

Population-based Birth Defects Surveillance Data from Selected States, 2001-2005

In this issue, 35 population-based birth defects surveillance programs provided data for the time period January 1, 2001 through December 31, 2005. Differences in surveillance methodology among states preclude the ability to provide rates for all programs combined; information on the programs' methodology is available in the state birth defects surveillance program directory on pages 906-961.

The Data Committee of the National Birth Defects Prevention Network (NBDPN) issued a data request to population-based birth defects programs for prevalence data on 45 specific birth defects as detailed in Appendix A on pages 904-905. Program directors were also asked to identify the occurrence of each specific defect for all live births, stillbirths and terminations (if collected), and to stratify the data by racial/ethnic group and, for certain defects (trisomy 13, 18 and 21), by maternal age. To calculate rates, programs were also asked to provide the number of live births for each calendar year submitted. In aggregate, the total live birth counts from the contributing birth defects programs comprise 77 percent of the total live birth population in the United States by birth year. Statistically, no differences were evident between these groups in relation to the distribution of births in the maternal age classifications or maternal race/ethnicity categories reported (unpublished data). Due to unstable numbers, the rate for the unknown/other category is not calculated.

An attempt was made to standardize both the request and presentation of state surveillance data, however, differences in the way programs collect and report birth defects data are listed in the footnotes of the accompanying tables and may be referenced in the program directories. Along with the inability of some programs to provide data for each of the years included in the report, others varied in their ability to report counts and rates by race/ethnicity, and still others were unable to provide data for each specific

defect requested due to differences in the coding systems (i.e., ICD-9-CM vs. CDC/BPA) used to classify birth defects.

The NBDPN would like to acknowledge the state birth defects surveillance programs that submitted data for this report, David Law and Ying Wang for co-chairing the Data Committee that oversaw the data collection process, as well as Cara Mai, Samantha Parker, Jennifer Lim, and Anil Kolli at the Centers for Disease Control and Prevention for their efforts in compiling and formatting the data tables.

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Alabama
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Amniotic bands	10 <i>1.84</i>	7 <i>1.92</i>	1 <i>3.42</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	18 <i>1.89</i>	
Anencephalus	16 <i>2.94</i>	6 <i>1.64</i>	1 <i>3.42</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	23 <i>2.41</i>	+
Aniridia	1 <i>0.18</i>	1 <i>0.27</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	2 <i>0.21</i>	
Anophthalmia/ microphthalmia	14 <i>2.58</i>	9 <i>2.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>22.94</i>	0	24 <i>2.52</i>	
Anotia/microtia	5 <i>0.92</i>	1 <i>0.27</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	6 <i>0.63</i>	
Aortic valve stenosis	21 <i>3.86</i>	5 <i>1.37</i>	2 <i>6.83</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	28 <i>2.94</i>	
Atrial septal defect	80 <i>14.72</i>	50 <i>13.69</i>	4 <i>13.67</i>	2 <i>18.92</i>	1 <i>22.94</i>	0	137 <i>14.37</i>	+
Biliary atresia	1 <i>0.18</i>	2 <i>0.55</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	3 <i>0.31</i>	
Bladder exstrophy	2 <i>0.37</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	2 <i>0.21</i>	
Choanal atresia	5 <i>0.92</i>	2 <i>0.55</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	7 <i>0.73</i>	
Cleft lip with and without cleft palate	60 <i>11.04</i>	27 <i>7.39</i>	2 <i>6.83</i>	2 <i>18.92</i>	0 <i>0.00</i>	0	91 <i>9.54</i>	
Cleft palate without cleft lip	58 <i>10.67</i>	20 <i>5.48</i>	4 <i>13.67</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	82 <i>8.60</i>	
Coarctation of aorta	17 <i>3.13</i>	6 <i>1.64</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	23 <i>2.41</i>	
Common truncus	4 <i>0.74</i>	3 <i>0.82</i>	1 <i>3.42</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	8 <i>0.84</i>	
Congenital cataract	3 <i>0.55</i>	4 <i>1.10</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	7 <i>0.73</i>	
Congenital hip dislocation	6 <i>1.10</i>	2 <i>0.55</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	8 <i>0.84</i>	+
Diaphragmatic hernia	13 <i>2.39</i>	3 <i>0.82</i>	1 <i>3.42</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	17 <i>1.78</i>	
Down syndrome (Trisomy 21)	76 <i>13.98</i>	41 <i>11.23</i>	4 <i>13.67</i>	1 <i>9.46</i>	0 <i>0.00</i>	0	122 <i>12.79</i>	
Ebstein anomaly	4 <i>0.74</i>	3 <i>0.82</i>	1 <i>3.42</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	8 <i>0.84</i>	
Encephalocele	5 <i>0.92</i>	4 <i>1.10</i>	1 <i>3.42</i>	0 <i>0.00</i>	1 <i>22.94</i>	0	11 <i>1.15</i>	
Endocardial cushion defect	24 <i>4.42</i>	27 <i>7.39</i>	1 <i>3.42</i>	1 <i>9.46</i>	0 <i>0.00</i>	0	53 <i>5.56</i>	
Esophageal atresia/ tracheoesophageal fistula	13 <i>2.39</i>	5 <i>1.37</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	18 <i>1.89</i>	
Fetus or newborn affected by maternal alcohol use	1 <i>0.18</i>	2 <i>0.55</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	3 <i>0.31</i>	
Gastroschisis	12 <i>2.21</i>	5 <i>1.37</i>	1 <i>3.42</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	18 <i>1.89</i>	
Hirschsprung disease (congenital megacolon)	9 <i>1.66</i>	7 <i>1.92</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	16 <i>1.68</i>	
Hydrocephalus without Spina Bifida	35 <i>6.44</i>	31 <i>8.49</i>	4 <i>13.67</i>	1 <i>9.46</i>	2 <i>45.87</i>	0	73 <i>7.66</i>	
Hypoplastic left heart syndrome	8 <i>1.47</i>	7 <i>1.92</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	15 <i>1.57</i>	
Hypospadias and Epispadias	104 <i>19.14</i>	76 <i>20.81</i>	0 <i>0.00</i>	1 <i>9.46</i>	1 <i>22.94</i>	1	183 <i>19.19</i>	+
Microcephalus	39 <i>7.18</i>	45 <i>12.32</i>	3 <i>10.25</i>	2 <i>18.92</i>	1 <i>22.94</i>	0	90 <i>9.44</i>	
Obstructive genitourinary defect	98 <i>18.03</i>	66 <i>18.07</i>	2 <i>6.83</i>	2 <i>18.92</i>	3 <i>68.81</i>	0	171 <i>17.93</i>	+

Alabama**Birth Defects Counts and Rates 2001-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
	10	13	1	0	0	0	24	
Omphalocele	1.84	3.56	3.42	0.00	0.00	0.00	2.52	
	18	14	2	0	0	0	34	
Pulmonary valve atresia and stenosis	3.31	3.83	6.83	0.00	0.00	0.00	3.57	
	108	15	6	0	0	0	129	
Pyloric stenosis	19.87	4.11	20.50	0.00	0.00	0.00	13.53	
	15	12	1	1	0	0	29	
Rectal and large intestinal atresia/stenosis	2.76	3.29	3.42	9.46	0.00	0.00	3.04	
	8	10	0	0	0	0	18	
Reduction deformity, lower limbs	1.47	2.74	0.00	0.00	0.00	0.00	1.89	
	25	14	2	0	0	0	41	
Reduction deformity, upper limbs	4.60	3.83	6.83	0.00	0.00	0.00	4.30	
	41	23	1	0	2	0	67	
Renal agenesis/hypoplasia	7.54	6.30	3.42	0.00	45.87	0.00	7.03	
	12	12	4	0	1	0	29	
Spina bifida without anencephalus	2.21	3.28	13.67	0.00	22.94	0.00	3.04	+
	16	18	1	0	0	0	35	
Tetralogy of Fallot	2.94	4.93	3.42	0.00	0.00	0.00	3.67	
	18	7	0	1	1	0	27	
Transposition of great arteries	3.31	1.92	0.00	9.46	22.94	0.00	2.83	
	6	5	0	0	0	0	11	
Tricuspid valve atresia and stenosis	1.10	1.37	0.00	0.00	0.00	0.00	1.15	
	13	8	0	0	0	0	21	
Trisomy 13 (Patau syndrome)	2.39	2.19	0.00	0.00	0.00	0.00	2.20	
	19	13	0	0	0	0	32	
Trisomy 18 (Edwards syndrome)	3.50	3.56	0.00	0.00	0.00	0.00	3.36	
	82	45	3	2	1	0	133	
Ventricular septal defect	15.09	12.32	10.25	18.92	22.94	0.00	13.95	+
Total Live Births	54350	36516	2927	1057	436	0	95350	

Alabama**Trisomy Counts and Rates by Maternal Age 2001-2005**

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
	71	51	122
Down syndrome (Trisomy 21)	8.14	62.53	12.79
	13	8	21
Trisomy 13 (Patau syndrome)	1.49	9.81	2.20
	17	15	32
Trisomy 18 (Edwards syndrome)	1.95	18.39	3.36
Total Live Births	87177	8156	95350

(**) Total includes unknown age

(+)Notes:

- 1: 2001-2005, Anencephalus, includes Livebirths, stillbirths, terminations
- 2: 2001-2005, Spina bifida without anencephalus, includes livebirths, stillbirths, terminations
- 3: 2001-2005, Ventricular septal defect, isolated cases not reported
- 4: 2001-2005, Atrial septal defect, isolated cases not reported
- 5: 2001-2005, Obstructive genitourinary defect, isolated hydronephrosis not reported
- 6: 2001-2005, Hypospadias and Epispadias, isolated 1st degree hypospadias not reported
- 7: 2001-2005, Congenital hip dislocation, isolated cases not reported

Alaska
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Anencephalus	0				0		0	
	0.00				0.00		0.00	
Aniridia	<6				<6		<6	
Anophthalmia/ microphthalmia	6				15		24	
	2.02				11.99		4.75	
Anotia/microtia	<6				6		15	
					4.80		2.97	
Aortic valve stenosis	8				<6		12	
	2.69						2.38	
Atrial septal defect	226				212		556	
	76.10				169.49		110.11	
Biliary atresia	<6				6		9	
					4.80		1.78	
Bladder exstrophy	<6				<6		<6	
Choanal atresia	11				8		20	
	3.70				6.40		3.96	
Cleft lip with and without cleft palate	32				36		81	
	10.78				28.78		16.04	
Cleft palate without cleft lip	31				28		74	
	10.44				22.39		14.66	
Coarctation of aorta	23				9		37	
	7.74				7.20		7.33	
Common truncus	<6				<6		10	
							1.98	
Congenital cataract	8				9		22	
	2.69				7.20		4.36	
Congenital hip dislocation	55				35		103	
	18.52				27.98		20.40	
Diaphragmatic hernia	10				14		30	
	3.37				11.19		5.94	
Down syndrome (Trisomy 21)	40				28		87	
	13.47				22.39		17.23	
Ebstein anomaly	<6				<6		<6	
Encephalocele	<6				<6		7	
							1.39	
Endocardial cushion defect	13				7		27	
	4.38				5.60		5.35	
Esophageal atresia/ tracheoesophageal fistula	8				<6		12	
	2.69						2.38	
Hirschsprung disease (congenital megacolon)	21				8		35	
	7.07				6.40		6.93	
Hydrocephalus without Spina Bifida	22				28		64	
	7.41				22.39		12.68	
Hypoplastic left heart syndrome	7				<6		17	
	2.36						3.37	
Hypospadias and Epispadias	108				52		207	
	36.37				41.57		41.00	
Microcephalus	45				39		93	
	15.15				31.18		18.42	
Obstructive genitourinary defect	124				37		192	
	41.76				29.58		38.03	
Patent ductus arteriosus	201				119		394	
	67.68				95.14		78.03	
Pulmonary valve atresia and stenosis	23				41		77	
	7.74				32.78		15.25	
Pyloric stenosis	64				48		127	
	21.55				38.38		25.15	

Alaska**Birth Defects Counts and Rates 2001-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Rectal and large intestinal atresia/stenosis	19 6.40				11 8.79		36 7.13	
Reduction deformity, lower limbs	12 4.04				8 6.40		21 4.16	
Reduction deformity, upper limbs	<6				0 0.00		8 1.58	
Renal agenesis/hypoplasia	12 4.04				<6		22 4.36	
Spina bifida without anencephalus	11 3.70				6 4.80		20 3.96	
Tetralogy of Fallot	13 4.38				17 13.59		36 7.13	
Transposition of great arteries	14 4.71				<6		26 5.15	
Tricuspid valve atresia and stenosis	<6				<6		<6	
Trisomy 13 (Patau syndrome)	<6				<6		7 1.39	
Trisomy 18 (Edwards syndrome)	8 2.69				<6		12 2.38	
Ventricular septal defect	170 57.24				222 177.49		459 90.90	
Total Live Births	29697				12508		50493	+

Alaska**Trisomy Counts and Rates by Maternal Age 2001-2005**

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	60 13.74	26 38.22	87 17.23
Trisomy 13 (Patau syndrome)	<6	<6	7 1.39
Trisomy 18 (Edwards syndrome)	6 1.37	6 8.82	12 2.38
Total Live Births	43659	6802	50493

(**) Total includes unknown age

(+)Notes:

- 1: Data was indicated by race for non-hispanic white and non-hispanic AK Native only.
- 2: Live birth numbers were queried from VS data sets and not from published VS data as VS does not publish break downs on these two races with indicated ethnicity.
- 3: The ABDR does not collect data on still births or terminations; live birth information only.
- 4: The ABDR does not provide numbers for cells with <6 cases.
- 5: Alaska conducts surveillance for FAS using FASSNET methodology. Contact the program for data on FAS and FASD.

Arizona
Birth Defects Counts and Rates 2001-2004
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Amniotic bands	8 <i>1.02</i>	1 <i>1.71</i>	4 <i>0.50</i>	0 <i>0.00</i>	2 <i>1.81</i>	0 <i>0.00</i>	15 <i>0.82</i>	(+3)
Anencephalus	28 <i>1.80</i>	2 <i>1.81</i>	26 <i>1.68</i>	1 <i>1.11</i>	4 <i>1.89</i>	2 <i>8.10</i>	63 <i>1.78</i>	(+4)
Aniridia	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	(+3)
Anophthalmia/ microphthalmia	14 <i>1.78</i>	1 <i>1.71</i>	13 <i>1.61</i>	2 <i>4.11</i>	3 <i>2.71</i>	1 <i>7.50</i>	34 <i>1.86</i>	(+3)
Anotia/microtia	8 <i>1.02</i>	0 <i>0.00</i>	18 <i>2.23</i>	1 <i>2.06</i>	10 <i>9.04</i>	0 <i>0.00</i>	37 <i>2.03</i>	(+3)
Aortic valve stenosis	24 <i>3.06</i>	0 <i>0.00</i>	23 <i>2.85</i>	1 <i>2.06</i>	3 <i>2.71</i>	1 <i>7.50</i>	52 <i>2.85</i>	(+3)
Atrial septal defect	83 <i>10.57</i>	7 <i>12.00</i>	77 <i>9.54</i>	8 <i>16.45</i>	23 <i>20.80</i>	1 <i>7.50</i>	199 <i>10.92</i>	(+3)
Biliary atresia	1 <i>0.13</i>	1 <i>1.71</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>7.50</i>	3 <i>0.16</i>	(+3)
Bladder exstrophy	3 <i>0.38</i>	0 <i>0.00</i>	1 <i>0.12</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>7.50</i>	5 <i>0.27</i>	(+3)
Choanal atresia	14 <i>1.78</i>	0 <i>0.00</i>	4 <i>0.50</i>	0 <i>0.00</i>	2 <i>1.81</i>	0 <i>0.00</i>	20 <i>1.10</i>	(+3)
Cleft lip with and without cleft palate	166 <i>10.67</i>	1 <i>0.91</i>	150 <i>9.71</i>	9 <i>9.97</i>	54 <i>25.47</i>	4 <i>16.20</i>	384 <i>10.86</i>	(+4)
Cleft palate without cleft lip	93 <i>5.98</i>	4 <i>3.63</i>	99 <i>6.41</i>	6 <i>6.65</i>	9 <i>4.25</i>	5 <i>20.25</i>	216 <i>6.11</i>	(+4)
Coarctation of aorta	34 <i>4.33</i>	3 <i>5.14</i>	31 <i>3.84</i>	3 <i>6.17</i>	3 <i>2.71</i>	1 <i>7.50</i>	75 <i>4.11</i>	(+3)
Common truncus	9 <i>1.15</i>	0 <i>0.00</i>	5 <i>0.62</i>	0 <i>0.00</i>	1 <i>0.90</i>	1 <i>7.50</i>	16 <i>0.88</i>	(+3)
Congenital cataract	8 <i>1.02</i>	3 <i>5.14</i>	8 <i>0.99</i>	0 <i>0.00</i>	3 <i>2.71</i>	1 <i>7.50</i>	23 <i>1.26</i>	(+3)
Congenital hip dislocation	46 <i>5.86</i>	2 <i>3.43</i>	40 <i>4.96</i>	2 <i>4.11</i>	15 <i>13.57</i>	1 <i>7.50</i>	106 <i>5.81</i>	(+3)
Diaphragmatic hernia	14 <i>1.78</i>	1 <i>1.71</i>	11 <i>1.36</i>	1 <i>2.06</i>	2 <i>1.81</i>	0 <i>0.00</i>	29 <i>1.59</i>	(+3)
Down syndrome (Trisomy 21)	80 <i>10.19</i>	4 <i>6.86</i>	74 <i>9.17</i>	8 <i>16.45</i>	13 <i>11.76</i>	2 <i>14.99</i>	181 <i>9.93</i>	(+3)
Ebstein anomaly	6 <i>0.76</i>	0 <i>0.00</i>	3 <i>0.37</i>	0 <i>0.00</i>	2 <i>1.81</i>	0 <i>0.00</i>	11 <i>0.60</i>	(+3)
Encephalocele	12 <i>0.77</i>	2 <i>1.81</i>	15 <i>0.97</i>	2 <i>2.22</i>	3 <i>1.42</i>	0 <i>0.00</i>	34 <i>0.96</i>	(+4)
Endocardial cushion defect	38 <i>4.84</i>	2 <i>3.43</i>	18 <i>2.23</i>	4 <i>8.23</i>	4 <i>3.62</i>	1 <i>7.50</i>	67 <i>3.67</i>	(+3)
Esophageal atresia/ tracheoesophageal fistula	23 <i>2.93</i>	3 <i>5.14</i>	11 <i>1.36</i>	0 <i>0.00</i>	3 <i>2.71</i>	0 <i>0.00</i>	40 <i>2.19</i>	(+3)
Fetus or newborn affected by maternal alcohol use	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	7 <i>6.33</i>	1 <i>7.50</i>	8 <i>0.44</i>	(+3)
Gastroschisis	63 <i>4.05</i>	0 <i>0.00</i>	52 <i>3.37</i>	5 <i>5.54</i>	14 <i>6.60</i>	3 <i>12.15</i>	137 <i>3.87</i>	(+4)
Hirschsprung disease (congenital megacolon)	13 <i>1.66</i>	1 <i>1.71</i>	3 <i>0.37</i>	1 <i>2.06</i>	0 <i>0.00</i>	1 <i>7.50</i>	19 <i>1.04</i>	(+3)
Hydrocephalus without Spina Bifida	32 <i>4.07</i>	0 <i>0.00</i>	29 <i>3.59</i>	2 <i>4.11</i>	6 <i>5.43</i>	1 <i>7.50</i>	70 <i>3.84</i>	(+3)
Hypoplastic left heart syndrome	19 <i>2.42</i>	0 <i>0.00</i>	9 <i>1.12</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>7.50</i>	29 <i>1.59</i>	(+3)
Hypospadias and Epispadias	192 <i>24.45</i>	12 <i>20.58</i>	73 <i>9.05</i>	9 <i>18.51</i>	8 <i>7.24</i>	6 <i>44.98</i>	300 <i>16.45</i>	(+3)
Microcephalus	26 <i>3.31</i>	2 <i>3.43</i>	40 <i>4.96</i>	1 <i>2.06</i>	12 <i>10.85</i>	1 <i>7.50</i>	82 <i>4.50</i>	(+3)
Obstructive genitourinary defect	80 <i>10.19</i>	12 <i>20.58</i>	77 <i>9.54</i>	1 <i>2.06</i>	16 <i>14.47</i>	1 <i>7.50</i>	187 <i>10.26</i>	(+3)

Arizona

Birth Defects Counts and Rates 2001-2004

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	28 <i>1.80</i>	1 <i>0.91</i>	17 <i>1.10</i>	3 <i>3.32</i>	1 <i>0.47</i>	0 <i>0.00</i>	50 <i>1.41</i>	(+4)
Pulmonary valve atresia and stenosis	57 <i>7.26</i>	3 <i>5.14</i>	58 <i>7.19</i>	3 <i>6.17</i>	13 <i>11.76</i>	2 <i>14.99</i>	136 <i>7.46</i>	(+3)
Pyloric stenosis	111 <i>14.13</i>	6 <i>10.29</i>	85 <i>10.53</i>	7 <i>14.40</i>	11 <i>9.95</i>	6 <i>44.98</i>	226 <i>12.40</i>	(+3)
Rectal and large intestinal atresia/stenosis	25 <i>3.18</i>	1 <i>1.71</i>	25 <i>3.10</i>	3 <i>6.17</i>	2 <i>1.81</i>	0 <i>0.00</i>	56 <i>3.07</i>	(+3)
Reduction deformity, lower limbs	9 <i>1.15</i>	3 <i>5.14</i>	4 <i>0.50</i>	1 <i>2.06</i>	1 <i>0.90</i>	0 <i>0.00</i>	18 <i>0.99</i>	(+3)
Reduction deformity, upper limbs	20 <i>2.55</i>	4 <i>6.86</i>	15 <i>1.86</i>	1 <i>2.06</i>	7 <i>6.33</i>	0 <i>0.00</i>	47 <i>2.58</i>	(+3)
Renal agenesis/hypoplasia	29 <i>3.69</i>	3 <i>5.14</i>	19 <i>2.35</i>	0 <i>0.00</i>	2 <i>1.81</i>	1 <i>7.50</i>	54 <i>2.96</i>	(+3)
Spina bifida without anencephalus	48 <i>3.09</i>	2 <i>1.81</i>	72 <i>4.66</i>	0 <i>0.00</i>	12 <i>5.66</i>	2 <i>8.10</i>	136 <i>3.84</i>	(+4)
Tetralogy of Fallot	27 <i>3.44</i>	2 <i>3.43</i>	30 <i>3.72</i>	1 <i>2.06</i>	7 <i>6.33</i>	0 <i>0.00</i>	67 <i>3.67</i>	(+3)
Transposition of great arteries	28 <i>3.56</i>	1 <i>1.71</i>	26 <i>3.22</i>	5 <i>10.28</i>	5 <i>4.52</i>	3 <i>22.49</i>	68 <i>3.73</i>	(+3)
Tricuspid valve atresia and stenosis	10 <i>1.27</i>	1 <i>1.71</i>	11 <i>1.36</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	22 <i>1.21</i>	(+3)
Trisomy 13 (Patau syndrome)	16 <i>1.03</i>	2 <i>1.81</i>	13 <i>0.84</i>	1 <i>1.11</i>	1 <i>0.47</i>	1 <i>4.05</i>	34 <i>0.96</i>	(+4)
Trisomy 18 (Edwards syndrome)	34 <i>2.19</i>	3 <i>2.72</i>	22 <i>1.42</i>	3 <i>3.32</i>	8 <i>3.77</i>	1 <i>4.05</i>	71 <i>2.01</i>	(+4)
Ventricular septal defect	103 <i>13.11</i>	12 <i>20.58</i>	119 <i>14.75</i>	5 <i>10.28</i>	33 <i>29.85</i>	2 <i>14.99</i>	274 <i>15.03</i>	(+3)
Total Live Births	155504	11031	154507	9027	21198	2469	353736	

Arizona

Trisomy Counts and Rates by Maternal Age 2001-2004

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	184 <i>5.87</i>	135 <i>33.60</i>	319 <i>9.02</i>
Trisomy 13 (Patau syndrome)	22 <i>0.70</i>	12 <i>2.99</i>	34 <i>0.96</i>
Trisomy 18 (Edwards syndrome)	40 <i>1.28</i>	31 <i>7.72</i>	71 <i>2.01</i>
Total Live Births	313562	40174	353736

(**) Total includes unknown age

(+)Notes:

(+3) This condition is among the 35 categories ascertained for 2003-2004. All 44 defect conditions include live births and fetal deaths.

