2008	% Change 2006-2008
	N=21 # (%)	N=21 # (%)	N=19 # (%)	
Yes	15 (71%)	16 (76%)	14 (74%)	-7%
No	1 (5%)	0 (0%)	4 (21%)	300%
Unknown/Missing	5 (24%)	5 (24%)	1 (5%)	-80%

Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

- Nearly 75% (Table 9) of HIV-positive women between 2006 and 2008 received medications (ZDV or ART) during labor that reduce the risk of HIV transmission from mother-to-child.
- From 2006 to 2008, there was a decrease in the number of women whose use of ZDV or ART during labor was unknown (Table 9); four cases accounted for the significant increase in women who did not receive medication.

KEY POINT #2: Prevention Strategies to Reduce Perinatal HIV Transmission (Cont.)

2. c) From 2006 to 2008, Nevada has seen a decrease in low birth weight and an increase in neonatal Zidovudine (ZDV) treatment among children exposed by HIV positive mothers.

Table 10

Birth Weight for Children Exposed to HIV through Mother-to-Child Transmission, Nevada: 2006-2008				
	2006	2007	2008	% Change 2006-2008
	N=21 # (%)	N=21 # (%)	N=19 # (%)	
Very Low Birth Weight (< 1,500g)	1 (5%)	0 (0%)	1 (5%)	0.0%
Low Birth Weight (≥1,500g, < 2,500g)	4 (19%)	6 (29%)	2 (11%)	-50.0%
Normal Birth Weight (≥ 2,500g, ≤ 8,000g)	16 (76%)	15 (71%)	16 (84%)	0.0%

Source: Nevada State Health Division Vital Record Birth Registry

Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

- Among children born to HIV-positive mothers, children born of low birth weight (> 1,500 to < 2,500 grams) have decreased 50% from 2006 to 2008 (Table 10); while, very low birth weight (<1,500 grams) and normal birth weight (≥ 2,500grams, ≤ 8,000 grams) have seen no significant changes from 2006 to 2008 (Table 10).
- Over 75% of babies born to HIV-infected mothers between 2006 to 2008 were born of normal birth weight, approximately 10-30% were born with low birth weight and only 5% or less were born with very low birth weight (Table 10).

Table 11

Number and Percent of Newborns who Received Neonatal ZDV or Other Antiretroviral Medications, Nevada: 2006-2008				
	2006	2007	2008	% Change 2006-2008
	N=21 # (%)	N=21 # (%)	N=19 # (%)	
Yes	17 (81%)	17 (81%)	18 (95%)	6%
No	0 (0%)	0 (0%)	0 (0%)	0%
Unknown/Missing	4 (19%)	4 (19%)	1 (5%)	-75%

Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

- From 2006 to 2008, there was a 6% increase (Table 11) in the number of children born to HIV-positive mothers who received neonatal ZDV or other antiretroviral medications (ART). Additionally, there was a significant improvement in the data completion; the “unknown/missing” percentage decreased by 75% (Table 11).

KEY POINT #3: Profile of HIV-Infected Mothers

3) From 2006 to 2008, the overall profile of HIV-positive pregnant women in Nevada who residing in Clark County, report a race/ethnicity of Black (non-Hispanic), and were 26-35 years of age.

Table 12

HIV Positive Mothers by Residence at Time of Child's Birth, Nevada: 2006-2008				
	2006	2007	2008	% Change 2006-2008
	N=21 # (%)	N=21 # (%)	N=19 # (%)	
Clark County	20 (95%)	19 (90%)	18 (95%)	-10.0%
Rest of State	0 (0%)	2 (10%)	1 (5%)	0.0%
Out of State	1 (5%)	0 (0%)	0 (0%)	-100.0%

Source: Nevada State Health Division Vital Record Birth Registry

Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

- Between 2006 and 2008, 90-95% of HIV positive pregnant women were residents of Clark County (Table 12).

Table 13

Race/Ethnicity of HIV Positive Mothers Who Gave Birth in Nevada: 2006-2008				
	2006	2007	2008	% Change 2006-2008
	N=21 # (%)	N=21 # (%)	N=19 # (%)	
White (non-Hispanic)	5 (24%)	7 (33%)	5 (26%)	0.0%
Black (non-Hispanic)	8 (38%)	11 (52%)	9 (47%)	12.5%
Asian /Pacific Islander	0 (0%)	1 (5%)	0 (0%)	0.0%
Native American	0 (0%)	0 (0%)	1 (5%)	100.0%
Hispanic	8 (38%)	2 (10%)	3 (16%)	-62.5%
Unknown/Other	0 (0%)	0 (0%)	1 (5%)	100.0%

Source: Nevada State Health Division Vital Record Birth Registry

Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

- There was a 12.5% increase in Black (non-Hispanic) mothers (Table 13) of children exposed to HIV through mother-to-child contact and 40-50% (Table 13) of all mothers of children exposed to HIV through mother-to-child contact were Black (non-Hispanic).
- From 2006 to 2008, there was a 62.5% decrease in the number of Hispanic HIV-mothers (Table 13).