(+4) This condition is among the 9 categories ascertained for 2001-2004. All 44 defect conditions include live births and fetal deaths.

Arkansas
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/ Other		
	33	6	1	0	1	0	41	
Amniotic bands	2.51	1.64	0.61	0.00	3.64		2.16	
	48	5	7	0	0	0	60	
Anencephalus	3.65	1.36	4.24	0.00	0.00		3.16	
	0	0	1	0	0	0	1	
Aniridia	0.00	0.00	0.61	0.00	0.00		0.05	
	28	15	3	0	0	0	46	
Anophthalmia/ microphthalmia	2.13	4.09	1.82	0.00	0.00		2.43	
	29	1	6	0	0	0	36	
Anotia/microtia	2.20	0.27	3.64	0.00	0.00		1.90	
	45	3	3	0	0	0	51	
Aortic valve stenosis	3.42	0.82	1.82	0.00	0.00		2.69	
	633	158	87	4	3	3	888	
Atrial septal defect	48.10	43.13	52.74	36.23	10.91		46.83	
	4	7	0	0	0	0	11	
Biliary atresia	0.30	1.91	0.00	0.00	0.00		0.58	
	4	3	0	0	0	0	7	
Bladder exstrophy	0.30	0.82	0.00	0.00	0.00		0.37	
	12	1	1	0	0	0	14	
Choanal atresia	0.91	0.27	0.61	0.00	0.00		0.74	
	190	22	20	1	2	0	235	
Cleft lip with and without cleft palate	14.44	6.00	12.12	9.06	7.27		12.39	
	97	14	7	0	2	0	120	
Cleft palate without cleft lip	7.37	3.82	4.24	0.00	7.27		6.33	
	71	14	5	1	0	0	91	
Coarctation of aorta	5.39	3.82	3.03	9.06	0.00		4.80	
	9	2	0	0	0	0	11	
Common truncus	0.68	0.55	0.00	0.00	0.00		0.58	
	27	14	2	0	0	0	43	
Congenital cataract	2.05	3.82	1.21	0.00	0.00		2.27	
	8	0	0	0	0	0	8	
Congenital hip dislocation	0.61	0.00	0.00	0.00	0.00		0.42	
	40	9	6	0	1	0	56	
Diaphragmatic hernia	3.04	2.46	3.64	0.00	3.64		2.95	
	147	36	39	3	1	0	226	
Down syndrome (Trisomy 21)	11.17	9.83	23.64	27.17	3.64		11.92	
	7	1	3	0	1	0	12	
Ebstein anomaly	0.53	0.27	1.82	0.00	3.64		0.63	
	14	4	1	2	0	0	21	
Encephalocele	1.06	1.09	0.61	18.12	0.00		1.11	
	38	10	4	0	0	0	52	
Endocardial cushion defect	2.89	2.73	2.42	0.00	0.00		2.74	
	37	4	4	0	1	0	46	
Esophageal atresia/ tracheoesophageal fistula	2.81	1.09	2.42	0.00	3.64		2.43	
	2	1	0	0	0	0	3	
Fetus or newborn affected by maternal alcohol use	0.15	0.27	0.00	0.00	0.00		0.16	
	96	7	4	0	0	0	107	
Gastroschisis	7.29	1.91	2.42	0.00	0.00		5.64	
	16	7	0	0	0	0	24	
Hirschsprung disease (congenital megacolon)	1.22	1.91	0.00	0.00	0.00		1.27	
	85	39	9	0	0	0	133	
Hydrocephalus without Spina Bifida	6.46	10.64	5.46	0.00	0.00		7.01	
	33	13	4	0	0	0	50	
Hypoplastic left heart syndrome	2.51	3.55	2.42	0.00	0.00		2.64	
	639	97	33	3	1	0	773	
Hypospadias and Epispadias	48.55	26.48	20.00	27.17	3.64		40.77	
	27	11	3	2	1	0	44	
Microcephalus	2.05	3.00	1.82	18.12	3.64		2.32	
	107	21	11	1	2	0	142	
Obstructive genitourinary defect	8.13	5.73	6.67	9.06	7.27		7.49	

Arkansas

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	46 3.50	12 3.28	4 2.42	0 0.00	0 0.00	0 0	62 3.27	
Patent ductus arteriosus	115 8.74	32 8.73	14 8.49	0 0.00	0 0.00	0 0	161 8.49	
Pulmonary valve atresia and stenosis	184 13.98	64 17.47	22 13.34	3 27.17	1 3.64	1 0	275 14.50	
Pyloric stenosis	141 10.71	12 3.28	17 10.31	0 0.00	2 7.27	0 0	172 9.07	
Rectal and large intestinal atresia/stenosis	49 3.72	20 5.46	10 6.06	1 9.06	0 0.00	0 0	80 4.22	
Reduction deformity, lower limbs	32 2.43	12 3.28	1 0.61	0 0.00	1 3.64	0 0	46 2.43	
Reduction deformity, upper limbs	45 3.42	16 4.37	9 5.46	0 0.00	0 0.00	0 0	70 3.69	
Renal agenesis/hypoplasia	50 3.80	14 3.82	2 1.21	0 0.00	0 0.00	0 0	66 3.48	
Spina bifida without anencephalus	58 4.41	10 2.73	7 4.24	1 9.06	0 0.00	0 0	76 4.01	
Tetralogy of Fallot	39 2.96	15 4.09	5 3.03	0 0.00	0 0.00	2 0	61 3.22	
Transposition of great arteries	89 6.76	9 2.46	9 5.46	2 18.12	0 0.00	0 0	108 5.70	
Tricuspid valve atresia and stenosis	16 1.22	3 0.82	0 0.00	0 0.00	0 0.00	0 0	19 1.00	
Trisomy 13 (Patau syndrome)	14 1.06	2 0.55	1 0.61	0 0.00	0 0.00	0 0	17 0.90	
Trisomy 18 (Edwards syndrome)	30 2.28	12 3.28	4 2.42	1 9.06	0 0.00	0 0	47 2.48	
Ventricular septal defect	658 49.99	139 37.94	79 47.89	6 54.35	7 25.45	3 0	892 47.04	
Total Live Births	131614	36637	16496	1104	2750		189618	

Arkansas

Trisomy Counts and Rates by Maternal Age 2001-2005

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	140 7.98	86 61.09	226 11.92
Trisomy 13 (Patau syndrome)	9 0.51	8 5.68	17 0.90
Trisomy 18 (Edwards syndrome)	31 1.77	16 11.37	47 2.48
Total Live Births	175439	14077	189618

(**) Total includes unknown age

California
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Amniotic bands	15 <i>0.82</i>	<5	27 <i>0.73</i>	5 <i>1.87</i>	0 <i>0.00</i>	5	53 <i>0.84</i>	
Anencephalus	13 <i>0.71</i>	<5	32 <i>0.87</i>	<5	<5	41	90 <i>1.43</i>	+
Anophthalmia/ microphthalmia	12 <i>0.66</i>	<5	18 <i>0.49</i>	0 <i>0.00</i>	0 <i>0.00</i>	<5	33 <i>0.53</i>	
Anotia/microtia	11 <i>0.60</i>	0 <i>0.00</i>	68 <i>1.85</i>	5 <i>1.87</i>	0 <i>0.00</i>	<5	87 <i>1.38</i>	
Aortic valve stenosis	14 <i>0.77</i>	<5	39 <i>1.06</i>	<5	<5	0	59 <i>0.94</i>	
Atrial septal defect	189 <i>10.38</i>	25 <i>8.88</i>	388 <i>10.53</i>	31 <i>11.57</i>	7 <i>16.24</i>	25	665 <i>10.58</i>	+
Biliary atresia	5 <i>0.27</i>	<5	8 <i>0.22</i>	<5	0 <i>0.00</i>	<5	17 <i>0.27</i>	
Bladder exstrophy	<5	<5	<5	<5	0 <i>0.00</i>	0	7 <i>0.11</i>	
Choanal atresia	<5	0 <i>0.00</i>	<5	0 <i>0.00</i>	0 <i>0.00</i>	0	8 <i>0.13</i>	
Cleft lip with and without cleft palate	97 <i>5.33</i>	11 <i>3.91</i>	170 <i>4.61</i>	9 <i>3.36</i>	<5	14	304 <i>4.84</i>	
Cleft palate without cleft lip	38 <i>2.09</i>	11 <i>3.91</i>	78 <i>2.12</i>	6 <i>2.24</i>	<5	12	149 <i>2.37</i>	
Coarctation of aorta	36 <i>1.98</i>	8 <i>2.84</i>	80 <i>2.17</i>	5 <i>1.87</i>	<5	7	137 <i>2.18</i>	
Common truncus	5 <i>0.27</i>	0 <i>0.00</i>	7 <i>0.19</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	12 <i>0.19</i>	
Congenital cataract	10 <i>0.55</i>	<5	17 <i>0.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	31 <i>0.49</i>	
Diaphragmatic hernia	20 <i>1.10</i>	<5	45 <i>1.22</i>	<5	0 <i>0.00</i>	<5	73 <i>1.16</i>	
Down syndrome (Trisomy 21)	101 <i>5.55</i>	13 <i>4.62</i>	270 <i>7.33</i>	15 <i>5.60</i>	<5	15	415 <i>6.60</i>	
Ebstein anomaly	<5	0 <i>0.00</i>	9 <i>0.24</i>	<5	0 <i>0.00</i>	0	12 <i>0.19</i>	
Encephalocele	<5	0 <i>0.00</i>	14 <i>0.38</i>	0 <i>0.00</i>	0 <i>0.00</i>	5	20 <i>0.32</i>	
Endocardial cushion defect	40 <i>2.20</i>	<5	62 <i>1.68</i>	7 <i>2.61</i>	<5	5	118 <i>1.88</i>	
Esophageal atresia/ tracheoesophageal fistula	12 <i>0.66</i>	<5	29 <i>0.79</i>	<5	<5	<5	49 <i>0.78</i>	
Fetus or newborn affected by maternal alcohol use	0 <i>0.00</i>	<5	<5	<5	0 <i>0.00</i>	0	<5	
Gastroschisis	41 <i>2.25</i>	<5	91 <i>2.47</i>	16 <i>5.97</i>	<5	<5	156 <i>2.48</i>	
Hydrocephalus without Spina Bifida	27 <i>1.48</i>	5 <i>1.78</i>	46 <i>1.25</i>	6 <i>2.24</i>	0 <i>0.00</i>	5	89 <i>1.42</i>	
Hypoplastic left heart syndrome	30 <i>1.65</i>	5 <i>1.78</i>	37 <i>1.00</i>	<5	0 <i>0.00</i>	6	81 <i>1.29</i>	
Hypospadias and Epispadias	25 <i>1.37</i>	<5	38 <i>1.03</i>	<5	<5	7	78 <i>1.24</i>	+
Omphalocele	13 <i>0.71</i>	<5	19 <i>0.52</i>	<5	<5	6	43 <i>0.68</i>	
Pulmonary valve atresia and stenosis	31 <i>1.70</i>	<5	73 <i>1.98</i>	9 <i>3.36</i>	0 <i>0.00</i>	<5	118 <i>1.88</i>	+
Rectal and large intestinal atresia/stenosis	26 <i>1.43</i>	<5	75 <i>2.04</i>	10 <i>3.73</i>	<5	6	121 <i>1.93</i>	
Reduction deformity, lower limbs	10 <i>0.55</i>	<5	27 <i>0.73</i>	<5	0 <i>0.00</i>	5	47 <i>0.75</i>	
Reduction deformity, upper limbs	23 <i>1.26</i>	<5	63 <i>1.71</i>	7 <i>2.61</i>	0 <i>0.00</i>	7	104 <i>1.65</i>	

California

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Renal agenesis/hypoplasia	6 <i>0.33</i>	0 <i>0.00</i>	24 <i>0.65</i>	<5	0 <i>0.00</i>	<5	37 <i>0.59</i>	+
Spina bifida without anencephalus	30 <i>1.65</i>	5 <i>1.78</i>	81 <i>2.20</i>	<5	0 <i>0.00</i>	13	131 <i>2.08</i>	+
Tetralogy of Fallot	30 <i>1.65</i>	8 <i>2.84</i>	73 <i>1.98</i>	5 <i>1.87</i>	0 <i>0.00</i>	<5	120 <i>1.91</i>	
Transposition of great arteries	39 <i>2.14</i>	<5	67 <i>1.82</i>	6 <i>2.24</i>	<5	<5	120 <i>1.91</i>	
Tricuspid valve atresia and stenosis	8 <i>0.44</i>	<5	12 <i>0.33</i>	<5	0 <i>0.00</i>	0	23 <i>0.37</i>	+
Trisomy 13 (Patau syndrome)	5 <i>0.27</i>	<5	13 <i>0.35</i>	<5	0 <i>0.00</i>	<5	26 <i>0.41</i>	
Trisomy 18 (Edwards syndrome)	10 <i>0.55</i>	<5	39 <i>1.06</i>	5 <i>1.87</i>	<5	9	66 <i>1.05</i>	
Ventricular septal defect	96 <i>5.27</i>	19 <i>6.75</i>	235 <i>6.38</i>	13 <i>4.85</i>	5 <i>11.60</i>	11	379 <i>6.03</i>	+
Total Live Births	182090	28168	368384	26796	4310		628426	+

California

Trisomy Counts and Rates by Maternal Age 2001-2005

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	248 <i>4.42</i>	162 <i>24.12</i>	415 <i>6.60</i>
Trisomy 13 (Patau syndrome)	15 <i>0.27</i>	9 <i>1.34</i>	26 <i>0.41</i>
Trisomy 18 (Edwards syndrome)	36 <i>0.64</i>	27 <i>4.02</i>	66 <i>1.05</i>
Total Live Births	561218	67174	628426

(**) Total includes unknown age

(+)Notes:

- 1: The California Birth Defects Monitoring Program does not report counts based on <5 cases.
- 2: Single gene disorders are excluded from the dataset.
- 3: Cardiovascular defects other than ASD and VSD were confirmed by physician review.
- 4: Trisomy 13, trisomy 18 and trisomy 21 diagnosis confirmed by cytogenetics.
- 5: Anencephalus, includes livebirths, stillbirths, and terminations.
- 6: Spina bifida without anencephalus, includes livebirths, stillbirths, and terminations.
- 7: Ventricular septal defect, a) Only cases confirmed by physician review or echo or cath or autopsy are included; b) VSDs that are a component of another major heart malformation are excluded from the case count; c) muscular VSDs are excluded.
- 8: Atrial septal defect, a) Only cases confirmed by physician review or echo or cath or autopsy are included; b) ASDs that are a component of another major heart malformation are excluded from the case count.
- 9: Pulmonary valve stenosis was reported beginning with 1/1/02 births.
- 10: Tricuspid valve stenosis is not reported.
- 11: Only bilateral renal agenesis/hypoplasia are included.
- 12: Hypospadias only 2nd and 3rd degree are reported; no epispadias in CBDMP registry.

Colorado
Birth Defects Counts and Rates 2001-2005
 (Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Anencephalus	14 <i>0.67</i>	1 <i>0.71</i>	22 <i>2.08</i>	1 <i>0.88</i>	0 <i>0.00</i>	7	45 <i>1.32</i>	+
Aniridia	1 <i>0.05</i>	0 <i>0.00</i>	3 <i>0.28</i>	1 <i>0.88</i>	0 <i>0.00</i>	0	5 <i>0.15</i>	
Anophthalmia/ microphthalmia	27 <i>1.29</i>	3 <i>2.12</i>	22 <i>2.08</i>	0 <i>0.00</i>	2 <i>8.47</i>	3	57 <i>1.67</i>	
Anotia/microtia	31 <i>1.49</i>	1 <i>0.71</i>	42 <i>3.98</i>	3 <i>2.64</i>	0 <i>0.00</i>	0	77 <i>2.25</i>	
Aortic valve stenosis	90 <i>4.32</i>	2 <i>1.41</i>	44 <i>4.16</i>	1 <i>0.88</i>	0 <i>0.00</i>	0	137 <i>4.00</i>	
Atrial septal defect	1560 <i>74.80</i>	140 <i>98.96</i>	807 <i>76.39</i>	77 <i>67.83</i>	22 <i>93.14</i>	6	2612 <i>76.35</i>	
Biliary atresia	16 <i>0.77</i>	0 <i>0.00</i>	17 <i>1.61</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	33 <i>0.96</i>	
Bladder exstrophy	9 <i>0.43</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>4.23</i>	0	10 <i>0.29</i>	
Choanal atresia	36 <i>1.73</i>	3 <i>2.12</i>	17 <i>1.61</i>	0 <i>0.00</i>	0 <i>0.00</i>	1	57 <i>1.67</i>	
Cleft lip with and without cleft palate	226 <i>10.84</i>	15 <i>10.60</i>	151 <i>14.29</i>	12 <i>10.57</i>	6 <i>25.40</i>	4	414 <i>12.10</i>	
Cleft palate without cleft lip	204 <i>9.78</i>	13 <i>9.19</i>	88 <i>8.33</i>	12 <i>10.57</i>	5 <i>21.17</i>	1	323 <i>9.44</i>	
Coarctation of aorta	205 <i>9.83</i>	5 <i>3.53</i>	90 <i>8.52</i>	4 <i>3.52</i>	0 <i>0.00</i>	3	307 <i>8.97</i>	
Common truncus	20 <i>0.96</i>	2 <i>1.41</i>	8 <i>0.76</i>	1 <i>0.88</i>	1 <i>4.23</i>	1	33 <i>0.96</i>	
Congenital cataract	57 <i>2.73</i>	4 <i>2.83</i>	34 <i>3.22</i>	4 <i>3.52</i>	2 <i>8.47</i>	0	101 <i>2.95</i>	
Congenital hip dislocation	363 <i>17.40</i>	17 <i>12.02</i>	147 <i>13.91</i>	15 <i>13.21</i>	5 <i>21.17</i>	0	547 <i>15.99</i>	
Diaphragmatic hernia	73 <i>3.50</i>	3 <i>2.12</i>	45 <i>4.26</i>	2 <i>1.76</i>	1 <i>4.23</i>	6	130 <i>3.80</i>	
Down syndrome (Trisomy 21)	305 <i>14.62</i>	23 <i>16.26</i>	154 <i>14.58</i>	14 <i>12.33</i>	7 <i>29.64</i>	193	696 <i>20.34</i>	
Ebstein anomaly	17 <i>0.82</i>	0 <i>0.00</i>	13 <i>1.23</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	30 <i>0.88</i>	
Encephalocele	17 <i>0.82</i>	3 <i>2.12</i>	12 <i>1.14</i>	0 <i>0.00</i>	0 <i>0.00</i>	5	37 <i>1.08</i>	
Endocardial cushion defect	93 <i>4.46</i>	5 <i>3.53</i>	39 <i>3.69</i>	5 <i>4.40</i>	2 <i>8.47</i>	3	147 <i>4.30</i>	
Esophageal atresia/ tracheoesophageal fistula	107 <i>5.13</i>	8 <i>5.65</i>	48 <i>4.54</i>	8 <i>7.05</i>	1 <i>4.23</i>	1	173 <i>5.06</i>	
Gastroschisis	61 <i>2.92</i>	6 <i>4.24</i>	69 <i>6.53</i>	6 <i>5.29</i>	2 <i>8.47</i>	5	149 <i>4.36</i>	+
Hirschsprung disease (congenital megacolon)	53 <i>2.54</i>	5 <i>3.53</i>	15 <i>1.42</i>	2 <i>1.76</i>	0 <i>0.00</i>	0	75 <i>2.19</i>	
Hydrocephalus without Spina Bifida	170 <i>8.15</i>	11 <i>7.78</i>	79 <i>7.48</i>	9 <i>7.93</i>	3 <i>12.70</i>	16	288 <i>8.42</i>	
Hypoplastic left heart syndrome	73 <i>3.50</i>	3 <i>2.12</i>	33 <i>3.12</i>	1 <i>0.88</i>	0 <i>0.00</i>	5	115 <i>3.36</i>	
Hypospadias and Epispadias	1420 <i>68.08</i>	101 <i>71.39</i>	334 <i>31.62</i>	66 <i>58.14</i>	7 <i>29.64</i>	1	1929 <i>56.38</i>	
Microcephalus	92 <i>4.41</i>	14 <i>9.90</i>	86 <i>8.14</i>	12 <i>10.57</i>	3 <i>12.70</i>	2	209 <i>6.11</i>	
Obstructive genitourinary defect	671 <i>32.17</i>	45 <i>31.81</i>	341 <i>32.28</i>	57 <i>50.21</i>	10 <i>42.34</i>	5	1129 <i>33.00</i>	
Omphalocele	51 <i>2.45</i>	3 <i>2.12</i>	22 <i>2.08</i>	2 <i>1.76</i>	0 <i>0.00</i>	19	97 <i>2.84</i>	+
Patent ductus arteriosus	770 <i>36.92</i>	71 <i>50.19</i>	413 <i>39.09</i>	38 <i>33.47</i>	11 <i>46.57</i>	0	1303 <i>38.09</i>	+

Colorado**Birth Defects Counts and Rates 2001-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
	221	22	116	12	5	1	377	
Pulmonary valve atresia and stenosis	10.60	15.55	10.98	10.57	21.17		11.02	
	335	8	194	6	3	0	546	
Pyloric stenosis	16.06	5.65	18.36	5.29	12.70		15.96	
	136	5	52	7	0	3	203	
Rectal and large intestinal atresia/stenosis	6.52	3.53	4.92	6.17	0.00		5.93	
	36	3	24	0	0	4	67	
Reduction deformity, lower limbs	1.73	2.12	2.27	0.00	0.00		1.96	
	76	5	40	0	0	9	130	
Reduction deformity, upper limbs	3.64	3.53	3.79	0.00	0.00		3.80	
	108	8	54	3	1	7	181	
Renal agenesis/hypoplasia	5.18	5.65	5.11	2.64	4.23		5.29	
	62	0	43	0	0	12	117	
Spina bifida without anencephalus	2.97	0.00	4.07	0.00	0.00		3.42	+
	72	6	35	8	2	1	124	
Tetralogy of Fallot	3.45	4.24	3.31	7.05	8.47		3.62	
	74	6	44	7	2	2	135	
Transposition of great arteries	3.55	4.24	4.16	6.17	8.47		3.95	
	30	4	19	1	1	1	56	
Tricuspid valve atresia and stenosis	1.44	2.83	1.80	0.88	4.23		1.64	
	31	3	10	2	2	41	89	
Trisomy 13 (Patau syndrome)	1.49	2.12	0.95	1.76	8.47		2.60	
	55	4	22	4	1	73	159	
Trisomy 18 (Edwards syndrome)	2.64	2.83	2.08	3.52	4.23		4.65	
	862	67	496	25	12	14	1476	
Ventricular septal defect	41.33	47.36	46.95	22.02	50.80		43.14	+
Total Live Births	208565	14147	105644	11352	2362		342127	

Colorado**Trisomy Counts and Rates by Maternal Age 2001-2005**

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
	330	366	696
Down syndrome (Trisomy 21)	11.30	73.28	20.34
	49	39	89
Trisomy 13 (Patau syndrome)	1.68	7.81	2.60
	71	88	159
Trisomy 18 (Edwards syndrome)	2.43	17.62	4.65
Total Live Births	292048	49948	342127

(**) Total includes unknown age

(+)Notes:

- 1: For fetal alcohol syndrome data, please contact the CRCSN program director.
- 2: Denominator data were supplied by the Health Statistics Section of the Colorado Department of Public Health and Environment, which specifically disclaims responsibility for any analysis, interpretations, or conclusions.
- 3: 2001-2005, Anencephalus, live births and fetal deaths-any gestational age
- 4: 2001-2005, Spina bifida without anencephalus, live births and fetal deaths-any gestational age
- 5: 2001-2005, Ventricular septal defect, includes probable cases
- 6: 2001-2005, Patent ductus arteriosus, cases w/birth weight of ≥ 2500 grams
- 7: 2001-2005, Gastroschisis, medical record review
- 8: 2001-2005, Omphalocele, medical record review

Florida Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Anencephalus	19 <i>0.37</i>	11 <i>0.48</i>	12 <i>0.43</i>	4 <i>1.48</i>	1 <i>3.16</i>	1 <i>0.45</i>	48	
Aniridia	5 <i>0.10</i>	3 <i>0.13</i>	4 <i>0.14</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.11</i>	12	
Anophthalmia/ microphthalmia	58 <i>1.13</i>	19 <i>0.83</i>	26 <i>0.94</i>	3 <i>1.11</i>	1 <i>3.16</i>	2 <i>1.02</i>	109	
Anotia/microtia	31 <i>0.60</i>	7 <i>0.30</i>	25 <i>0.90</i>	1 <i>0.37</i>	0 <i>0.00</i>	1 <i>0.61</i>	65	
Aortic valve stenosis	120 <i>2.33</i>	28 <i>1.22</i>	30 <i>1.08</i>	1 <i>0.37</i>	0 <i>0.00</i>	4 <i>1.72</i>	183	
Biliary atresia	54 <i>1.05</i>	34 <i>1.48</i>	22 <i>0.79</i>	1 <i>0.37</i>	0 <i>0.00</i>	1 <i>1.05</i>	112	
Bladder exstrophy	21 <i>0.41</i>	9 <i>0.39</i>	4 <i>0.14</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.32</i>	34	
Choanal atresia	93 <i>1.80</i>	31 <i>1.35</i>	26 <i>0.94</i>	1 <i>0.37</i>	0 <i>0.00</i>	1 <i>1.43</i>	152	
Cleft lip with and without cleft palate	513 <i>9.95</i>	121 <i>5.27</i>	222 <i>7.98</i>	25 <i>9.25</i>	2 <i>6.31</i>	5 <i>8.35</i>	888	
Cleft palate without cleft lip	317 <i>6.15</i>	82 <i>3.57</i>	122 <i>4.39</i>	12 <i>4.44</i>	3 <i>9.47</i>	7 <i>5.10</i>	543	
Coarctation of aorta	355 <i>6.89</i>	110 <i>4.79</i>	140 <i>5.04</i>	4 <i>1.48</i>	4 <i>12.62</i>	5 <i>5.81</i>	618	
Common truncus	51 <i>0.99</i>	21 <i>0.91</i>	18 <i>0.65</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.85</i>	90	
Congenital cataract	74 <i>1.44</i>	45 <i>1.96</i>	42 <i>1.51</i>	5 <i>1.85</i>	1 <i>3.16</i>	2 <i>1.59</i>	169	
Congenital hip dislocation	568 <i>11.02</i>	113 <i>4.92</i>	340 <i>12.23</i>	32 <i>11.84</i>	4 <i>12.62</i>	11 <i>10.04</i>	1068	
Diaphragmatic hernia	159 <i>3.08</i>	68 <i>2.96</i>	78 <i>2.81</i>	5 <i>1.85</i>	0 <i>0.00</i>	5 <i>2.96</i>	315	
Down syndrome (Trisomy 21)	707 <i>13.72</i>	279 <i>12.15</i>	387 <i>13.92</i>	26 <i>9.62</i>	4 <i>12.62</i>	11 <i>13.29</i>	1414	
Ebstein anomaly	25 <i>0.49</i>	6 <i>0.26</i>	12 <i>0.43</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.42</i>	45	
Encephalocele	29 <i>0.56</i>	27 <i>1.18</i>	24 <i>0.86</i>	1 <i>0.37</i>	2 <i>6.31</i>	0 <i>0.78</i>	83	
Endocardial cushion defect	236 <i>4.58</i>	115 <i>5.01</i>	88 <i>3.17</i>	8 <i>2.96</i>	2 <i>6.31</i>	2 <i>4.24</i>	451	
Esophageal atresia/ tracheoesophageal fistula	139 <i>2.70</i>	37 <i>1.61</i>	64 <i>2.30</i>	4 <i>1.48</i>	1 <i>3.16</i>	0 <i>2.30</i>	245	
Hirschsprung disease (congenital megacolon)	141 <i>2.74</i>	74 <i>3.22</i>	40 <i>1.44</i>	6 <i>2.22</i>	2 <i>6.31</i>	2 <i>2.49</i>	265	
Hydrocephalus without Spina Bifida	324 <i>6.29</i>	238 <i>10.37</i>	181 <i>6.51</i>	18 <i>6.66</i>	4 <i>12.62</i>	6 <i>7.25</i>	771	
Hypoplastic left heart syndrome	150 <i>2.91</i>	82 <i>3.57</i>	56 <i>2.01</i>	4 <i>1.48</i>	0 <i>0.00</i>	2 <i>2.76</i>	294	
Hypospadias and Epispadias	2254 <i>43.73</i>	682 <i>29.71</i>	702 <i>25.25</i>	64 <i>23.68</i>	3 <i>9.47</i>	37 <i>35.17</i>	3742	
Microcephalus	261 <i>5.06</i>	190 <i>8.28</i>	174 <i>6.26</i>	6 <i>2.22</i>	2 <i>6.31</i>	8 <i>6.02</i>	641	
Obstructive genitourinary defect	1540 <i>29.88</i>	457 <i>19.91</i>	818 <i>29.42</i>	81 <i>29.97</i>	8 <i>25.24</i>	31 <i>27.59</i>	2935	
Pulmonary valve atresia and stenosis	540 <i>10.48</i>	379 <i>16.51</i>	248 <i>8.92</i>	31 <i>11.47</i>	6 <i>18.93</i>	10 <i>11.41</i>	1214	
Pyloric stenosis	1773 <i>34.40</i>	310 <i>13.50</i>	619 <i>22.26</i>	18 <i>6.66</i>	9 <i>28.40</i>	15 <i>25.79</i>	2744	
Rectal and large intestinal atresia/stenosis	234 <i>4.54</i>	84 <i>3.66</i>	105 <i>3.78</i>	16 <i>5.92</i>	3 <i>9.47</i>	4 <i>4.19</i>	446	

Florida**Birth Defects Counts and Rates 2001-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Reduction deformity, lower limbs	76 <i>1.47</i>	31 <i>1.35</i>	30 <i>1.08</i>	3 <i>1.11</i>	0 <i>0.00</i>	1	141 <i>1.33</i>	
Reduction deformity, upper limbs	85 <i>1.65</i>	47 <i>2.05</i>	48 <i>1.73</i>	3 <i>1.11</i>	0 <i>0.00</i>	1	184 <i>1.73</i>	
Renal agenesis/hypoplasia	188 <i>3.65</i>	76 <i>3.31</i>	93 <i>3.34</i>	11 <i>4.07</i>	0 <i>0.00</i>	6	374 <i>3.52</i>	
Spina bifida without anencephalus	177 <i>3.43</i>	73 <i>3.18</i>	84 <i>3.02</i>	3 <i>1.11</i>	2 <i>6.31</i>	2	341 <i>3.21</i>	
Tetralogy of Fallot	298 <i>5.78</i>	127 <i>5.53</i>	132 <i>4.75</i>	8 <i>2.96</i>	2 <i>6.31</i>	3	570 <i>5.36</i>	
Transposition of great arteries	249 <i>4.83</i>	99 <i>4.31</i>	116 <i>4.17</i>	13 <i>4.81</i>	1 <i>3.16</i>	3	481 <i>4.52</i>	
Tricuspid valve atresia and stenosis	65 <i>1.26</i>	32 <i>1.39</i>	26 <i>0.94</i>	2 <i>0.74</i>	1 <i>3.16</i>	1	127 <i>1.19</i>	
Trisomy 13 (Patau syndrome)	51 <i>0.99</i>	33 <i>1.44</i>	23 <i>0.83</i>	1 <i>0.37</i>	0 <i>0.00</i>	0	108 <i>1.02</i>	
Trisomy 18 (Edwards syndrome)	67 <i>1.30</i>	56 <i>2.44</i>	33 <i>1.19</i>	5 <i>1.85</i>	0 <i>0.00</i>	3	164 <i>1.54</i>	
Ventricular septal defect	2720 <i>52.77</i>	1075 <i>46.83</i>	1557 <i>56.00</i>	103 <i>38.10</i>	14 <i>44.18</i>	36	5505 <i>51.74</i>	+
Total Live Births	515434	229574	278027	27031	3169		1063942	

Florida**Trisomy Counts and Rates by Maternal Age 2001-2005**

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	782 <i>8.61</i>	632 <i>40.74</i>	1414 <i>13.29</i>
Trisomy 13 (Patau syndrome)	84 <i>0.92</i>	24 <i>1.55</i>	108 <i>1.02</i>
Trisomy 18 (Edwards syndrome)	96 <i>1.06</i>	68 <i>4.38</i>	164 <i>1.54</i>
Total Live Births	908706	155116	1063942

(**) Total includes unknown age

(+)Notes:

1: 2001-2005, Ventricular septal defect, all cases with the VSD ICD-9 code are included, including probable cases.

Georgia
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Amniotic bands	10 <i>1.09</i>	18 <i>1.87</i>	11 <i>2.18</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	39 <i>1.52</i>	
Anencephalus	17 <i>1.85</i>	14 <i>1.46</i>	16 <i>3.17</i>	5 <i>3.34</i>	0 <i>0.00</i>	4	56 <i>2.19</i>	+
Aniridia	5 <i>0.54</i>	1 <i>0.10</i>	0 <i>0.00</i>	1 <i>0.67</i>	0 <i>0.00</i>	0	7 <i>0.27</i>	
Anophthalmia/ microphthalmia	26 <i>2.82</i>	26 <i>2.70</i>	10 <i>1.98</i>	3 <i>2.00</i>	0 <i>0.00</i>	0	65 <i>2.54</i>	
Anotia/microtia	10 <i>1.09</i>	11 <i>1.14</i>	18 <i>3.56</i>	4 <i>2.67</i>	0 <i>0.00</i>	1	44 <i>1.72</i>	
Aortic valve stenosis	22 <i>2.39</i>	22 <i>2.29</i>	12 <i>2.38</i>	3 <i>2.00</i>	0 <i>0.00</i>	0	59 <i>2.30</i>	
Atrial septal defect	312 <i>33.88</i>	367 <i>38.15</i>	186 <i>36.82</i>	48 <i>32.03</i>	1 <i>23.58</i>	14	928 <i>36.21</i>	
Biliary atresia	3 <i>0.33</i>	13 <i>1.35</i>	3 <i>0.59</i>	2 <i>1.33</i>	0 <i>0.00</i>	0	21 <i>0.82</i>	
Bladder exstrophy	2 <i>0.22</i>	1 <i>0.10</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	3 <i>0.12</i>	
Choanal atresia	14 <i>1.52</i>	9 <i>0.94</i>	4 <i>0.79</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	27 <i>1.05</i>	
Cleft lip with and without cleft palate	97 <i>10.53</i>	61 <i>6.34</i>	56 <i>11.08</i>	12 <i>8.01</i>	0 <i>0.00</i>	3	229 <i>8.94</i>	
Cleft palate without cleft lip	69 <i>7.49</i>	50 <i>5.20</i>	32 <i>6.33</i>	3 <i>2.00</i>	0 <i>0.00</i>	2	156 <i>6.09</i>	
Coarctation of aorta	64 <i>6.95</i>	50 <i>5.20</i>	22 <i>4.35</i>	4 <i>2.67</i>	0 <i>0.00</i>	8	148 <i>5.77</i>	
Common truncus	9 <i>0.98</i>	4 <i>0.42</i>	4 <i>0.79</i>	2 <i>1.33</i>	0 <i>0.00</i>	1	20 <i>0.78</i>	
Congenital cataract	19 <i>2.06</i>	17 <i>1.77</i>	12 <i>2.38</i>	1 <i>0.67</i>	0 <i>0.00</i>	0	49 <i>1.91</i>	
Congenital hip dislocation	104 <i>11.29</i>	14 <i>1.46</i>	40 <i>7.92</i>	4 <i>2.67</i>	0 <i>0.00</i>	6	168 <i>6.56</i>	
Diaphragmatic hernia	33 <i>3.58</i>	22 <i>2.29</i>	18 <i>3.56</i>	2 <i>1.33</i>	0 <i>0.00</i>	1	76 <i>2.97</i>	
Down syndrome (Trisomy 21)	150 <i>16.29</i>	120 <i>12.47</i>	76 <i>15.04</i>	18 <i>12.01</i>	1 <i>23.58</i>	6	371 <i>14.48</i>	
Ebstein anomaly	7 <i>0.76</i>	5 <i>0.52</i>	5 <i>0.99</i>	1 <i>0.67</i>	0 <i>0.00</i>	0	18 <i>0.70</i>	
Encephalocele	5 <i>0.54</i>	24 <i>2.49</i>	6 <i>1.19</i>	2 <i>1.33</i>	0 <i>0.00</i>	0	37 <i>1.44</i>	
Endocardial cushion defect	39 <i>4.23</i>	56 <i>5.82</i>	15 <i>2.97</i>	5 <i>3.34</i>	0 <i>0.00</i>	2	117 <i>4.57</i>	
Esophageal atresia/ tracheoesophageal fistula	29 <i>3.15</i>	14 <i>1.46</i>	12 <i>2.38</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	55 <i>2.15</i>	
Fetus or newborn affected by maternal alcohol use	3 <i>0.33</i>	15 <i>1.56</i>	1 <i>0.20</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	19 <i>0.74</i>	
Gastroschisis	23 <i>2.50</i>	24 <i>2.49</i>	22 <i>4.35</i>	3 <i>2.00</i>	0 <i>0.00</i>	1	73 <i>2.85</i>	
Hirschsprung disease (congenital megacolon)	21 <i>2.28</i>	34 <i>3.53</i>	5 <i>0.99</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	60 <i>2.34</i>	
Hydrocephalus without Spina Bifida	51 <i>5.54</i>	102 <i>10.60</i>	32 <i>6.33</i>	8 <i>5.34</i>	1 <i>23.58</i>	2	196 <i>7.65</i>	
Hypoplastic left heart syndrome	19 <i>2.06</i>	26 <i>2.70</i>	13 <i>2.57</i>	2 <i>1.33</i>	0 <i>0.00</i>	0	60 <i>2.34</i>	
Hypospadias and Epispadias	378 <i>41.05</i>	299 <i>31.08</i>	66 <i>13.06</i>	31 <i>20.69</i>	1 <i>23.58</i>	8	783 <i>30.55</i>	
Microcephalus	38 <i>4.13</i>	83 <i>8.63</i>	33 <i>6.53</i>	10 <i>6.67</i>	0 <i>0.00</i>	1	165 <i>6.44</i>	
Obstructive genitourinary defect	255 <i>27.69</i>	213 <i>22.14</i>	135 <i>26.72</i>	30 <i>20.02</i>	1 <i>23.58</i>	6	640 <i>24.97</i>	

Georgia

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	12 <i>1.30</i>	25 <i>2.60</i>	5 <i>0.99</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>1.68</i>	43	
Patent ductus arteriosus	287 <i>31.16</i>	283 <i>29.42</i>	175 <i>34.64</i>	35 <i>23.36</i>	0 <i>0.00</i>	18 <i>12.14</i>	798	
Pulmonary valve atresia and stenosis	61 <i>6.62</i>	70 <i>7.28</i>	33 <i>6.53</i>	16 <i>10.68</i>	0 <i>0.00</i>	1 <i>7.06</i>	181	
Pyloric stenosis	172 <i>18.68</i>	53 <i>5.51</i>	80 <i>15.83</i>	12 <i>8.01</i>	0 <i>0.00</i>	2 <i>12.45</i>	319	
Rectal and large intestinal atresia/stenosis	27 <i>2.93</i>	35 <i>3.64</i>	16 <i>3.17</i>	5 <i>3.34</i>	0 <i>0.00</i>	2 <i>3.32</i>	85	
Reduction deformity, lower limbs	8 <i>0.87</i>	15 <i>1.56</i>	3 <i>0.59</i>	2 <i>1.33</i>	0 <i>0.00</i>	0 <i>1.09</i>	28	
Reduction deformity, upper limbs	27 <i>2.93</i>	35 <i>3.64</i>	10 <i>1.98</i>	1 <i>0.67</i>	0 <i>0.00</i>	1 <i>2.89</i>	74	
Renal agenesis/hypoplasia	49 <i>5.32</i>	42 <i>4.37</i>	18 <i>3.56</i>	5 <i>3.34</i>	0 <i>0.00</i>	0 <i>4.45</i>	114	
Spina bifida without anencephalus	26 <i>2.82</i>	37 <i>3.85</i>	32 <i>6.33</i>	2 <i>1.33</i>	0 <i>0.00</i>	4 <i>3.94</i>	101	+
Tetralogy of Fallot	39 <i>4.23</i>	44 <i>4.57</i>	17 <i>3.36</i>	9 <i>6.01</i>	0 <i>0.00</i>	0 <i>4.25</i>	109	
Transposition of great arteries	40 <i>4.34</i>	47 <i>4.89</i>	32 <i>6.33</i>	10 <i>6.67</i>	0 <i>0.00</i>	2 <i>5.11</i>	131	
Tricuspid valve atresia and stenosis	13 <i>1.41</i>	21 <i>2.18</i>	8 <i>1.58</i>	1 <i>0.67</i>	0 <i>0.00</i>	0 <i>1.68</i>	43	
Trisomy 13 (Patau syndrome)	11 <i>1.19</i>	11 <i>1.14</i>	8 <i>1.58</i>	2 <i>1.33</i>	0 <i>0.00</i>	0 <i>1.25</i>	32	
Trisomy 18 (Edwards syndrome)	15 <i>1.63</i>	36 <i>3.74</i>	12 <i>2.38</i>	3 <i>2.00</i>	0 <i>0.00</i>	1 <i>2.61</i>	67	
Ventricular septal defect	539 <i>58.53</i>	369 <i>38.36</i>	289 <i>57.20</i>	44 <i>29.36</i>	1 <i>23.58</i>	26 <i>49.48</i>	1268	
Total Live Births	92093	96203	50521	14984	424	256287		