KEY POINT- #3: Profile of HIV-Infected Mothers (Cont.)

Table 14

Age of Mothers of Children Exposed to HIV through Mother-to-Child Transmission, Nevada: 2006-2008				
	2006	2007	2008	% Change 2006-2008
	N=21 # (%)	N=21 # (%)	N=19 # (%)	
16-25	4 (19%)	7 (34%)	7 (37%)	75.0%
26-30	11 (52%)	6 (29%)	6 (32%)	-45.5%
31-35	1 (5%)	2 (9.5%)	2 (11%)	100.0%
36-40	5 (24%)	6 (29%)	3 (16%)	-40.0%
40+	0 (0%)	0 (0%)	1 (5%)	100.0%

Source: Nevada State Health Division Vital Record Birth Registry

Source: Nevada State Health Division HIV/AIDS Reporting System (eHARS), February 2009

- From 2006 to 2008, there was an increase in HIV positive mothers ages 16-25 and 31-35 (Table 14).

CONCLUSIONS

This report addressed testing of HIV-infected pregnant women, prevention strategies to reduce perinatal HIV transmission, and the profile of HIV-infected pregnant women in Nevada.

As a result of this being a newly implemented bill (SB 266), further data is needed to understand the true impact on the decrease in perinatal HIV in Nevada. We can see from this report the importance of utilizing prevention strategies such as early HIV testing, medications that reduce transmission risk, and C-section delivery, to reduce the risk of HIV transmission from mother-to-child.

This report identifies that younger, minority women who reside in Clark County are the population most impacted by perinatal HIV. By identifying the population at highest risk, prevention programs can focus on these groups in order to reduce the prenatal HIV exposure and transmission. Prevention programs that address women of child-bearing age and HIV-positive pregnant women should focus on educating women at risk of transmitting HIV to their unborn child and the prevention strategies necessary to reduce the transmission of HIV from mother-to-child such as electing to have a C-section and not breastfeeding.

DEFINITIONS

- **Perinatal:** Pertaining to the period immediately before and after birth (it starts at the 20th to 28th week of gestation and ends 30 days after birth).
- **Neonatal:** Pertaining to the newborn period which, by convention, is the first four weeks after birth.
- **Perinatally HIV Exposed:** Child who was born to a mother known to be infected with HIV and who has an unknown HIV antibody status.
- **Pediatric HIV/AIDS:** A child less than thirteen years of age who is either born to a HIV-infected mother, infected by blood, blood products, or other known modes of transmission (e.g., sexual contact) and who has a confirmed positive HIV test result.
 - A child less than 18 months of age who is known to be HIV seropositive or born to an HIV-infected mother and has two confirmed positive test results (from two separate determinations (excluding cord blood)) or meets criteria for acquired immunodeficiency syndrome (AIDS) diagnosis.
 - A child greater than 18 months and less than 13 years of age who was born to an HIV-infected mother or any child infected by blood, blood products, or other known modes of transmission (e.g., sexual contact) and has a positive HIV confirmed test or meets the AIDS diagnosis criteria.
- **Pediatric Seroreverter:** A child who is born to an HIV-infected mother and who has been documented as HIV-antibody negative (i.e., two or more negative EIA tests performed between 6 and 18 months of age or one negative EIA test after 18 months of age); and has had no other laboratory evidence of HIV infection.
- **Zidovudine (ZDV):** An antiviral drug used to treat HIV-infected patients.
- **Antiretroviral therapy (ART):** Treatment that suppresses or stops a [retrovirus](#). The human [immunodeficiency](#) virus ([HIV](#)) is the retrovirus that causes [AIDS](#).

SUMMARY OF PERINATAL HIV/AIDS DATA

- Data for this report is a collaborative effort between the HIV/AIDS Surveillance Program, HIV Prevention Program, and the Office of Health Statistics and Surveillance Vital Statistics Birth Registry.
- All perinatally exposed HIV cases from 1994 to 2008 were identified and a probabilistic match with the Birth Registry was done to obtain mothers' and child's birth information. The HIV Prevention Program provided data for HIV testing. This reports focuses on data from 2006 to 2008, as well as trend data from 2000-2008.
- Data in this report is considered final for 2000-2007, 2008 data is provisional.
- Perinatally exposed cases require up to 18 months from time of birth for HIV statistics to be confirmed; therefore, data for 2008 will be preliminary until June of 2009.
- Data for HIV testing in this report was obtained from the Family Planning Clinics in Clark and Washoe Counties. The HIV Prevention Program, Family Planning Clinics associated with Southern Nevada Health District (SNHD) and Washoe County Health District (WCHD) are required to report the number of HIV tests administered. However, primary care physicians, hospitals (emergency rooms/labor delivery rooms) are not required to report the number of HIV tests they perform, only the number of HIV positive tests.

REFERENCES

¹Centers for Disease Control and Prevention. Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Setting. MMWR 2006;55(No RR-14):1-17.

²Centers for Disease Control and Prevention. Revised Guidelines for HIV Counseling, Testing and Referral and Revised Recommendations for HIV Screening of Pregnant Women. MMWR 2001;50(No RR-19):1-86.