Georgia

Trisomy Counts and Rates by Maternal Age 2001-2005

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
Down syndrome (Trisomy 21)	179 <i>8.34</i>	192 <i>46.13</i>	371 <i>14.48</i>
Trisomy 13 (Patau syndrome)	24 <i>1.12</i>	8 <i>1.92</i>	32 <i>1.25</i>
Trisomy 18 (Edwards syndrome)	38 <i>1.77</i>	29 <i>6.97</i>	67 <i>2.61</i>
Total Live Births	214613	41621	256287

(**) Total includes unknown age

(+)Notes:

1: 2001-2005, Anencephalus, Includes livebirths, stillbirths, and terminations

2: 2001-2005, Spina bifida without anencephalus, Includes livebirths, stillbirths, and terminations

Hawaii

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Amniotic bands	4 <i>2.20</i>	0 <i>0.00</i>	0 <i>0.00</i>	5 <i>0.82</i>	0 <i>0.00</i>	1 <i>0.00</i>	10 <i>1.12</i>	
Anencephalus	9 <i>4.96</i>	0 <i>0.00</i>	0 <i>0.00</i>	18 <i>2.97</i>	0 <i>0.00</i>	2 <i>0.00</i>	29 <i>3.26</i>	+
Aniridia	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Anophthalmia/ microphthalmia	4 <i>2.20</i>	0 <i>0.00</i>	1 <i>18.52</i>	11 <i>1.81</i>	0 <i>0.00</i>	0 <i>0.00</i>	16 <i>1.80</i>	
Anotia/microtia	4 <i>2.20</i>	0 <i>0.00</i>	2 <i>37.04</i>	33 <i>5.44</i>	0 <i>0.00</i>	1 <i>0.00</i>	40 <i>4.49</i>	
Aortic valve stenosis	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	6 <i>0.99</i>	1 <i>27.70</i>	0 <i>0.00</i>	7 <i>0.79</i>	
Atrial septal defect	37 <i>20.39</i>	2 <i>8.32</i>	8 <i>148.15</i>	201 <i>33.15</i>	4 <i>110.80</i>	7 <i>0.00</i>	259 <i>29.10</i>	
Biliary atresia	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	6 <i>0.99</i>	1 <i>27.70</i>	0 <i>0.00</i>	7 <i>0.79</i>	
Bladder exstrophy	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Choanal atresia	2 <i>1.10</i>	0 <i>0.00</i>	0 <i>0.00</i>	5 <i>0.82</i>	0 <i>0.00</i>	0 <i>0.00</i>	7 <i>0.79</i>	
Cleft lip with and without cleft palate	13 <i>7.17</i>	0 <i>0.00</i>	2 <i>37.04</i>	68 <i>11.21</i>	0 <i>0.00</i>	4 <i>0.00</i>	87 <i>9.78</i>	
Cleft palate without cleft lip	7 <i>3.86</i>	0 <i>0.00</i>	2 <i>37.04</i>	45 <i>7.42</i>	0 <i>0.00</i>	0 <i>0.00</i>	54 <i>6.07</i>	
Coarctation of aorta	9 <i>4.96</i>	0 <i>0.00</i>	0 <i>0.00</i>	17 <i>2.80</i>	0 <i>0.00</i>	0 <i>0.00</i>	26 <i>2.92</i>	
Common truncus	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>0.49</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>0.34</i>	
Congenital cataract	3 <i>1.65</i>	0 <i>0.00</i>	1 <i>18.52</i>	3 <i>0.49</i>	0 <i>0.00</i>	0 <i>0.00</i>	7 <i>0.79</i>	
Congenital hip dislocation	8 <i>4.41</i>	0 <i>0.00</i>	1 <i>18.52</i>	29 <i>4.78</i>	1 <i>27.70</i>	1 <i>0.00</i>	40 <i>4.49</i>	
Diaphragmatic hernia	1 <i>0.55</i>	1 <i>4.16</i>	0 <i>0.00</i>	9 <i>1.48</i>	0 <i>0.00</i>	0 <i>0.00</i>	11 <i>1.24</i>	
Down syndrome (Trisomy 21)	21 <i>11.58</i>	2 <i>8.32</i>	4 <i>74.07</i>	69 <i>11.38</i>	2 <i>55.40</i>	14 <i>0.00</i>	112 <i>12.58</i>	
Ebstein anomaly	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	5 <i>0.82</i>	0 <i>0.00</i>	1 <i>0.00</i>	6 <i>0.67</i>	
Encephalocele	2 <i>1.10</i>	1 <i>4.16</i>	0 <i>0.00</i>	7 <i>1.15</i>	0 <i>0.00</i>	1 <i>0.00</i>	11 <i>1.24</i>	
Endocardial cushion defect	3 <i>1.65</i>	1 <i>4.16</i>	0 <i>0.00</i>	11 <i>1.81</i>	1 <i>27.70</i>	0 <i>0.00</i>	16 <i>1.80</i>	
Esophageal atresia/ tracheoesophageal fistula	5 <i>2.76</i>	0 <i>0.00</i>	1 <i>18.52</i>	9 <i>1.48</i>	0 <i>0.00</i>	0 <i>0.00</i>	15 <i>1.69</i>	
Fetus or newborn affected by maternal alcohol use	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>0.66</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>0.45</i>	
Gastroschisis	8 <i>4.41</i>	0 <i>0.00</i>	1 <i>18.52</i>	27 <i>4.45</i>	0 <i>0.00</i>	4 <i>0.00</i>	40 <i>4.49</i>	
Hirschsprung disease (congenital megacolon)	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>18.52</i>	14 <i>2.31</i>	0 <i>0.00</i>	0 <i>0.00</i>	15 <i>1.69</i>	
Hydrocephalus without Spina Bifida	14 <i>7.72</i>	3 <i>12.48</i>	2 <i>37.04</i>	52 <i>8.58</i>	0 <i>0.00</i>	3 <i>0.00</i>	74 <i>8.31</i>	
Hypoplastic left heart syndrome	1 <i>0.55</i>	0 <i>0.00</i>	1 <i>18.52</i>	3 <i>0.49</i>	0 <i>0.00</i>	0 <i>0.00</i>	5 <i>0.56</i>	
Hypospadias and Epispadias	54 <i>29.77</i>	11 <i>45.76</i>	6 <i>111.11</i>	150 <i>24.74</i>	1 <i>27.70</i>	5 <i>0.00</i>	227 <i>25.51</i>	
Microcephalus	13 <i>7.17</i>	2 <i>8.32</i>	0 <i>0.00</i>	48 <i>7.92</i>	0 <i>0.00</i>	1 <i>0.00</i>	64 <i>7.19</i>	
Obstructive genitourinary defect	42 <i>23.15</i>	6 <i>24.96</i>	6 <i>111.11</i>	133 <i>21.93</i>	0 <i>0.00</i>	7 <i>0.00</i>	194 <i>21.80</i>	

Hawaii**Birth Defects Counts and Rates 2001-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	6 3.31	0 0.00	0 0.00	9 1.48	0 0.00	0	15 1.69	
Patent ductus arteriosus	129 71.11	16 66.56	28 518.52	673 110.98	9 249.31	33	888 99.78	
Pulmonary valve atresia and stenosis	2 1.10	0 0.00	1 18.52	19 3.13	1 27.70	0	23 2.58	
Pyloric stenosis	16 8.82	4 16.64	2 37.04	28 4.62	0 0.00	1	51 5.73	
Rectal and large intestinal atresia/stenosis	6 3.31	1 4.16	1 18.52	24 3.96	0 0.00	2	34 3.82	
Reduction deformity, lower limbs	1 0.55	0 0.00	0 0.00	10 1.65	0 0.00	1	12 1.35	
Reduction deformity, upper limbs	6 3.31	0 0.00	0 0.00	14 2.31	0 0.00	2	22 2.47	
Renal agenesis/hypoplasia	6 3.31	4 16.64	0 0.00	23 3.79	0 0.00	1	34 3.82	
Spina bifida without anencephalus	10 5.51	0 0.00	2 37.04	14 2.31	0 0.00	1	27 3.03	+
Tetralogy of Fallot	4 2.20	1 4.16	2 37.04	23 3.79	0 0.00	0	30 3.37	
Transposition of great arteries	11 6.06	0 0.00	1 18.52	31 5.11	0 0.00	0	43 4.83	
Tricuspid valve atresia and stenosis	1 0.55	0 0.00	0 0.00	10 1.65	0 0.00	0	11 1.24	
Trisomy 13 (Patau syndrome)	2 1.10	0 0.00	1 18.52	8 1.32	0 0.00	0	11 1.24	
Trisomy 18 (Edwards syndrome)	9 4.96	0 0.00	1 18.52	18 2.97	0 0.00	2	30 3.37	
Ventricular septal defect	59 32.52	8 33.28	7 129.63	297 48.98	4 110.80	11	386 43.37	
Total Live Births	18142	2404	540	60639	361		88996	+

Hawaii**Trisomy Counts and Rates by Maternal Age 2001-2005**

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	48 6.51	64 42.07	112 12.58
Trisomy 13 (Patau syndrome)	5 0.68	6 3.94	11 1.24
Trisomy 18 (Edwards syndrome)	11 1.49	19 12.49	30 3.37
Total Live Births	73781	15213	88996

(**) Total includes unknown age

(+)Notes:

- 1: 2001-2005, Anencephalus, Include livebirths, fetal deaths of any gestational age, terminations
- 2: 2001-2005, Spina bifida without anencephalus, Include livebirths, fetal deaths of any gestational age, terminations
- 3: 2003-2005, Total Live Births, Due to a change in Hawaii Department of Health policy, the Hawaii Birth Defects Program could not get denominators for many of the racial/ethnic groups

Illinois Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Amniotic bands	30 <i>0.61</i>	11 <i>0.70</i>	13 <i>0.62</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	54 <i>0.60</i>	
Anencephalus	68 <i>1.38</i>	23 <i>1.47</i>	53 <i>2.52</i>	4 <i>0.92</i>	5 <i>41.95</i>	0 <i>0.00</i>	153 <i>1.69</i>	+
Aniridia	4 <i>0.08</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.23</i>	0 <i>0.00</i>	0 <i>0.00</i>	5 <i>0.06</i>	
Anophthalmia/ microphthalmia	71 <i>1.44</i>	17 <i>1.08</i>	25 <i>1.19</i>	2 <i>0.46</i>	1 <i>8.39</i>	0 <i>0.00</i>	116 <i>1.28</i>	
Anotia/microtia	38 <i>0.77</i>	7 <i>0.45</i>	47 <i>2.23</i>	5 <i>1.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	97 <i>1.07</i>	
Aortic valve stenosis	64 <i>1.30</i>	5 <i>0.32</i>	10 <i>0.48</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	79 <i>0.87</i>	
Atrial septal defect	2982 <i>60.39</i>	863 <i>55.02</i>	988 <i>46.98</i>	217 <i>49.90</i>	8 <i>67.11</i>	5 <i>0.00</i>	5063 <i>55.85</i>	
Biliary atresia	7 <i>0.14</i>	3 <i>0.19</i>	9 <i>0.43</i>	2 <i>0.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	21 <i>0.23</i>	
Bladder exstrophy	20 <i>0.41</i>	2 <i>0.13</i>	1 <i>0.05</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	23 <i>0.25</i>	
Choanal atresia	75 <i>1.52</i>	17 <i>1.08</i>	27 <i>1.28</i>	7 <i>1.61</i>	1 <i>8.39</i>	0 <i>0.00</i>	127 <i>1.40</i>	
Cleft lip with and without cleft palate	419 <i>8.49</i>	84 <i>5.36</i>	172 <i>8.18</i>	25 <i>5.75</i>	2 <i>16.78</i>	0 <i>0.00</i>	702 <i>7.74</i>	
Cleft palate without cleft lip	273 <i>5.53</i>	63 <i>4.02</i>	77 <i>3.66</i>	19 <i>4.37</i>	0 <i>0.00</i>	0 <i>0.00</i>	432 <i>4.77</i>	
Coarctation of aorta	161 <i>3.26</i>	35 <i>2.23</i>	68 <i>3.23</i>	8 <i>1.84</i>	0 <i>0.00</i>	0 <i>0.00</i>	272 <i>3.00</i>	
Common truncus	29 <i>0.59</i>	13 <i>0.83</i>	9 <i>0.43</i>	1 <i>0.23</i>	0 <i>0.00</i>	0 <i>0.00</i>	52 <i>0.57</i>	
Congenital cataract	33 <i>0.67</i>	15 <i>0.96</i>	13 <i>0.62</i>	2 <i>0.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	63 <i>0.69</i>	
Congenital hip dislocation	244 <i>4.94</i>	24 <i>1.53</i>	87 <i>4.14</i>	18 <i>4.14</i>	0 <i>0.00</i>	0 <i>0.00</i>	373 <i>4.11</i>	
Diaphragmatic hernia	142 <i>2.88</i>	33 <i>2.10</i>	62 <i>2.95</i>	10 <i>2.30</i>	0 <i>0.00</i>	1 <i>0.00</i>	248 <i>2.74</i>	
Down syndrome (Trisomy 21)	614 <i>12.43</i>	167 <i>10.65</i>	321 <i>15.26</i>	59 <i>13.57</i>	6 <i>50.34</i>	3 <i>0.00</i>	1170 <i>12.91</i>	
Ebstein anomaly	29 <i>0.59</i>	7 <i>0.45</i>	20 <i>0.95</i>	2 <i>0.46</i>	0 <i>0.00</i>	1 <i>0.00</i>	59 <i>0.65</i>	
Encephalocele	29 <i>0.59</i>	12 <i>0.77</i>	13 <i>0.62</i>	3 <i>0.69</i>	1 <i>8.39</i>	0 <i>0.00</i>	58 <i>0.64</i>	
Endocardial cushion defect	176 <i>3.56</i>	67 <i>4.27</i>	47 <i>2.23</i>	9 <i>2.07</i>	0 <i>0.00</i>	0 <i>0.00</i>	299 <i>3.30</i>	
Esophageal atresia/ tracheoesophageal fistula	126 <i>2.55</i>	37 <i>2.36</i>	34 <i>1.62</i>	11 <i>2.53</i>	0 <i>0.00</i>	0 <i>0.00</i>	209 <i>2.31</i>	
Fetus or newborn affected by maternal alcohol use	65 <i>1.32</i>	96 <i>6.12</i>	12 <i>0.57</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	173 <i>1.91</i>	
Gastroschisis	90 <i>1.82</i>	33 <i>2.10</i>	66 <i>3.14</i>	2 <i>0.46</i>	0 <i>0.00</i>	1 <i>0.00</i>	192 <i>2.12</i>	
Hirschsprung disease (congenital megacolon)	75 <i>1.52</i>	49 <i>3.12</i>	19 <i>0.90</i>	7 <i>1.61</i>	0 <i>0.00</i>	0 <i>0.00</i>	150 <i>1.65</i>	
Hydrocephalus without Spina Bifida	268 <i>5.43</i>	169 <i>10.78</i>	125 <i>5.94</i>	17 <i>3.91</i>	4 <i>33.56</i>	1 <i>0.00</i>	584 <i>6.44</i>	
Hypoplastic left heart syndrome	95 <i>1.92</i>	27 <i>1.72</i>	39 <i>1.85</i>	2 <i>0.46</i>	1 <i>8.39</i>	0 <i>0.00</i>	164 <i>1.81</i>	
Hypospadias and Epispadias	1272 <i>25.76</i>	280 <i>17.85</i>	215 <i>10.22</i>	61 <i>14.03</i>	3 <i>25.17</i>	1 <i>0.00</i>	1832 <i>20.21</i>	
Microcephalus	163 <i>3.30</i>	172 <i>10.97</i>	77 <i>3.66</i>	16 <i>3.68</i>	0 <i>0.00</i>	0 <i>0.00</i>	428 <i>4.72</i>	

Illinois**Birth Defects Counts and Rates 2001-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
	1532	259	482	126	3	1	2403	
Obstructive genitourinary defect	31.03	16.51	22.92	28.97	25.17		26.51	
Omphalocele	65	23	21	3	0	0	112	
Patent ductus arteriosus	36.53	36.73	32.43	24.83	343.96	0	35.42	+
Pulmonary valve atresia and stenosis	9.76	10.84	4.90	4.60	8.39	0	8.56	
Pyloric stenosis	32	7	14	2	0	2	57	
Rectal and large intestinal atresia/stenosis	0.65	0.45	0.67	0.46	0.00		0.63	
Reduction deformity, lower limbs	167	50	73	21	0	1	312	
Reduction deformity, upper limbs	3.38	3.19	3.47	4.83	0.00		3.44	
Renal agenesis/hypoplasia	87	32	24	5	1	0	149	
Spina bifida without anencephalus	1.76	2.04	1.14	1.15	8.39		1.64	
Tetralogy of Fallot	163	63	53	16	2	1	298	
Transposition of great arteries	3.30	4.02	2.52	3.68	16.78		3.29	
Tricuspid valve atresia and stenosis	172	48	71	11	0	1	303	
Trisomy 13 (Patau syndrome)	3.48	3.06	3.38	2.53	0.00		3.34	
Trisomy 18 (Edwards syndrome)	135	44	74	4	2	0	259	
Ventricular septal defect	2.73	2.81	3.52	0.92	16.78		2.86	
	132	61	48	16	0	0	257	
	2.67	3.89	2.28	3.68	0.00		2.84	
	192	57	58	21	1	0	329	
	3.89	3.63	2.76	4.83	8.39		3.63	
	36	8	19	0	0	0	63	
	0.73	0.51	0.90	0.00	0.00		0.69	
	64	18	13	1	1	1	98	
	1.30	1.15	0.62	0.23	8.39		1.08	
	141	41	54	3	2	1	242	
	2.86	2.61	2.57	0.69	16.78		2.67	
	1558	404	659	121	4	2	2748	
	31.55	25.76	31.34	27.82	33.56		30.31	+
Total Live Births	493774	156838	210292	43489	1192		906507	

Illinois**Trisomy Counts and Rates by Maternal Age 2001-2005**

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
	658	510	1170
Down syndrome (Trisomy 21)	8.54	37.50	12.91
	71	26	98
Trisomy 13 (Patau syndrome)	0.92	1.91	1.08
	157	85	242
Trisomy 18 (Edwards syndrome)	2.04	6.25	2.67
Total Live Births	770454	135983	906507

(**) Total includes unknown age

(+)Notes:

1: Illinois used primarily passive newborn reporting during 2001. However, a number of projects were undertaken to enhance case identification during this time period:

a) In each of these years, some active case finding was undertaken. APORS staff reviewed hospital charts to identify children with major birth defects. The targeted hospitals and conditions varied from year to year. Birth defects identified through these projects may not have been diagnosed during the newborn period.

b) APORS staff matched records to birth certificate information. Facilities were asked to provide birth defect information about very low birth-weight children previously unreported to APORS.

c) In 2001, APORS staff matched some hospital discharge records with APORS records to obtain more complete case ascertainment. The facilities that provided most of the hospital discharge records were Level III facilities.

2: In 2002, there was a major change in data collection methods. Illinois began active verification of the newborn reports received from facilities. Abstractors review each of the charts of live-born children believed likely to have a birth defect, markedly increasing the number of birth defects identified.

3: For 2001, ICD-9 codes were used to define the birth defect groups. From 2002 onwards BPA coding was used, except for 760.71: Fetus or newborn affected by maternal alcohol use.

4: The data include fetal deaths > 20 weeks, or if death certificate was issued. It does not include terminations.

5: Probable/possible diagnoses are included in Illinois cases prior to 2002. From 2002 onwards, possible diagnoses are not included.

6: 2001, Anencephalus, Include livebirths, fetal deaths > 20 weeks, or if death certificate issued.

7: 2001-2005, Ventricular septal defect, Includes probable cases

8: 2001-2005, Patent ductus arteriosus, Birth weight \geq 2500 g

Indiana
Birth Defects Counts and Rates 2003-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Anencephalus	8 <i>0.39</i>	1 <i>0.35</i>	2 <i>1.01</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	11 <i>0.42</i>	+
Aniridia	3 <i>0.15</i>	1 <i>0.35</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	4 <i>0.15</i>	
Anophthalmia/ microphthalmia	12 <i>0.59</i>	1 <i>0.35</i>	2 <i>1.01</i>	0 <i>0.00</i>	0 <i>0.00</i>	2	17 <i>0.65</i>	
Anotia/microtia	6 <i>0.29</i>	0 <i>0.00</i>	4 <i>2.02</i>	0 <i>0.00</i>	0 <i>0.00</i>	1	11 <i>0.42</i>	
Aortic valve stenosis	49 <i>2.40</i>	2 <i>0.71</i>	1 <i>0.51</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	52 <i>2.00</i>	
Atrial septal defect	840 <i>41.20</i>	110 <i>38.97</i>	49 <i>24.78</i>	3 <i>29.13</i>	3 <i>88.24</i>	30	1035 <i>39.72</i>	
Biliary atresia	14 <i>0.69</i>	4 <i>1.42</i>	3 <i>1.52</i>	0 <i>0.00</i>	0 <i>0.00</i>	1	22 <i>0.84</i>	
Bladder exstrophy	1 <i>0.05</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>9.71</i>	0 <i>0.00</i>	1	3 <i>0.12</i>	
Choanal atresia	25 <i>1.23</i>	3 <i>1.06</i>	2 <i>1.01</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	30 <i>1.15</i>	
Cleft lip with and without cleft palate	196 <i>9.61</i>	11 <i>3.90</i>	18 <i>9.10</i>	0 <i>0.00</i>	0 <i>0.00</i>	7	232 <i>8.90</i>	+
Cleft palate without cleft lip	146 <i>7.16</i>	11 <i>3.90</i>	5 <i>2.53</i>	0 <i>0.00</i>	0 <i>0.00</i>	4	166 <i>6.37</i>	
Coarctation of aorta	117 <i>5.74</i>	11 <i>3.90</i>	10 <i>5.06</i>	1 <i>9.71</i>	0 <i>0.00</i>	2	141 <i>5.41</i>	
Common truncus	10 <i>0.49</i>	2 <i>0.71</i>	1 <i>0.51</i>	0 <i>0.00</i>	0 <i>0.00</i>	1	14 <i>0.54</i>	
Congenital cataract	16 <i>0.78</i>	2 <i>0.71</i>	3 <i>1.52</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	21 <i>0.81</i>	+
Congenital hip dislocation	130 <i>6.38</i>	7 <i>2.48</i>	12 <i>6.07</i>	0 <i>0.00</i>	0 <i>0.00</i>	6	155 <i>5.95</i>	
Diaphragmatic hernia	59 <i>2.89</i>	4 <i>1.42</i>	4 <i>2.02</i>	1 <i>9.71</i>	0 <i>0.00</i>	3	71 <i>2.72</i>	
Down syndrome (Trisomy 21)	233 <i>11.43</i>	24 <i>8.50</i>	15 <i>7.59</i>	2 <i>19.42</i>	0 <i>0.00</i>	6	280 <i>10.75</i>	
Ebstein anomaly	14 <i>0.69</i>	1 <i>0.35</i>	3 <i>1.52</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	18 <i>0.69</i>	
Encephalocele	12 <i>0.59</i>	1 <i>0.35</i>	3 <i>1.52</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	16 <i>0.61</i>	
Endocardial cushion defect	95 <i>4.66</i>	8 <i>2.83</i>	5 <i>2.53</i>	1 <i>9.71</i>	0 <i>0.00</i>	1	110 <i>4.22</i>	
Esophageal atresia/ tracheoesophageal fistula	40 <i>1.96</i>	4 <i>1.42</i>	2 <i>1.01</i>	1 <i>9.71</i>	0 <i>0.00</i>	1	48 <i>1.84</i>	
Fetus or newborn affected by maternal alcohol use	44 <i>2.16</i>	11 <i>3.90</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	6	61 <i>2.34</i>	
Gastroschisis	62 <i>3.04</i>	2 <i>0.71</i>	8 <i>4.05</i>	0 <i>0.00</i>	0 <i>0.00</i>	2	74 <i>2.84</i>	
Hirschsprung disease (congenital megacolon)	45 <i>2.21</i>	7 <i>2.48</i>	0 <i>0.00</i>	1 <i>9.71</i>	0 <i>0.00</i>	0	53 <i>2.03</i>	
Hydrocephalus without Spina Bifida	120 <i>5.89</i>	25 <i>8.86</i>	8 <i>4.05</i>	1 <i>9.71</i>	0 <i>0.00</i>	5	159 <i>6.10</i>	
Hypoplastic left heart syndrome	48 <i>2.35</i>	3 <i>1.06</i>	0 <i>0.00</i>	1 <i>9.71</i>	0 <i>0.00</i>	0	52 <i>2.00</i>	
Hypospadias and Epispadias	610 <i>29.92</i>	72 <i>25.51</i>	16 <i>8.09</i>	2 <i>19.42</i>	0 <i>0.00</i>	12	712 <i>27.33</i>	
Microcephalus	160 <i>7.85</i>	26 <i>9.21</i>	14 <i>7.08</i>	0 <i>0.00</i>	0 <i>0.00</i>	6	206 <i>7.91</i>	
Obstructive genitourinary defect	487 <i>23.88</i>	46 <i>16.30</i>	31 <i>15.68</i>	2 <i>19.42</i>	2 <i>58.82</i>	14	582 <i>22.34</i>	
Omphalocele	11 <i>0.54</i>	4 <i>1.42</i>	3 <i>1.52</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	18 <i>0.69</i>	

Indiana**Birth Defects Counts and Rates 2003-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Patent ductus arteriosus	406 <i>19.91</i>	72 <i>25.51</i>	33 <i>16.69</i>	2 <i>19.42</i>	0 <i>0.00</i>	17 <i>20.34</i>	530	+
Pulmonary valve atresia and stenosis	181 <i>8.88</i>	24 <i>8.50</i>	11 <i>5.56</i>	2 <i>19.42</i>	1 <i>29.41</i>	11 <i>8.83</i>	230	+
Pyloric stenosis	479 <i>23.49</i>	22 <i>7.79</i>	34 <i>17.19</i>	1 <i>9.71</i>	0 <i>0.00</i>	15 <i>21.15</i>	551	
Rectal and large intestinal atresia/stenosis	67 <i>3.29</i>	6 <i>2.13</i>	1 <i>0.51</i>	1 <i>9.71</i>	0 <i>0.00</i>	4 <i>3.03</i>	79	
Reduction deformity, lower limbs	21 <i>1.03</i>	5 <i>1.77</i>	2 <i>1.01</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>1.07</i>	28	
Reduction deformity, upper limbs	49 <i>2.40</i>	3 <i>1.06</i>	4 <i>2.02</i>	1 <i>9.71</i>	0 <i>0.00</i>	0 <i>2.19</i>	57	
Renal agenesis/hypoplasia	51 <i>2.50</i>	4 <i>1.42</i>	7 <i>3.54</i>	1 <i>9.71</i>	2 <i>58.82</i>	0 <i>2.49</i>	65	
Spina bifida without anencephalus	77 <i>3.78</i>	9 <i>3.19</i>	14 <i>7.08</i>	1 <i>9.71</i>	0 <i>0.00</i>	2 <i>3.95</i>	103	+
Tetralogy of Fallot	62 <i>3.04</i>	15 <i>5.31</i>	3 <i>1.52</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>3.22</i>	84	
Transposition of great arteries	97 <i>4.76</i>	9 <i>3.19</i>	9 <i>4.55</i>	1 <i>9.71</i>	0 <i>0.00</i>	4 <i>4.61</i>	120	
Tricuspid valve atresia and stenosis	20 <i>0.98</i>	1 <i>0.35</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.81</i>	21	
Trisomy 13 (Patau syndrome)	14 <i>0.69</i>	0 <i>0.00</i>	4 <i>2.02</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.77</i>	20	
Trisomy 18 (Edwards syndrome)	17 <i>0.83</i>	3 <i>1.06</i>	2 <i>1.01</i>	1 <i>9.71</i>	2 <i>58.82</i>	0 <i>0.96</i>	25	
Ventricular septal defect	710 <i>34.82</i>	73 <i>25.86</i>	67 <i>33.88</i>	3 <i>29.13</i>	3 <i>88.24</i>	28 <i>33.93</i>	884	
Total Live Births	203908	28226	19775	1030	340	260559		

Indiana**Trisomy Counts and Rates by Maternal Age 2003-2005**

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
Down syndrome (Trisomy 21)	165 <i>7.05</i>	115 <i>43.12</i>	280 <i>10.75</i>
Trisomy 13 (Patau syndrome)	12 <i>0.51</i>	8 <i>3.00</i>	20 <i>0.77</i>
Trisomy 18 (Edwards syndrome)	12 <i>0.51</i>	13 <i>4.87</i>	25 <i>0.96</i>
Total Live Births	233892	26667	260559

(**) Total includes unknown age

(+)Notes:

1: Case ascertainment in Indiana is a combination of passive ascertainment by electronic submission of hospital discharge information and active ascertainment through chart auditing of 45 targeted conditions identified through hospital discharge ICD9-CM codes.

2: Data includes children whose conditions were classified with a status of either “confirmed” or “probable” based on the abstracted information.

3: Birth defects rates based on fewer than 20 cases are unstable.

4: 2003-2005, Cleft lip with and without cleft palate: a more stringent classification was recently adopted. The new classification was applied to data from 2003 and 2004 as well as 2005.

5: 2003-2005, Congenital cataracts: 3 children born in 2005 were identified with congenital cataracts. Further review of 2003 and 2004 data revealed that 4 children had previously been misidentified as having congenital cataracts.

6: 2003-2005, Patent ductus arteriosus: a more stringent classification was recently adopted. The new classification was only applied to 2005 data.

7: 2003-2005, Pulmonary valve atresia and stenosis: a more stringent classification was recently adopted. The new classification was only applied to 2005 data.

8: 2003-2005, Report based on data as of 07/21/2008. As additional information is constantly entering the system, updated 2003, 2004, and 2005 data will be submitted along with the 2006 data in the next report.

9: 2003-2005, Anencephalus, Livebirths only

10: 2003-2005, Spina bifida without anencephalus, Livebirths only

Iowa
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Amniotic bands	21 <i>1.27</i>	2 <i>3.01</i>	0 <i>0.00</i>	3 <i>6.64</i>	0 <i>0.00</i>	0	26 <i>1.36</i>	
Anencephalus	41 <i>2.49</i>	1 <i>1.50</i>	7 <i>5.14</i>	1 <i>2.21</i>	0 <i>0.00</i>	3	53 <i>2.78</i>	+
Aniridia	1 <i>0.06</i>	1 <i>1.50</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	3	5 <i>0.26</i>	
Anophthalmia/ microphthalmia	45 <i>2.73</i>	1 <i>1.50</i>	5 <i>3.67</i>	0 <i>0.00</i>	0 <i>0.00</i>	1	52 <i>2.72</i>	
Anotia/microtia	44 <i>2.67</i>	1 <i>1.50</i>	11 <i>8.07</i>	1 <i>2.21</i>	0 <i>0.00</i>	0	57 <i>2.99</i>	
Aortic valve stenosis	66 <i>4.00</i>	1 <i>1.50</i>	2 <i>1.47</i>	0 <i>0.00</i>	0 <i>0.00</i>	2	71 <i>3.72</i>	
Atrial septal defect	468 <i>28.39</i>	29 <i>43.64</i>	34 <i>24.96</i>	15 <i>33.21</i>	0 <i>0.00</i>	8	554 <i>29.01</i>	
Biliary atresia	10 <i>0.61</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1	11 <i>0.58</i>	
Bladder exstrophy	11 <i>0.67</i>	0 <i>0.00</i>	1 <i>0.73</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	12 <i>0.63</i>	
Choanal atresia	34 <i>2.06</i>	1 <i>1.50</i>	1 <i>0.73</i>	0 <i>0.00</i>	0 <i>0.00</i>	2	38 <i>1.99</i>	
Cleft lip with and without cleft palate	210 <i>12.74</i>	3 <i>4.51</i>	15 <i>11.01</i>	4 <i>8.86</i>	1 <i>9.46</i>	5	238 <i>12.46</i>	
Cleft palate without cleft lip	125 <i>7.58</i>	6 <i>9.03</i>	11 <i>8.07</i>	1 <i>2.21</i>	0 <i>0.00</i>	4	147 <i>7.70</i>	
Coarctation of aorta	77 <i>4.67</i>	3 <i>4.51</i>	2 <i>1.47</i>	2 <i>4.43</i>	0 <i>0.00</i>	0	84 <i>4.40</i>	
Common truncus	17 <i>1.03</i>	0 <i>0.00</i>	1 <i>0.73</i>	0 <i>0.00</i>	0 <i>0.00</i>	1	19 <i>1.00</i>	
Congenital cataract	32 <i>1.94</i>	3 <i>4.51</i>	3 <i>2.20</i>	0 <i>0.00</i>	0 <i>0.00</i>	2	40 <i>2.09</i>	
Congenital hip dislocation	143 <i>8.67</i>	1 <i>1.50</i>	15 <i>11.01</i>	2 <i>4.43</i>	0 <i>0.00</i>	1	162 <i>8.48</i>	
Diaphragmatic hernia	14 <i>0.85</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	14 <i>0.73</i>	
Down syndrome (Trisomy 21)	262 <i>15.89</i>	6 <i>9.03</i>	24 <i>17.62</i>	8 <i>17.71</i>	0 <i>0.00</i>	8	308 <i>16.13</i>	
Ebstein anomaly	18 <i>1.09</i>	0 <i>0.00</i>	1 <i>0.73</i>	0 <i>0.00</i>	0 <i>0.00</i>	1	20 <i>1.05</i>	
Encephalocele	10 <i>0.61</i>	3 <i>4.51</i>	3 <i>2.20</i>	0 <i>0.00</i>	0 <i>0.00</i>	1	17 <i>0.89</i>	
Endocardial cushion defect	107 <i>6.49</i>	4 <i>6.02</i>	7 <i>5.14</i>	2 <i>4.43</i>	1 <i>9.46</i>	4	125 <i>6.55</i>	
Esophageal atresia/ tracheoesophageal fistula	41 <i>2.49</i>	1 <i>1.50</i>	1 <i>0.73</i>	3 <i>6.64</i>	0 <i>0.00</i>	1	47 <i>2.46</i>	
Fetus or newborn affected by maternal alcohol use	5 <i>0.30</i>	0 <i>0.00</i>	1 <i>0.73</i>	0 <i>0.00</i>	0 <i>0.00</i>	1	7 <i>0.37</i>	
Gastroschisis	80 <i>4.85</i>	2 <i>3.01</i>	10 <i>7.34</i>	2 <i>4.43</i>	1 <i>9.46</i>	0	95 <i>4.98</i>	
Hirschsprung disease (congenital megacolon)	33 <i>2.00</i>	2 <i>3.01</i>	3 <i>2.20</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	38 <i>1.99</i>	
Hydrocephalus without Spina Bifida	170 <i>10.31</i>	7 <i>10.53</i>	9 <i>6.61</i>	10 <i>22.14</i>	0 <i>0.00</i>	5	201 <i>10.53</i>	
Hypoplastic left heart syndrome	45 <i>2.73</i>	0 <i>0.00</i>	1 <i>0.73</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	46 <i>2.41</i>	
Hypospadias and Epispadias	139 <i>8.43</i>	5 <i>7.52</i>	5 <i>3.67</i>	8 <i>17.71</i>	0 <i>0.00</i>	7	164 <i>8.59</i>	+
Microcephalus	140 <i>8.49</i>	13 <i>19.56</i>	13 <i>9.54</i>	2 <i>4.43</i>	0 <i>0.00</i>	6	174 <i>9.11</i>	
Obstructive genitourinary defect	456 <i>27.66</i>	14 <i>21.07</i>	33 <i>24.22</i>	11 <i>24.35</i>	1 <i>9.46</i>	20	535 <i>28.02</i>	

Iowa**Birth Defects Counts and Rates 2001-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	47 2.85	1 1.50	2 1.47	0 0.00	0 0.00	1 1	51 2.67	
Patent ductus arteriosus	473 28.69	16 24.07	36 26.42	12 26.57	1 9.46	5 5	543 28.44	
Pulmonary valve atresia and stenosis	164 9.95	9 13.54	14 10.28	3 6.64	0 0.00	5 5	195 10.21	
Pyloric stenosis	527 31.96	6 9.03	42 30.83	3 6.64	3 28.38	10 10	591 30.95	
Rectal and large intestinal atresia/stenosis	76 4.61	3 4.51	13 9.54	1 2.21	0 0.00	2 2	95 4.98	
Reduction deformity, lower limbs	43 2.61	4 6.02	2 1.47	3 6.64	0 0.00	1 1	53 2.78	
Reduction deformity, upper limbs	88 5.34	6 9.03	3 2.20	5 11.07	1 9.46	0 0	103 5.39	
Renal agenesis/hypoplasia	121 7.34	6 9.03	7 5.14	4 8.86	0 0.00	5 5	143 7.49	
Spina bifida without anencephalus	87 5.28	2 3.01	4 2.94	2 4.43	0 0.00	3 3	98 5.13	+
Tetralogy of Fallot	54 3.28	4 6.02	5 3.67	3 6.64	1 9.46	2 2	69 3.61	
Transposition of great arteries	91 5.52	3 4.51	6 4.40	0 0.00	0 0.00	1 1	101 5.29	
Tricuspid valve atresia and stenosis	14 0.85	1 1.50	3 2.20	0 0.00	0 0.00	3 3	21 1.10	
Trisomy 13 (Patau syndrome)	25 1.52	0 0.00	1 0.73	0 0.00	0 0.00	0 0	26 1.36	
Trisomy 18 (Edwards syndrome)	43 2.61	2 3.01	5 3.67	1 2.21	0 0.00	2 2	53 2.78	
Ventricular septal defect	792 48.04	35 52.66	68 49.91	15 33.21	2 18.92	23 23	935 48.97	
Total Live Births	164870	6646	13624	4517	1057		190947	

Iowa**Trisomy Counts and Rates by Maternal Age 2001-2005**

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
Down syndrome (Trisomy 21)	179 10.53	128 61.18	308 16.13
Trisomy 13 (Patau syndrome)	16 0.94	10 4.78	26 1.36
Trisomy 18 (Edwards syndrome)	31 1.82	22 10.51	53 2.78
Total Live Births	170005	20923	190947

(**) Total includes unknown age

(+) Notes:

- 1: 2001-2005, Anencephalus, Include livebirths, stillbirths, terminations
- 2: 2001-2005, Spina bifida without anencephalus, Include livebirths, stillbirths, terminations
- 3: 2001-2005, Hypospadias and Epispadias, Excludes hypospadias NOS and first degree hypospadias

Kentucky Birth Defects Counts and Rates 2004-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/ Other		
Anencephalus	15 <i>1.57</i>	2 <i>2.10</i>	1 <i>2.18</i>	0 <i>0.00</i>	0 <i>0.00</i>	6 <i>0.00</i>	24 <i>2.15</i>	+
Aniridia	1 <i>0.10</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.09</i>	
Anophthalmia/ microphthalmia	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Anotia/microtia	4 <i>0.42</i>	2 <i>2.10</i>	3 <i>6.54</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	9 <i>0.81</i>	
Aortic valve stenosis	18 <i>1.88</i>	2 <i>2.10</i>	1 <i>2.18</i>	1 <i>6.70</i>	0 <i>0.00</i>	1 <i>0.00</i>	23 <i>2.06</i>	
Atrial septal defect	657 <i>68.65</i>	145 <i>152.50</i>	21 <i>45.75</i>	7 <i>46.89</i>	0 <i>0.00</i>	2 <i>0.00</i>	832 <i>74.43</i>	
Biliary atresia	4 <i>0.42</i>	0 <i>0.00</i>	1 <i>2.18</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	5 <i>0.45</i>	
Bladder exstrophy	6 <i>0.63</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	6 <i>0.54</i>	
Choanal atresia	16 <i>1.67</i>	1 <i>1.05</i>	1 <i>2.18</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.00</i>	19 <i>1.70</i>	
Cleft lip with and without cleft palate	14 <i>1.46</i>	1 <i>1.05</i>	3 <i>6.54</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	18 <i>1.61</i>	
Cleft palate without cleft lip	40 <i>4.18</i>	3 <i>3.16</i>	3 <i>6.54</i>	1 <i>6.70</i>	0 <i>0.00</i>	0 <i>0.00</i>	47 <i>4.20</i>	
Coarctation of aorta	64 <i>6.69</i>	6 <i>6.31</i>	4 <i>8.71</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.00</i>	76 <i>6.80</i>	
Common truncus	1 <i>0.10</i>	1 <i>1.05</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.18</i>	
Congenital cataract	9 <i>0.94</i>	1 <i>1.05</i>	1 <i>2.18</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	11 <i>0.98</i>	
Congenital hip dislocation	92 <i>9.61</i>	2 <i>2.10</i>	6 <i>13.07</i>	1 <i>6.70</i>	0 <i>0.00</i>	1 <i>0.00</i>	102 <i>9.13</i>	
Diaphragmatic hernia	21 <i>2.19</i>	2 <i>2.10</i>	3 <i>6.54</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	26 <i>2.33</i>	
Down syndrome (Trisomy 21)	125 <i>13.06</i>	14 <i>14.72</i>	10 <i>21.79</i>	5 <i>33.49</i>	0 <i>0.00</i>	0 <i>0.00</i>	154 <i>13.78</i>	
Ebstein anomaly	8 <i>0.84</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	8 <i>0.72</i>	
Encephalocele	5 <i>0.52</i>	0 <i>0.00</i>	1 <i>2.18</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	6 <i>0.54</i>	
Endocardial cushion defect	35 <i>3.66</i>	4 <i>4.21</i>	2 <i>4.36</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>0.00</i>	44 <i>3.94</i>	
Esophageal atresia/ tracheoesophageal fistula	29 <i>3.03</i>	0 <i>0.00</i>	1 <i>2.18</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.00</i>	32 <i>2.86</i>	
Fetus or newborn affected by maternal alcohol use	7 <i>0.73</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	7 <i>0.63</i>	
Gastroschisis	22 <i>2.30</i>	0 <i>0.00</i>	2 <i>4.36</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	24 <i>2.15</i>	
Hirschsprung disease (congenital megacolon)	19 <i>1.99</i>	3 <i>3.16</i>	2 <i>4.36</i>	1 <i>6.70</i>	0 <i>0.00</i>	5 <i>0.00</i>	30 <i>2.68</i>	
Hydrocephalus without Spina Bifida	26 <i>2.72</i>	6 <i>6.31</i>	4 <i>8.71</i>	1 <i>6.70</i>	0 <i>0.00</i>	0 <i>0.00</i>	37 <i>3.31</i>	
Hypoplastic left heart syndrome	17 <i>1.78</i>	4 <i>4.21</i>	2 <i>4.36</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.00</i>	25 <i>2.24</i>	
Hypospadias and Epispadias	399 <i>41.69</i>	23 <i>24.19</i>	13 <i>28.32</i>	2 <i>13.40</i>	0 <i>0.00</i>	36 <i>0.00</i>	475 <i>42.50</i>	
Microcephalus	30 <i>3.13</i>	3 <i>3.16</i>	3 <i>6.54</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	36 <i>3.22</i>	
Obstructive genitourinary defect	195 <i>20.38</i>	22 <i>23.14</i>	8 <i>17.43</i>	4 <i>26.79</i>	0 <i>0.00</i>	0 <i>0.00</i>	229 <i>20.49</i>	

Kentucky

Birth Defects Counts and Rates 2004-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	5 0.52	0 0.00	1 2.18	0 0.00	0 0.00	0 0	6 0.54	
Patent ductus arteriosus	324 33.86	80 84.14	13 28.32	2 13.40	3 225.56	2 37.93	424 37.93	
Pulmonary valve atresia and stenosis	67 7.00	7 7.36	1 2.18	1 6.70	0 0.00	6 7.34	82 7.34	
Pyloric stenosis	355 37.10	10 10.52	13 28.32	3 20.09	0 0.00	11 35.07	392 35.07	
Rectal and large intestinal atresia/stenosis	35 3.66	6 6.31	2 4.36	2 13.40	0 0.00	6 4.56	51 4.56	
Reduction deformity, lower limbs	13 1.36	2 2.10	2 4.36	0 0.00	0 0.00	0 1.52	17 1.52	
Reduction deformity, upper limbs	25 2.61	4 4.21	2 4.36	0 0.00	0 0.00	0 2.77	31 2.77	
Renal agenesis/hypoplasia	27 2.82	2 2.10	3 6.54	0 0.00	0 0.00	4 3.22	36 3.22	
Spina bifida without anencephalus	14 1.46	2 2.10	2 4.36	0 0.00	0 0.00	0 4.12	46 4.12	+
Tetralogy of Fallot	38 3.97	2 2.10	0 0.00	1 6.70	0 0.00	4 4.03	45 4.03	
Transposition of great arteries	30 3.13	5 5.26	0 0.00	1 6.70	0 0.00	2 3.40	38 3.40	
Tricuspid valve atresia and stenosis	7 0.73	2 2.10	0 0.00	1 6.70	0 0.00	0 0.89	10 0.89	
Trisomy 13 (Patau syndrome)	5 0.52	0 0.00	0 0.00	0 0.00	0 0.00	0 0.45	5 0.45	
Trisomy 18 (Edwards syndrome)	6 0.63	2 2.10	0 0.00	0 0.00	0 0.00	0 0.72	8 0.72	
Ventricular septal defect	442 46.19	60 63.10	28 61.00	4 26.79	4 300.75	1 48.22	539 48.22	
Total Live Births	95697	9508	4590	1493	133	111776		

Kentucky

Trisomy Counts and Rates by Maternal Age 2004-2005

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
Down syndrome (Trisomy 21)	93 9.23	56 51.11	154 13.78
Trisomy 13 (Patau syndrome)	3 0.30	2 1.83	5 0.45
Trisomy 18 (Edwards syndrome)	3 0.30	3 2.74	9 0.81
Total Live Births	100783	10956	111776

(**) Total includes unknown age

(+) Notes:

- 1: 2004-2005, Anencephalus, Include livebirths and stillbirths
- 2: 2004-2005, Spina bifida without anencephalus, Include livebirths and

Maryland

Birth Defects Counts and Rates 2001-2004

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Anencephalus	37 2.11	23 2.66	3 1.27	0 0.00	0 0.00	12 2.73	76 2.73	+
Cleft lip with and without cleft palate	191 10.89	66 7.64	6 2.54	2 1.24	0 0.00	40 10.94	305 10.94	
Cleft palate without cleft lip	95 5.42	24 2.78	0 0.00	0 0.00	0 0.00	16 4.84	135 4.84	
Congenital hip dislocation	55 3.14	11 1.27	0 0.00	0 0.00	0 0.00	14 2.87	80 2.87	
Down syndrome (Trisomy 21)	241 13.74	89 10.30	4 1.69	1 0.62	0 0.00	42 13.52	377 13.52	
Esophageal atresia/ tracheoesophageal fistula	35 2.00	12 1.39	0 0.00	0 0.00	0 0.00	10 2.04	57 2.04	
Hydrocephalus without Spina Bifida	72 4.11	40 4.63	1 0.42	0 0.00	0 0.00	10 4.41	123 4.41	
Hypospadias and Epispadias	409 23.32	176 20.36	3 1.27	1 0.62	0 0.00	50 22.92	639 22.92	
Rectal and large intestinal atresia/stenosis	64 3.65	17 1.97	0 0.00	0 0.00	0 0.00	10 3.26	91 3.26	
Reduction deformity, lower limbs	39 2.22	24 2.78	0 0.00	0 0.00	0 0.00	8 2.55	71 2.55	
Reduction deformity, upper limbs	64 3.65	29 3.35	2 0.85	0 0.00	0 0.00	14 3.91	109 3.91	
Spina bifida without anencephalus	69 3.93	20 2.31	1 0.42	0 0.00	0 0.00	10 3.62	101 3.62	+
Total Live Births	175384	86441	23627	16134	815	278774	278774	+

Maryland

Trisomy Counts and Rates by Maternal Age 2001-2004

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
Down syndrome (Trisomy 21)	191 8.36	186 37.09	377 13.52
Total Live Births	228590	50149	278774

(**) Total includes unknown age

(+) Notes:

- 1: 2001-2004, Anencephalus, Cut off 20 weeks
- 2: 2001-2004, Spina bifida without mention of hydrocephalus, Cut off 20 weeks
- 3: 2001-2004, Total Live Births, white/ black and hispanic/ non hispanic are recorded separately. So, white / black includes white hispanic/ black hispanic

Massachusetts
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/ Other		
Amniotic bands	16 <i>0.56</i>	5 <i>1.68</i>	4 <i>0.82</i>	4 <i>1.54</i>	1 <i>13.19</i>	0	30 <i>0.76</i>	
Anencephalus	11 <i>0.39</i>	2 <i>0.67</i>	7 <i>1.44</i>	1 <i>0.38</i>	0 <i>0.00</i>	0	21 <i>0.53</i>	+
Aniridia	9 <i>0.32</i>	1 <i>0.34</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	10 <i>0.25</i>	
Anophthalmia/ microphthalmia	23 <i>0.81</i>	3 <i>1.01</i>	4 <i>0.82</i>	3 <i>1.15</i>	0 <i>0.00</i>	2	35 <i>0.88</i>	
Anotia/microtia	37 <i>1.30</i>	3 <i>1.01</i>	11 <i>2.26</i>	6 <i>2.31</i>	0 <i>0.00</i>	1	58 <i>1.46</i>	
Aortic valve stenosis	49 <i>1.73</i>	8 <i>2.68</i>	9 <i>1.85</i>	2 <i>0.77</i>	0 <i>0.00</i>	0	68 <i>1.71</i>	
Atrial septal defect	513 <i>18.09</i>	94 <i>31.50</i>	90 <i>18.53</i>	40 <i>15.38</i>	1 <i>13.19</i>	14	752 <i>18.94</i>	
Biliary atresia	10 <i>0.35</i>	2 <i>0.67</i>	4 <i>0.82</i>	1 <i>0.38</i>	0 <i>0.00</i>	0	17 <i>0.43</i>	
Bladder exstrophy	11 <i>0.39</i>	2 <i>0.67</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	13 <i>0.33</i>	
Choanal atresia	16 <i>0.56</i>	0 <i>0.00</i>	2 <i>0.41</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	18 <i>0.45</i>	
Cleft lip with and without cleft palate	206 <i>7.26</i>	15 <i>5.03</i>	49 <i>10.09</i>	21 <i>8.07</i>	0 <i>0.00</i>	7	298 <i>7.50</i>	
Cleft palate without cleft lip	165 <i>5.82</i>	15 <i>5.03</i>	32 <i>6.59</i>	17 <i>6.54</i>	0 <i>0.00</i>	5	234 <i>5.89</i>	
Coarctation of aorta	140 <i>4.94</i>	14 <i>4.69</i>	14 <i>2.88</i>	8 <i>3.08</i>	1 <i>13.19</i>	7	184 <i>4.63</i>	
Common truncus	11 <i>0.39</i>	2 <i>0.67</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	13 <i>0.33</i>	
Congenital cataract	54 <i>1.90</i>	8 <i>2.68</i>	11 <i>2.26</i>	2 <i>0.77</i>	0 <i>0.00</i>	1	76 <i>1.91</i>	+
Diaphragmatic hernia	69 <i>2.43</i>	7 <i>2.35</i>	13 <i>2.68</i>	7 <i>2.69</i>	0 <i>0.00</i>	0	96 <i>2.42</i>	
Down syndrome (Trisomy 21)	350 <i>12.34</i>	46 <i>15.41</i>	70 <i>14.41</i>	20 <i>7.69</i>	0 <i>0.00</i>	7	493 <i>12.42</i>	
Ebstein anomaly	12 <i>0.42</i>	1 <i>0.34</i>	4 <i>0.82</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	17 <i>0.43</i>	
Encephalocele	9 <i>0.32</i>	4 <i>1.34</i>	1 <i>0.21</i>	1 <i>0.38</i>	0 <i>0.00</i>	1	16 <i>0.40</i>	
Endocardial cushion defect	140 <i>4.94</i>	29 <i>9.72</i>	29 <i>5.97</i>	7 <i>2.69</i>	0 <i>0.00</i>	1	206 <i>5.19</i>	
Esophageal atresia/ tracheoesophageal fistula	78 <i>2.75</i>	4 <i>1.34</i>	11 <i>2.26</i>	4 <i>1.54</i>	0 <i>0.00</i>	2	99 <i>2.49</i>	
Gastroschisis	71 <i>2.50</i>	6 <i>2.01</i>	24 <i>4.94</i>	3 <i>1.15</i>	1 <i>13.19</i>	0	105 <i>2.64</i>	
Hirschsprung disease (congenital megacolon)	49 <i>1.73</i>	5 <i>1.68</i>	11 <i>2.26</i>	2 <i>0.77</i>	0 <i>0.00</i>	1	68 <i>1.71</i>	
Hydrocephalus without Spina Bifida	69 <i>2.43</i>	14 <i>4.69</i>	23 <i>4.73</i>	7 <i>2.69</i>	1 <i>13.19</i>	4	118 <i>2.97</i>	
Hypoplastic left heart syndrome	36 <i>1.27</i>	7 <i>2.35</i>	6 <i>1.24</i>	1 <i>0.38</i>	0 <i>0.00</i>	2	52 <i>1.31</i>	
Hypospadias and Epispadias	346 <i>12.20</i>	30 <i>10.05</i>	43 <i>8.85</i>	28 <i>10.76</i>	2 <i>26.39</i>	2	451 <i>11.36</i>	+
Microcephalus	56 <i>1.97</i>	7 <i>2.35</i>	18 <i>3.71</i>	6 <i>2.31</i>	0 <i>0.00</i>	3	90 <i>2.27</i>	+
Obstructive genitourinary defect	278 <i>9.80</i>	29 <i>9.72</i>	51 <i>10.50</i>	22 <i>8.46</i>	0 <i>0.00</i>	5	385 <i>9.70</i>	+
Omphalocele	37 <i>1.30</i>	6 <i>2.01</i>	9 <i>1.85</i>	2 <i>0.77</i>	0 <i>0.00</i>	0	54 <i>1.36</i>	

Massachusetts
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Patent ductus arteriosus	418 14.74	82 27.48	67 13.79	36 13.84	2 26.39	8 15.44	613 15.44	+
Pulmonary valve atresia and stenosis	203 7.16	31 10.39	31 6.38	10 3.84	0 0.00	6 7.08	281 7.08	
Rectal and large intestinal atresia/stenosis	105 3.70	12 4.02	20 4.12	10 3.84	0 0.00	3 3.78	150 3.78	
Reduction deformity, lower limbs	31 1.09	5 1.68	7 1.44	3 1.15	0 0.00	3 1.23	49 1.23	
Reduction deformity, upper limbs	76 2.68	10 3.35	16 3.29	6 2.31	1 13.19	3 2.82	112 2.82	
Renal agenesis/hypoplasia	4 0.14	2 0.67	2 0.41	2 0.77	0 0.00	0 0.25	10 0.25	+
Spina bifida without anencephalus	47 1.66	5 1.68	9 1.85	2 0.77	0 0.00	1 1.61	64 1.61	
Tetralogy of Fallot	133 4.69	12 4.02	31 6.38	13 5.00	0 0.00	3 4.84	192 4.84	
Transposition of great arteries	115 4.05	13 4.36	17 3.50	13 5.00	0 0.00	2 4.03	160 4.03	
Tricuspid valve atresia and stenosis	15 0.53	6 2.01	2 0.41	1 0.38	0 0.00	0 0.60	24 0.60	
Trisomy 13 (Patau syndrome)	12 0.42	3 1.01	5 1.03	1 0.38	0 0.00	3 0.60	24 0.60	
Trisomy 18 (Edwards syndrome)	35 1.23	6 2.01	6 1.24	6 2.31	0 0.00	0 1.33	53 1.33	
Ventricular septal defect	477 16.82	64 21.45	102 21.00	50 19.22	0 0.00	16 17.85	709 17.85	+
Total Live Births	283646	29842	48576	26013	758	397089		

Massachusetts**Trisomy Counts and Rates by Maternal Age 2001-2005**

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
	226	267	493
Down syndrome (Trisomy 21)	7.39	29.22	12.42
	14	10	24
Trisomy 13 (Patau syndrome)	0.46	1.09	0.60
	20	33	53
Trisomy 18 (Edwards syndrome)	0.65	3.61	1.33
Total Live Births	305715	91370	397089

(**) Total includes unknown age

(+)Notes:

- 1: Stillbirths are included. Terminations are not included.
- 2: Coding system is CDC/BPA.
- 3: Possible/probable cases are excluded.
- 4: Differences in numbers of birth defects from previous publications are the result of updated files.
- 5: Anencephalus: Includes livebirths and stillbirths that are ≥ 20 weeks gestation or weight at least 350 grams.
- 6: Spina bifida without anencephalus: Includes livebirths and stillbirths that are ≥ 20 weeks gestation or weight at least 350 grams.
- 7: Microcephalus: Defined as head circumference 2 std below normal.
- 8: Congenital cataract: Number increased from previous submissions due to addition of missing BPA codes from definition.
- 9: Ventricular septal defect: Excludes isolated muscular VSDs.
- 10: Patent ductus arteriosus: Change from previous years: wt < 2500 gms is excluded (included in past). We follow a stringent algorithm for coding PDA.
- 11: Renal agenesis/hypoplasia: Excludes isolated unilateral renal agenesis/hypoplasia.
- 12: Obstructive genitourinary defect: Excludes isolated diagnosis without surgical intervention and secondary diagnosis without postnatal confirmation.
- 13: Hypospadias and Epispadias: Excludes 1st degree hypospadias and epispadias.
- 14: 2004, Hypospadias and Epispadias: Number increased from previous 2004 submission due to underreporting by a hospital, which was corrected.

Michigan
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Anencephalus	45 <i>0.95</i>	14 <i>1.24</i>	4 <i>1.08</i>	0 <i>0.00</i>	0 <i>0.00</i>	18	81 <i>1.23</i>	
Aniridia	15 <i>0.32</i>	4 <i>0.35</i>	1 <i>0.27</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	20 <i>0.30</i>	
Anophthalmia/ microphthalmia	97 <i>2.05</i>	23 <i>2.04</i>	8 <i>2.15</i>	2 <i>0.92</i>	0 <i>0.00</i>	5	135 <i>2.06</i>	
Anotia/microtia	56 <i>1.18</i>	6 <i>0.53</i>	7 <i>1.88</i>	8 <i>3.67</i>	2 <i>5.89</i>	2	81 <i>1.23</i>	
Aortic valve stenosis	129 <i>2.73</i>	13 <i>1.15</i>	8 <i>2.15</i>	8 <i>3.67</i>	0 <i>0.00</i>	3	161 <i>2.45</i>	
Atrial septal defect	3446 <i>72.90</i>	957 <i>84.86</i>	317 <i>85.28</i>	130 <i>59.66</i>	18 <i>53.03</i>	144	5012 <i>76.37</i>	
Biliary atresia	38 <i>0.80</i>	28 <i>2.48</i>	1 <i>0.27</i>	1 <i>0.46</i>	0 <i>0.00</i>	3	71 <i>1.08</i>	
Bladder exstrophy	24 <i>0.51</i>	5 <i>0.44</i>	0 <i>0.00</i>	1 <i>0.46</i>	0 <i>0.00</i>	1	31 <i>0.47</i>	
Choanal atresia	87 <i>1.84</i>	19 <i>1.68</i>	10 <i>2.69</i>	1 <i>0.46</i>	0 <i>0.00</i>	1	118 <i>1.80</i>	
Cleft lip with and without cleft palate	516 <i>10.92</i>	78 <i>6.92</i>	44 <i>11.84</i>	19 <i>8.72</i>	7 <i>20.62</i>	21	685 <i>10.44</i>	
Cleft palate without cleft lip	259 <i>5.48</i>	56 <i>4.97</i>	13 <i>3.50</i>	9 <i>4.13</i>	2 <i>5.89</i>	14	353 <i>5.38</i>	
Coarctation of aorta	283 <i>5.99</i>	63 <i>5.59</i>	24 <i>6.46</i>	10 <i>4.59</i>	2 <i>5.89</i>	8	390 <i>5.94</i>	
Common truncus	62 <i>1.31</i>	11 <i>0.98</i>	4 <i>1.08</i>	2 <i>0.92</i>	1 <i>2.95</i>	7	87 <i>1.33</i>	
Congenital cataract	112 <i>2.37</i>	35 <i>3.10</i>	5 <i>1.35</i>	3 <i>1.38</i>	2 <i>5.89</i>	4	161 <i>2.45</i>	
Congenital hip dislocation	681 <i>14.41</i>	58 <i>5.14</i>	43 <i>11.57</i>	33 <i>15.14</i>	1 <i>2.95</i>	27	843 <i>12.85</i>	
Diaphragmatic hernia	149 <i>3.15</i>	22 <i>1.95</i>	13 <i>3.50</i>	9 <i>4.13</i>	1 <i>2.95</i>	12	206 <i>3.14</i>	
Down syndrome (Trisomy 21)	641 <i>13.56</i>	100 <i>8.87</i>	50 <i>13.45</i>	28 <i>12.85</i>	2 <i>5.89</i>	31	852 <i>12.98</i>	
Ebstein anomaly	99 <i>2.09</i>	15 <i>1.33</i>	3 <i>0.81</i>	3 <i>1.38</i>	1 <i>2.95</i>	3	124 <i>1.89</i>	
Encephalocele	38 <i>0.80</i>	22 <i>1.95</i>	7 <i>1.88</i>	0 <i>0.00</i>	0 <i>0.00</i>	5	72 <i>1.10</i>	
Endocardial cushion defect	234 <i>4.95</i>	53 <i>4.70</i>	11 <i>2.96</i>	14 <i>6.42</i>	1 <i>2.95</i>	14	327 <i>4.98</i>	
Esophageal atresia/ tracheoesophageal fistula	167 <i>3.53</i>	33 <i>2.93</i>	10 <i>2.69</i>	4 <i>1.84</i>	2 <i>5.89</i>	7	223 <i>3.40</i>	
Fetus or newborn affected by maternal alcohol use	44 <i>0.93</i>	34 <i>3.01</i>	6 <i>1.61</i>	1 <i>0.46</i>	1 <i>2.95</i>	0	86 <i>1.31</i>	
Hirschsprung disease (congenital megacolon)	135 <i>2.86</i>	48 <i>4.26</i>	7 <i>1.88</i>	7 <i>3.21</i>	0 <i>0.00</i>	7	204 <i>3.11</i>	
Hydrocephalus without Spina Bifida	401 <i>8.48</i>	173 <i>15.34</i>	31 <i>8.34</i>	14 <i>6.42</i>	6 <i>17.68</i>	24	649 <i>9.89</i>	
Hypoplastic left heart syndrome	201 <i>4.25</i>	46 <i>4.08</i>	13 <i>3.50</i>	9 <i>4.13</i>	1 <i>2.95</i>	14	284 <i>4.33</i>	
Hypospadias and Epispadias	1551 <i>32.81</i>	316 <i>28.02</i>	66 <i>17.76</i>	44 <i>20.19</i>	4 <i>11.79</i>	59	2040 <i>31.09</i>	
Microcephalus	399 <i>8.44</i>	144 <i>12.77</i>	40 <i>10.76</i>	25 <i>11.47</i>	3 <i>8.84</i>	17	628 <i>9.57</i>	
Obstructive genitourinary defect	1102 <i>23.31</i>	215 <i>19.06</i>	114 <i>30.67</i>	45 <i>20.65</i>	4 <i>11.79</i>	35	1515 <i>23.09</i>	
Patent ductus arteriosus	1396 <i>29.53</i>	368 <i>32.63</i>	112 <i>30.13</i>	55 <i>25.24</i>	8 <i>23.57</i>	2	1941 <i>29.58</i>	
Pulmonary valve atresia and stenosis	462 <i>9.77</i>	181 <i>16.05</i>	36 <i>9.68</i>	35 <i>16.06</i>	2 <i>5.89</i>	31	747 <i>11.38</i>	

Michigan

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Pyloric stenosis	926 <i>19.59</i>	111 <i>9.84</i>	59 <i>15.87</i>	14 <i>6.42</i>	3 <i>8.84</i>	21	1134 <i>17.28</i>	
Rectal and large intestinal atresia/stenosis	209 <i>4.42</i>	50 <i>4.43</i>	18 <i>4.84</i>	9 <i>4.13</i>	1 <i>2.95</i>	14	301 <i>4.59</i>	
Reduction deformity, lower limbs	87 <i>1.84</i>	29 <i>2.57</i>	7 <i>1.88</i>	3 <i>1.38</i>	0 <i>0.00</i>	4	130 <i>1.98</i>	
Reduction deformity, upper limbs	100 <i>2.12</i>	25 <i>2.22</i>	10 <i>2.69</i>	5 <i>2.29</i>	0 <i>0.00</i>	5	145 <i>2.21</i>	
Renal agenesis/hypoplasia	247 <i>5.23</i>	50 <i>4.43</i>	21 <i>5.65</i>	7 <i>3.21</i>	2 <i>5.89</i>	24	351 <i>5.35</i>	
Spina bifida without anencephalus	227 <i>4.80</i>	40 <i>3.55</i>	11 <i>2.96</i>	11 <i>5.05</i>	2 <i>5.89</i>	18	309 <i>4.71</i>	
Tetralogy of Fallot	236 <i>4.99</i>	56 <i>4.97</i>	25 <i>6.73</i>	10 <i>4.59</i>	0 <i>0.00</i>	12	339 <i>5.17</i>	
Transposition of great arteries	236 <i>4.99</i>	50 <i>4.43</i>	17 <i>4.57</i>	13 <i>5.97</i>	0 <i>0.00</i>	14	330 <i>5.03</i>	
Tricuspid valve atresia and stenosis	73 <i>1.54</i>	15 <i>1.33</i>	7 <i>1.88</i>	3 <i>1.38</i>	0 <i>0.00</i>	5	103 <i>1.57</i>	
Trisomy 13 (Patau syndrome)	33 <i>0.70</i>	11 <i>0.98</i>	5 <i>1.35</i>	3 <i>1.38</i>	0 <i>0.00</i>	10	62 <i>0.94</i>	
Trisomy 18 (Edwards syndrome)	55 <i>1.16</i>	22 <i>1.95</i>	4 <i>1.08</i>	5 <i>2.29</i>	0 <i>0.00</i>	13	99 <i>1.51</i>	
Ventricular septal defect	1905 <i>40.30</i>	375 <i>33.25</i>	150 <i>40.35</i>	104 <i>47.73</i>	9 <i>26.52</i>	82	2625 <i>40.00</i>	
Total Live Births	472720	112779	37171	21790	3394	8406	656260	+

Michigan

Trisomy Counts and Rates by Maternal Age 2001-2005

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
Down syndrome (Trisomy 21)	473 <i>8.35</i>	351 <i>40.89</i>	852 <i>12.98</i>
Trisomy 13 (Patau syndrome)	37 <i>0.65</i>	15 <i>1.75</i>	62 <i>0.94</i>
Trisomy 18 (Edwards syndrome)	54 <i>0.95</i>	33 <i>3.84</i>	99 <i>1.51</i>
Total Live Births	566157	85834	656260

(**) Total includes unknown age

(+)Notes:

1: 2001-2005, Total Live Births, Includes Hispanics in Asian/North American

Mississippi
Birth Defects Counts and Rates 2004
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Anencephalus	3 <i>1.33</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>0.70</i>	+
Aniridia	0 <i>0.11</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Anophthalmia/ microphthalmia	2 <i>0.89</i>	1 <i>0.54</i>	1 <i>9.51</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>0.93</i>	
Anotia/microtia	1 <i>0.44</i>	2 <i>1.08</i>	1 <i>9.51</i>	0 <i>0.00</i>	1 <i>31.85</i>	1 <i>0.00</i>	6 <i>1.40</i>	
Aortic valve stenosis	2 <i>0.89</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.89</i>	
Atrial septal defect	38 <i>16.90</i>	60 <i>32.44</i>	2 <i>19.03</i>	0 <i>0.00</i>	3 <i>95.54</i>	2 <i>0.00</i>	105 <i>23.53</i>	
Biliary atresia	1 <i>0.44</i>	3 <i>1.62</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>0.93</i>	
Bladder exstrophy	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Choanal atresia	2 <i>0.89</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.47</i>	
Cleft lip with and without cleft palate	26 <i>11.56</i>	15 <i>8.11</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>31.85</i>	1 <i>0.00</i>	43 <i>10.04</i>	
Cleft palate without cleft lip	18 <i>8.01</i>	8 <i>4.33</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>31.85</i>	0 <i>0.00</i>	27 <i>6.31</i>	
Coarctation of aorta	7 <i>3.11</i>	4 <i>2.16</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	11 <i>2.80</i>	
Common truncus	2 <i>0.89</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.47</i>	
Congenital cataract	0 <i>0.00</i>	2 <i>1.08</i>	0 <i>0.00</i>	1 <i>21.65</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>0.70</i>	
Congenital hip dislocation	5 <i>2.22</i>	6 <i>3.24</i>	1 <i>9.51</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	12 <i>2.80</i>	
Diaphragmatic hernia	1 <i>0.44</i>	3 <i>1.62</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.00</i>	6 <i>1.40</i>	
Down syndrome (Trisomy 21)	7 <i>3.11</i>	15 <i>8.11</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>31.85</i>	0 <i>0.00</i>	23 <i>5.37</i>	
Ebstein anomaly	1 <i>0.44</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.23</i>	
Encephalocele	1 <i>0.44</i>	4 <i>2.16</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	5 <i>1.17</i>	
Endocardial cushion defect	2 <i>0.89</i>	3 <i>1.62</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	5 <i>1.17</i>	
Esophageal atresia/ tracheoesophageal fistula	6 <i>2.67</i>	4 <i>2.16</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.00</i>	11 <i>2.57</i>	
Fetus or newborn affected by maternal alcohol use	1 <i>0.44</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.23</i>	
Gastrochisis	13 <i>5.78</i>	25 <i>13.52</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	38 <i>8.88</i>	
Hirschsprung disease (congenital megacolon)	3 <i>1.33</i>	8 <i>4.33</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>31.85</i>	0 <i>0.00</i>	12 <i>2.80</i>	
Hydrocephalus without Spina Bifida	11 <i>4.89</i>	16 <i>8.65</i>	3 <i>28.54</i>	1 <i>21.65</i>	1 <i>31.85</i>	0 <i>0.00</i>	32 <i>7.48</i>	
Hypoplastic left heart syndrome	1 <i>0.44</i>	5 <i>2.70</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	6 <i>1.40</i>	
Hypospadias and Epispadias	28 <i>12.45</i>	31 <i>16.76</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.00</i>	60 <i>14.02</i>	
Microcephalus	8 <i>3.56</i>	18 <i>9.73</i>	2 <i>19.03</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.00</i>	29 <i>6.77</i>	
Obstructive genitourinary defect	24 <i>10.67</i>	18 <i>9.73</i>	1 <i>9.51</i>	0 <i>0.00</i>	1 <i>31.85</i>	2 <i>0.00</i>	46 <i>10.75</i>	
Patent ductus arteriosus	54 <i>24.02</i>	62 <i>33.52</i>	1 <i>9.51</i>	0 <i>0.00</i>	2 <i>63.69</i>	0 <i>0.00</i>	119 <i>27.80</i>	

Mississippi

Birth Defects Counts and Rates 2004

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Pulmonary valve atresia and stenosis	11 4.89	10 5.41	0 0.00	0 0.00	0 0.00	0 0	21 4.91	
Pyloric stenosis	41 18.24	10 5.41	3 28.54	0 0.00	0 0.00	1 0	55 12.85	
Rectal and large intestinal atresia/stenosis	3 1.33	6 3.24	0 0.00	0 0.00	1 31.85	0 0	10 2.34	
Reduction deformity, lower limbs	0 0.00	1 0.54	0 0.00	0 0.00	0 0.00	0 0	1 0.23	
Reduction deformity, upper limbs	4 1.78	3 1.62	0 0.00	0 0.00	1 31.85	0 0	8 1.87	
Renal agenesis/hypoplasia	5 2.22	2 1.08	0 0.00	0 0.00	1 31.85	0 0	8 1.87	
Spina bifida without anencephalus	8 3.56	4 2.16	0 0.00	0 0.00	0 0.00	0 0	12 2.80	+
Tetralogy of Fallot	11 4.89	7 3.78	1 9.51	0 0.00	0 0.00	1 0	20 4.67	
Transposition of great arteries	8 3.56	5 2.70	0 0.00	0 0.00	0 0.00	0 0	13 3.04	
Tricuspid valve atresia and stenosis	1 0.44	3 1.62	0 0.00	0 0.00	0 0.00	0 0	4 0.93	
Trisomy 13 (Patau syndrome)	1 0.44	3 1.62	0 0.00	0 0.00	0 0.00	0 0	4 0.93	
Trisomy 18 (Edwards syndrome)	1 0.44	5 2.70	0 0.00	0 0.00	0 0.00	0 0	6 1.40	
Ventricular septal defect	63 28.02	50 27.03	1 9.51	0 0.00	1 31.85	2 0	117 27.33	
Total Live Births	22484	18496	1051	462	314		42809	

Mississippi

Trisomy Counts and Rates by Maternal Age 2004

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	18 4.55	5 15.57	23 5.37
Trisomy 13 (Patau syndrome)	3 0.76	1 3.11	4 0.93
Trisomy 18 (Edwards syndrome)	4 1.01	2 6.23	6 1.40
Total Live Births	39587	3212	42809

(**) Total includes unknown age

(+)Notes:

- 1: Anencephalus, Livebirths only
- 2: Spina bifida without anencephalus, Livebirths only

Nebraska
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/ Other		
Amniotic bands	3 <i>0.32</i>	0 <i>0.00</i>	1 <i>0.47</i>	1 <i>3.51</i>	0 <i>0.00</i>	0	5 <i>0.39</i>	
Anencephalus	20 <i>2.11</i>	4 <i>5.52</i>	7 <i>3.27</i>	2 <i>7.02</i>	2 <i>9.67</i>	0	35 <i>2.72</i>	+
Aniridia	2 <i>0.21</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	2 <i>0.16</i>	
Anophthalmia/ microphthalmia	8 <i>0.84</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>3.51</i>	0 <i>0.00</i>	0	9 <i>0.70</i>	
Anotia/microtia	3 <i>0.32</i>	0 <i>0.00</i>	1 <i>0.47</i>	1 <i>3.51</i>	0 <i>0.00</i>	0	5 <i>0.39</i>	
Aortic valve stenosis	23 <i>2.42</i>	0 <i>0.00</i>	1 <i>0.47</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	24 <i>1.87</i>	
Atrial septal defect	156 <i>16.44</i>	9 <i>12.41</i>	12 <i>5.61</i>	5 <i>17.55</i>	3 <i>14.51</i>	1	186 <i>14.47</i>	
Biliary atresia	5 <i>0.53</i>	0 <i>0.00</i>	3 <i>1.40</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	8 <i>0.62</i>	
Bladder exstrophy	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	0 <i>0.00</i>	
Choanal atresia	15 <i>1.58</i>	0 <i>0.00</i>	7 <i>3.27</i>	1 <i>3.51</i>	0 <i>0.00</i>	0	23 <i>1.79</i>	
Cleft lip with and without cleft palate	99 <i>10.43</i>	0 <i>0.00</i>	15 <i>7.01</i>	5 <i>17.55</i>	2 <i>9.67</i>	2	123 <i>9.57</i>	
Cleft palate without cleft lip	44 <i>4.64</i>	1 <i>1.38</i>	3 <i>1.40</i>	2 <i>7.02</i>	3 <i>14.51</i>	0	53 <i>4.12</i>	
Coarctation of aorta	60 <i>6.32</i>	1 <i>1.38</i>	4 <i>1.87</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	65 <i>5.06</i>	
Common truncus	4 <i>0.42</i>	0 <i>0.00</i>	2 <i>0.94</i>	0 <i>0.00</i>	1 <i>4.84</i>	0	7 <i>0.54</i>	
Congenital cataract	17 <i>1.79</i>	1 <i>1.38</i>	2 <i>0.94</i>	1 <i>3.51</i>	0 <i>0.00</i>	0	21 <i>1.63</i>	
Congenital hip dislocation	56 <i>5.90</i>	0 <i>0.00</i>	9 <i>4.21</i>	0 <i>0.00</i>	1 <i>4.84</i>	1	67 <i>5.21</i>	
Diaphragmatic hernia	27 <i>2.85</i>	1 <i>1.38</i>	3 <i>1.40</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	31 <i>2.41</i>	
Down syndrome (Trisomy 21)	172 <i>18.13</i>	12 <i>16.55</i>	24 <i>11.22</i>	3 <i>10.53</i>	2 <i>9.67</i>	0	213 <i>16.57</i>	
Ebstein anomaly	7 <i>0.74</i>	0 <i>0.00</i>	3 <i>1.40</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	10 <i>0.78</i>	
Encephalocele	7 <i>0.74</i>	0 <i>0.00</i>	2 <i>0.94</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	9 <i>0.70</i>	
Endocardial cushion defect	18 <i>1.90</i>	2 <i>2.76</i>	1 <i>0.47</i>	1 <i>3.51</i>	0 <i>0.00</i>	0	22 <i>1.71</i>	
Esophageal atresia/ tracheoesophageal fistula	26 <i>2.74</i>	1 <i>1.38</i>	1 <i>0.47</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	28 <i>2.18</i>	
Fetus or newborn affected by maternal alcohol use	1 <i>0.11</i>	1 <i>1.38</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>4.84</i>	0	3 <i>0.23</i>	
Gastroschisis	39 <i>4.11</i>	1 <i>1.38</i>	9 <i>4.21</i>	1 <i>3.51</i>	0 <i>0.00</i>	0	50 <i>3.89</i>	
Hirschsprung disease (congenital megacolon)	18 <i>1.90</i>	2 <i>2.76</i>	6 <i>2.81</i>	1 <i>3.51</i>	0 <i>0.00</i>	0	27 <i>2.10</i>	
Hydrocephalus without Spina Bifida	84 <i>8.85</i>	5 <i>6.90</i>	12 <i>5.61</i>	1 <i>3.51</i>	3 <i>14.51</i>	0	105 <i>8.17</i>	
Hypoplastic left heart syndrome	42 <i>4.43</i>	0 <i>0.00</i>	6 <i>2.81</i>	1 <i>3.51</i>	0 <i>0.00</i>	0	49 <i>3.81</i>	
Hypospadias and Epispadias	216 <i>22.76</i>	9 <i>12.41</i>	21 <i>9.82</i>	4 <i>14.04</i>	0 <i>0.00</i>	0	250 <i>19.45</i>	
Microcephalus	31 <i>3.27</i>	3 <i>4.14</i>	8 <i>3.74</i>	2 <i>7.02</i>	1 <i>4.84</i>	0	45 <i>3.50</i>	
Obstructive genitourinary defect	202 <i>21.29</i>	17 <i>23.45</i>	21 <i>9.82</i>	4 <i>14.04</i>	8 <i>38.68</i>	2	254 <i>19.76</i>	

Nebraska**Birth Defects Counts and Rates 2001-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	19 2.00	2 2.76	5 2.34	2 7.02	0 0.00	0 0	28 2.18	
Patent ductus arteriosus	173 18.23	14 19.31	24 11.22	3 10.53	1 4.84	2 0	217 16.88	+
Pulmonary valve atresia and stenosis	56 5.90	3 4.14	7 3.27	0 0.00	0 0.00	2 0	68 5.29	
Pyloric stenosis	193 20.34	7 9.66	26 12.16	0 0.00	2 9.67	0 0	228 17.73	
Rectal and large intestinal atresia/stenosis	41 4.32	4 5.52	7 3.27	2 7.02	0 0.00	0 0	54 4.20	
Reduction deformity, lower limbs	18 1.90	2 2.76	1 0.47	1 3.51	0 0.00	0 0	22 1.71	
Reduction deformity, upper limbs	36 3.79	4 5.52	4 1.87	0 0.00	0 0.00	1 0	45 3.50	
Renal agenesis/hypoplasia	46 4.85	3 4.14	10 4.68	0 0.00	0 0.00	1 0	60 4.67	
Spina bifida without anencephalus	70 7.38	3 4.14	13 6.08	0 0.00	0 0.00	0 0	86 6.69	+
Tetralogy of Fallot	27 2.85	0 0.00	4 1.87	0 0.00	1 4.84	0 0	32 2.49	
Transposition of great arteries	45 4.74	2 2.76	5 2.34	1 3.51	2 9.67	0 0	55 4.28	
Tricuspid valve atresia and stenosis	7 0.74	0 0.00	4 1.87	0 0.00	0 0.00	0 0	11 0.86	
Trisomy 13 (Patau syndrome)	21 2.21	0 0.00	3 1.40	0 0.00	0 0.00	0 0	24 1.87	
Trisomy 18 (Edwards syndrome)	36 3.79	1 1.38	3 1.40	1 3.51	1 4.84	0 0	42 3.27	
Ventricular septal defect	224 23.61	14 19.31	28 13.09	7 24.57	4 19.34	0 0	277 21.55	+
Total Live Births	94890	7250	21385	2849	2068		128565	

Nebraska**Trisomy Counts and Rates by Maternal Age 2001-2005**

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
Down syndrome (Trisomy 21)	114 10.03	99 66.41	213 16.57
Trisomy 13 (Patau syndrome)	17 1.50	7 4.70	24 1.87
Trisomy 18 (Edwards syndrome)	26 2.29	16 10.73	42 3.27
Total Live Births	113648	14908	128565

(**) Total includes unknown age

(+)Notes:

- 1: 2001-2005, Anencephalus, Include livebirths and stillbirths 20+ weeks gestation
- 2: 2001-2005, Spina bifida without anencephalus, Include livebirths and stillbirths 20+ weeks gestation
- 3: 2001-2005, Ventricular septal defect, NE Uses CDC/BPA Codes
- 4: 2001-2005, Patent ductus arteriosus, >= 2500 Grams

New Hampshire
Birth Defects Counts and Rates 2003-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Amniotic bands	2 <i>0.58</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.00</i>	4 <i>1.04</i>	
Anencephalus	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>0.00</i>	3 <i>0.78</i>	+
Aniridia	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.00</i>	1 <i>0.26</i>	
Anophthalmia/ microphthalmia	1 <i>0.29</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.26</i>	
Anotia/microtia	2 <i>0.58</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.00</i>	4 <i>1.04</i>	
Aortic valve stenosis	4 <i>1.17</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	7 <i>0.00</i>	11 <i>2.87</i>	
Atrial septal defect	14 <i>4.09</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	24 <i>0.00</i>	38 <i>9.90</i>	
Biliary atresia	1 <i>0.29</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.00</i>	3 <i>0.78</i>	
Bladder exstrophy	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Choanal atresia	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.00</i>	1 <i>0.26</i>	
Cleft lip with and without cleft palate	13 <i>3.80</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	19 <i>0.00</i>	32 <i>8.34</i>	
Cleft palate without cleft lip	12 <i>3.50</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>9.17</i>	0 <i>0.00</i>	17 <i>0.00</i>	30 <i>7.82</i>	
Coarctation of aorta	7 <i>2.04</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	7 <i>0.00</i>	14 <i>3.65</i>	
Common truncus	2 <i>0.58</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>0.00</i>	5 <i>1.30</i>	
Congenital cataract	1 <i>0.29</i>	1 <i>21.98</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.00</i>	3 <i>0.78</i>	
Congenital hip dislocation	14 <i>4.09</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	8 <i>0.00</i>	22 <i>5.73</i>	
Diaphragmatic hernia	3 <i>0.88</i>	1 <i>21.98</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.00</i>	6 <i>1.56</i>	
Down syndrome (Trisomy 21)	29 <i>8.47</i>	1 <i>21.98</i>	0 <i>0.00</i>	1 <i>9.17</i>	0 <i>0.00</i>	31 <i>0.00</i>	62 <i>16.16</i>	
Ebstein anomaly	1 <i>0.29</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>0.00</i>	4 <i>1.04</i>	
Encephalocele	2 <i>0.58</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.52</i>	
Endocardial cushion defect	7 <i>2.04</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	10 <i>0.00</i>	17 <i>4.43</i>	
Esophageal atresia/ tracheoesophageal fistula	5 <i>1.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>0.00</i>	8 <i>2.08</i>	
Fetus or newborn affected by maternal alcohol use	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Gastroschisis	6 <i>1.75</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	5 <i>0.00</i>	11 <i>2.87</i>	+
Hirschsprung disease (congenital megacolon)	2 <i>0.58</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.00</i>	3 <i>0.78</i>	
Hydrocephalus without Spina Bifida	5 <i>1.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>0.00</i>	9 <i>2.35</i>	
Hypoplastic left heart syndrome	2 <i>0.58</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	8 <i>0.00</i>	11 <i>2.87</i>	
Hypospadias and Epispadias	74 <i>21.61</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>18.35</i>	0 <i>0.00</i>	46 <i>0.00</i>	122 <i>31.79</i>	
Microcephalus	16 <i>4.67</i>	3 <i>65.93</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	8 <i>0.00</i>	27 <i>7.04</i>	
Obstructive genitourinary defect	23 <i>6.72</i>	1 <i>21.98</i>	0 <i>0.00</i>	1 <i>9.17</i>	0 <i>0.00</i>	32 <i>0.00</i>	57 <i>14.85</i>	

New Hampshire

Birth Defects Counts and Rates 2003-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	5 1.46	0 0.00	0 0.00	0 0.00	0 0.00	7 0.00	12 3.13	+
Patent ductus arteriosus	6 1.75	2 43.96	0 0.00	1 9.17	0 0.00	16 0.00	25 6.52	+
Pulmonary valve atresia and stenosis	16 4.67	0 0.00	0 0.00	0 0.00	0 0.00	28 0.00	44 11.47	
Pyloric stenosis	28 8.18	0 0.00	0 0.00	0 0.00	1 147.06	36 0.00	65 16.94	
Rectal and large intestinal atresia/stenosis	1 0.29	0 0.00	0 0.00	0 0.00	0 0.00	5 0.00	6 1.56	
Reduction deformity, lower limbs	1 0.29	0 0.00	0 0.00	0 0.00	0 0.00	3 0.00	4 1.04	
Reduction deformity, upper limbs	2 0.58	0 0.00	0 0.00	0 0.00	0 0.00	3 0.00	5 1.30	
Renal agenesis/hypoplasia	8 2.34	0 0.00	0 0.00	1 9.17	0 0.00	13 0.00	22 5.73	
Spina bifida without anencephalus	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	+
Tetralogy of Fallot	7 2.04	0 0.00	0 0.00	0 0.00	0 0.00	15 0.00	22 5.73	
Transposition of great arteries	2 0.58	0 0.00	0 0.00	1 9.17	0 0.00	4 0.00	7 1.82	
Tricuspid valve atresia and stenosis	1 0.29	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 0.26	
Trisomy 13 (Patau syndrome)	3 0.88	0 0.00	0 0.00	0 0.00	0 0.00	4 0.00	7 1.82	
Trisomy 18 (Edwards syndrome)	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	4 0.00	4 1.04	
Ventricular septal defect	52 15.19	1 21.98	0 0.00	1 9.17	0 0.00	58 0.00	112 29.19	+
Total Live Births	34241	455	1407	1090	68		38371	+

New Hampshire

Trisomy Counts and Rates by Maternal Age 2003-2005

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	24 7.57	21 31.46	62 16.16
Trisomy 13 (Patau syndrome)	3 0.95	2 3.00	6 1.56
Trisomy 18 (Edwards syndrome)	1 0.32	1 1.50	4 1.04
Total Live Births	31695	6675	38371

(**) Total includes unknown age

(+)Notes:

- 1: Data for all birth conditions includes data ascertained during calendar years 2003 through 2005.
- 2: Data for live births was obtained from the New Hampshire Department of Health and Human Services, Health Statistics and Data Management Section and is based on data directly from the State's birth certificate reports. * Due to a change in the birth certificate reporting system in mid-2004 the race field in 2004 and 2005 can show variability from year to year. Data includes live births from birth to age 1 year, stillbirths and terminations.
- 3: Data is for confirmed cases only, following medical chart review and use of the NBDPN Guidelines.
- 4: 2003-2005, Anencephalus, Include livebirths, stillbirths and terminations
- 5: 2003-2005, Spina bifida without anencephalus, Include livebirths, stillbirths and terminations
- 6: 2003-2005, Ventricular septal defect, Probable Cases NOT included
- 7: 2003-2005, Patent ductus arteriosus, Includes weight ≥ 2500 grams only

New Jersey
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/ Other		
Amniotic bands	18 <i>0.62</i>	9 <i>1.05</i>	5 <i>0.39</i>	4 <i>0.81</i>	0 <i>0.00</i>	0	36 <i>0.63</i>	
Anencephalus	4 <i>0.14</i>	6 <i>0.70</i>	13 <i>1.02</i>	0 <i>0.00</i>	0 <i>0.00</i>	1	24 <i>0.42</i>	+
Aniridia	4 <i>0.14</i>	2 <i>0.23</i>	1 <i>0.08</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	7 <i>0.12</i>	
Anophthalmia/ microphthalmia	24 <i>0.82</i>	9 <i>1.05</i>	10 <i>0.78</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	43 <i>0.75</i>	
Anotia/microtia	38 <i>1.30</i>	3 <i>0.35</i>	55 <i>4.30</i>	12 <i>2.44</i>	0 <i>0.00</i>	3	111 <i>1.93</i>	
Aortic valve stenosis	30 <i>1.03</i>	3 <i>0.35</i>	9 <i>0.70</i>	4 <i>0.81</i>	0 <i>0.00</i>	1	47 <i>0.82</i>	
Atrial septal defect	641 <i>27.73</i>	343 <i>50.72</i>	364 <i>34.75</i>	118 <i>29.59</i>	0 <i>0.00</i>	12	1478 <i>32.21</i>	+
Biliary atresia	10 <i>0.34</i>	2 <i>0.23</i>	2 <i>0.16</i>	3 <i>0.61</i>	0 <i>0.00</i>	1	18 <i>0.31</i>	
Bladder exstrophy	8 <i>0.27</i>	2 <i>0.23</i>	2 <i>0.16</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	12 <i>0.21</i>	
Choanal atresia	51 <i>1.74</i>	12 <i>1.40</i>	13 <i>1.02</i>	5 <i>1.01</i>	0 <i>0.00</i>	0	81 <i>1.41</i>	
Cleft lip with and without cleft palate	204 <i>6.98</i>	50 <i>5.82</i>	106 <i>8.29</i>	32 <i>6.50</i>	0 <i>0.00</i>	7	399 <i>6.94</i>	
Cleft palate without cleft lip	189 <i>6.46</i>	32 <i>3.72</i>	72 <i>5.63</i>	22 <i>4.47</i>	1 <i>15.82</i>	4	320 <i>5.57</i>	
Coarctation of aorta	97 <i>3.32</i>	28 <i>3.26</i>	28 <i>2.19</i>	11 <i>2.23</i>	0 <i>0.00</i>	2	166 <i>2.89</i>	
Common truncus	14 <i>0.48</i>	0 <i>0.00</i>	7 <i>0.55</i>	1 <i>0.20</i>	0 <i>0.00</i>	0	22 <i>0.38</i>	
Congenital cataract	48 <i>1.64</i>	17 <i>1.98</i>	22 <i>1.72</i>	4 <i>0.81</i>	0 <i>0.00</i>	1	92 <i>1.60</i>	
Congenital hip dislocation	267 <i>9.13</i>	14 <i>1.63</i>	91 <i>7.12</i>	23 <i>4.67</i>	0 <i>0.00</i>	4	399 <i>6.94</i>	
Diaphragmatic hernia	49 <i>1.68</i>	18 <i>2.09</i>	29 <i>2.27</i>	16 <i>3.25</i>	0 <i>0.00</i>	2	114 <i>1.98</i>	
Down syndrome (Trisomy 21)	367 <i>12.55</i>	99 <i>11.52</i>	178 <i>13.92</i>	49 <i>9.96</i>	0 <i>0.00</i>	9	702 <i>12.20</i>	
Ebstein anomaly	16 <i>0.55</i>	3 <i>0.35</i>	9 <i>0.70</i>	3 <i>0.61</i>	0 <i>0.00</i>	0	31 <i>0.54</i>	
Encephalocele	16 <i>0.55</i>	5 <i>0.58</i>	11 <i>0.86</i>	1 <i>0.20</i>	0 <i>0.00</i>	1	34 <i>0.59</i>	
Endocardial cushion defect	72 <i>2.46</i>	30 <i>3.49</i>	36 <i>2.81</i>	7 <i>1.42</i>	0 <i>0.00</i>	3	148 <i>2.58</i>	
Esophageal atresia/ tracheoesophageal fistula	87 <i>2.98</i>	19 <i>2.21</i>	31 <i>2.42</i>	5 <i>1.01</i>	0 <i>0.00</i>	0	142 <i>2.47</i>	
Fetus or newborn affected by maternal alcohol use	11 <i>0.38</i>	11 <i>1.28</i>	1 <i>0.08</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	23 <i>0.40</i>	
Gastroschisis	51 <i>1.74</i>	27 <i>3.14</i>	32 <i>2.50</i>	7 <i>1.42</i>	0 <i>0.00</i>	3	120 <i>2.09</i>	
Hirschsprung disease (congenital megacolon)	53 <i>1.81</i>	21 <i>2.44</i>	11 <i>0.86</i>	11 <i>2.23</i>	0 <i>0.00</i>	1	97 <i>1.69</i>	
Hydrocephalus without Spina Bifida	85 <i>2.91</i>	60 <i>6.98</i>	59 <i>4.61</i>	14 <i>2.84</i>	0 <i>0.00</i>	6	224 <i>3.90</i>	
Hypoplastic left heart syndrome	36 <i>1.23</i>	23 <i>2.68</i>	26 <i>2.03</i>	4 <i>0.81</i>	0 <i>0.00</i>	2	91 <i>1.58</i>	
Hypospadias and Epispadias	1521 <i>52.02</i>	320 <i>37.23</i>	306 <i>23.93</i>	142 <i>28.82</i>	6 <i>94.94</i>	25	2320 <i>40.38</i>	
Microcephalus	95 <i>3.25</i>	58 <i>6.75</i>	66 <i>5.16</i>	21 <i>4.26</i>	1 <i>15.82</i>	6	247 <i>4.30</i>	
Obstructive genitourinary defect	1047 <i>35.81</i>	171 <i>19.89</i>	371 <i>29.01</i>	158 <i>32.07</i>	1 <i>15.82</i>	15	1763 <i>30.69</i>	

New Jersey

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	28 <i>0.96</i>	16 <i>1.86</i>	13 <i>1.02</i>	2 <i>0.41</i>	0 <i>0.00</i>	1	60 <i>1.04</i>	
Patent ductus arteriosus	2216 <i>75.79</i>	732 <i>85.16</i>	840 <i>65.68</i>	298 <i>60.49</i>	3 <i>47.47</i>	18	4107 <i>71.48</i>	
Pulmonary valve atresia and stenosis	378 <i>12.93</i>	204 <i>23.73</i>	151 <i>11.81</i>	33 <i>6.70</i>	1 <i>15.82</i>	5	772 <i>13.44</i>	
Pyloric stenosis	617 <i>21.10</i>	98 <i>11.40</i>	330 <i>25.80</i>	27 <i>5.48</i>	2 <i>31.65</i>	12	1086 <i>18.90</i>	
Rectal and large intestinal atresia/stenosis	99 <i>3.39</i>	29 <i>3.37</i>	45 <i>3.52</i>	18 <i>3.65</i>	0 <i>0.00</i>	0	191 <i>3.32</i>	
Reduction deformity, lower limbs	38 <i>1.30</i>	27 <i>3.14</i>	27 <i>2.11</i>	6 <i>1.22</i>	0 <i>0.00</i>	0	98 <i>1.71</i>	
Reduction deformity, upper limbs	72 <i>2.46</i>	30 <i>3.49</i>	51 <i>3.99</i>	14 <i>2.84</i>	0 <i>0.00</i>	2	169 <i>2.94</i>	
Renal agenesis/hypoplasia	118 <i>4.04</i>	26 <i>3.02</i>	50 <i>3.91</i>	16 <i>3.25</i>	0 <i>0.00</i>	1	211 <i>3.67</i>	
Spina bifida without anencephalus	51 <i>1.74</i>	17 <i>1.98</i>	39 <i>3.05</i>	4 <i>0.81</i>	0 <i>0.00</i>	2	113 <i>1.97</i>	+
Tetralogy of Fallot	114 <i>3.90</i>	47 <i>5.47</i>	47 <i>3.67</i>	23 <i>4.67</i>	0 <i>0.00</i>	0	231 <i>4.02</i>	
Transposition of great arteries	116 <i>3.97</i>	33 <i>3.84</i>	48 <i>3.75</i>	14 <i>2.84</i>	0 <i>0.00</i>	5	216 <i>3.76</i>	
Tricuspid valve atresia and stenosis	30 <i>1.03</i>	17 <i>1.98</i>	17 <i>1.33</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	64 <i>1.11</i>	
Trisomy 13 (Patau syndrome)	16 <i>0.55</i>	5 <i>0.58</i>	11 <i>0.86</i>	1 <i>0.20</i>	0 <i>0.00</i>	0	33 <i>0.57</i>	
Trisomy 18 (Edwards syndrome)	25 <i>0.86</i>	12 <i>1.40</i>	12 <i>0.94</i>	3 <i>0.61</i>	0 <i>0.00</i>	0	52 <i>0.91</i>	
Ventricular septal defect	1894 <i>64.78</i>	437 <i>50.84</i>	783 <i>61.22</i>	247 <i>50.13</i>	3 <i>47.47</i>	23	3387 <i>58.95</i>	+
Total Live Births	292384	85960	127896	49267	632		574527	

New Jersey

Trisomy Counts and Rates by Maternal Age 2001-2005

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	319 <i>7.07</i>	361 <i>29.25</i>	702 <i>12.22</i>
Trisomy 13 (Patau syndrome)	20 <i>0.44</i>	13 <i>1.05</i>	33 <i>0.57</i>
Trisomy 18 (Edwards syndrome)	24 <i>0.53</i>	28 <i>2.27</i>	52 <i>0.91</i>
Total Live Births	451049	123402	574528

(**) Total includes unknown age

(+)Notes:

- 1: 2001-2005, Anencephalus, Livebirths only
- 2: 2001-2005, Spina bifida without anencephalus, Livebirths only
- 3: 2005, Ventricular septal defect, Only confirmed cases included.
4. Atrial Septal Defect: data are for 2002-2005.

New Mexico**Birth Defects Counts and Rates 2001-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Anencephalus	13 3.08	2 7.95	32 4.54	1 4.84	11 6.20	1 1.00	60 4.44	+
Cleft lip with and without cleft palate	47 11.12	4 15.90	83 11.78	1 4.84	41 23.11	0 0.00	176 13.03	
Cleft palate without cleft lip	28 6.63	1 3.98	46 6.53	0 0.00	13 7.33	1 1.00	89 6.59	
Down syndrome (Trisomy 21)	11 6.52	2 19.69	34 11.61	1 11.57	5 6.69	2 2.00	55 9.91	+
Gastroschisis	21 4.97	0 0.00	46 6.53	1 4.84	15 8.46	0 0.00	83 6.14	
Hypoplastic left heart syndrome	1 0.59	1 9.84	3 1.02	0 0.00	2 2.68	0 0.00	7 1.26	+
Hypospadias and Epispadias	32 18.96	3 29.53	24 8.20	2 23.15	5 6.69	0 0.00	66 11.89	+
Reduction deformity, lower limbs	7 4.15	0 0.00	1 0.34	0 0.00	2 2.68	0 0.00	10 1.80	+
Reduction deformity, upper limbs	7 4.15	0 0.00	4 1.37	0 0.00	3 4.02	0 0.00	14 2.52	+
Renal agenesis/hypoplasia	8 4.74	0 0.00	13 4.44	0 0.00	3 4.02	0 0.00	24 4.32	+
Spina bifida without anencephalus	22 5.21	1 3.98	41 5.82	0 0.00	11 6.20	1 1.00	76 5.63	+
Tetralogy of Fallot	1 0.59	0 0.00	6 2.05	0 0.00	0 0.00	0 0.00	7 1.26	+
Transposition of great arteries	2 1.18	0 0.00	4 1.37	0 0.00	2 2.68	0 0.00	8 1.44	+
Trisomy 13 (Patau syndrome)	1 0.59	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 0.18	+
Trisomy 18 (Edwards syndrome)	4 2.37	0 0.00	6 2.05	0 0.00	2 2.68	2 2.00	14 2.52	+
Total Live Births	42253	2515	70472	2067	17738		135098	+

New Mexico**Trisomy Counts and Rates by Maternal Age 2004-2005**

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
Down syndrome (Trisomy 21)	38 <i>7.44</i>	15 <i>33.84</i>	55 <i>9.91</i>
Trisomy 13 (Patau syndrome)	1 <i>0.20</i>	0 <i>0.00</i>	1 <i>0.18</i>
Trisomy 18 (Edwards syndrome)	9 <i>1.76</i>	3 <i>6.77</i>	14 <i>2.52</i>
Total Live Births	51075	4432	55526

(**) Total includes unknown age

(+)Notes:

- 1: All counts include occurrent births to NM residents only.
- 2: For Cleft palate and cleft lip with or without cleft palate, ICD9 749 with no information after the decimal is excluded.
- 3: Gastroschisis is determined based on review of procedure codes and medical records if diagnosis is not clear.
- 4: Still births/terminations at any gestational age are included. We do not distinguish stillbirths and terminations. All counts included under stillbirths.
- 5: 2001-2005, Anencephalus, Include livebirths and stillbirths
- 6: 2001-2005, Spina bifida without anencephalus, Include livebirths and stillbirths
- 7: 2004-2005, Transposition of great arteries, Includes 745.1, 2004-2005 data only
- 8: 2004-2005, Tetralogy of Fallot, 2004-2005 data only
- 9: 2004-2005, Hypoplastic left heart syndrome, 2004-2005 data only
- 10: 2004-2005, Renal agenesis/hypoplasia, 2004-2005 data only
- 11: 2004-2005, Hypospadias and Epispadias, 2004-2005 data only
- 12: 2004-2005, Reduction deformity, upper limbs, 2004-2005 data only
- 13: 2004-2005, Reduction deformity, lower limbs, 2004-2005 data only
- 14: 2004-2005, Trisomy 13 (Patau syndrome), 2004-2005 data only
- 15: 2004-2005, Down syndrome (Trisomy 21), 2004-2005 data only
- 16: 2004-2005, Trisomy 18 (Edwards syndrome), 2004-2005 data only

New York
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/ Other		
Amniotic bands	19 <i>0.30</i>	7 <i>0.32</i>	4 <i>0.14</i>	1 <i>0.10</i>	0 <i>0.00</i>	0	31 <i>0.25</i>	
Anencephalus	30 <i>0.47</i>	9 <i>0.41</i>	9 <i>0.33</i>	3 <i>0.31</i>	0 <i>0.00</i>	1	52 <i>0.42</i>	+
Aniridia	2 <i>0.03</i>	0 <i>0.00</i>	5 <i>0.18</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	7 <i>0.06</i>	
Anophthalmia/ microphthalmia	46 <i>0.72</i>	19 <i>0.87</i>	23 <i>0.83</i>	4 <i>0.41</i>	0 <i>0.00</i>	2	94 <i>0.75</i>	
Anotia/microtia	40 <i>0.63</i>	5 <i>0.23</i>	25 <i>0.90</i>	6 <i>0.61</i>	1 <i>3.54</i>	0	77 <i>0.62</i>	
Aortic valve stenosis	125 <i>1.95</i>	28 <i>1.29</i>	26 <i>0.94</i>	6 <i>0.61</i>	0 <i>0.00</i>	5	190 <i>1.52</i>	
Atrial septal defect	1875 <i>29.31</i>	1432 <i>65.84</i>	993 <i>35.94</i>	390 <i>39.79</i>	10 <i>35.44</i>	41	4741 <i>38.05</i>	
Biliary atresia	45 <i>0.70</i>	22 <i>1.01</i>	30 <i>1.09</i>	17 <i>1.73</i>	0 <i>0.00</i>	2	116 <i>0.93</i>	
Bladder exstrophy	15 <i>0.23</i>	1 <i>0.05</i>	4 <i>0.14</i>	2 <i>0.20</i>	0 <i>0.00</i>	0	22 <i>0.18</i>	
Choanal atresia	112 <i>1.75</i>	27 <i>1.24</i>	30 <i>1.09</i>	7 <i>0.71</i>	0 <i>0.00</i>	4	180 <i>1.44</i>	
Cleft lip with and without cleft palate	488 <i>7.63</i>	102 <i>4.69</i>	206 <i>7.46</i>	61 <i>6.22</i>	4 <i>14.17</i>	10	871 <i>6.99</i>	
Cleft palate without cleft lip	410 <i>6.41</i>	88 <i>4.05</i>	150 <i>5.43</i>	61 <i>6.22</i>	3 <i>10.63</i>	6	718 <i>5.76</i>	
Coarctation of aorta	305 <i>4.77</i>	95 <i>4.37</i>	101 <i>3.66</i>	26 <i>2.65</i>	1 <i>3.54</i>	6	534 <i>4.29</i>	
Common truncus	32 <i>0.50</i>	20 <i>0.92</i>	18 <i>0.65</i>	8 <i>0.82</i>	0 <i>0.00</i>	0	78 <i>0.63</i>	
Congenital cataract	46 <i>0.72</i>	22 <i>1.01</i>	21 <i>0.76</i>	6 <i>0.61</i>	1 <i>3.54</i>	0	96 <i>0.77</i>	
Congenital hip dislocation	689 <i>10.77</i>	103 <i>4.74</i>	276 <i>9.99</i>	84 <i>8.57</i>	2 <i>7.09</i>	10	1164 <i>9.34</i>	
Diaphragmatic hernia	112 <i>1.75</i>	31 <i>1.43</i>	40 <i>1.45</i>	12 <i>1.22</i>	1 <i>3.54</i>	5	201 <i>1.61</i>	
Down syndrome (Trisomy 21)	801 <i>12.52</i>	260 <i>11.95</i>	318 <i>11.51</i>	88 <i>8.98</i>	1 <i>3.54</i>	25	1493 <i>11.98</i>	
Ebstein anomaly	40 <i>0.63</i>	12 <i>0.55</i>	24 <i>0.87</i>	10 <i>1.02</i>	1 <i>3.54</i>	0	87 <i>0.70</i>	
Encephalocele	36 <i>0.56</i>	15 <i>0.69</i>	21 <i>0.76</i>	1 <i>0.10</i>	1 <i>3.54</i>	0	74 <i>0.59</i>	
Endocardial cushion defect	169 <i>2.64</i>	79 <i>3.63</i>	66 <i>2.39</i>	14 <i>1.43</i>	0 <i>0.00</i>	10	338 <i>2.71</i>	
Esophageal atresia/ tracheoesophageal fistula	179 <i>2.80</i>	39 <i>1.79</i>	51 <i>1.85</i>	16 <i>1.63</i>	0 <i>0.00</i>	0	285 <i>2.29</i>	
Fetus or newborn affected by maternal alcohol use	22 <i>0.34</i>	34 <i>1.56</i>	7 <i>0.25</i>	0 <i>0.00</i>	0 <i>0.00</i>	3	66 <i>0.53</i>	
Gastroschisis	119 <i>1.86</i>	39 <i>1.79</i>	69 <i>2.50</i>	4 <i>0.41</i>	2 <i>7.09</i>	3	236 <i>1.89</i>	
Hirschsprung disease (congenital megacolon)	161 <i>2.52</i>	67 <i>3.08</i>	62 <i>2.24</i>	22 <i>2.24</i>	0 <i>0.00</i>	2	314 <i>2.52</i>	
Hydrocephalus without Spina Bifida	372 <i>5.81</i>	235 <i>10.81</i>	228 <i>8.25</i>	56 <i>5.71</i>	0 <i>0.00</i>	7	898 <i>7.21</i>	
Hypoplastic left heart syndrome	150 <i>2.34</i>	58 <i>2.67</i>	63 <i>2.28</i>	10 <i>1.02</i>	0 <i>0.00</i>	1	282 <i>2.26</i>	
Hypospadias and Epispadias	2866 <i>44.80</i>	731 <i>33.61</i>	643 <i>23.27</i>	227 <i>23.16</i>	9 <i>31.89</i>	33	4509 <i>36.18</i>	
Microcephalus	220 <i>3.44</i>	191 <i>8.78</i>	170 <i>6.15</i>	36 <i>3.67</i>	1 <i>3.54</i>	3	621 <i>4.98</i>	
Obstructive genitourinary defect	2218 <i>34.67</i>	589 <i>27.08</i>	921 <i>33.33</i>	322 <i>32.85</i>	10 <i>35.44</i>	22	4082 <i>32.76</i>	

New York

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	81 <i>1.27</i>	39 <i>1.79</i>	32 <i>1.16</i>	5 <i>0.51</i>	1 <i>3.54</i>	3	161 <i>1.29</i>	
Patent ductus arteriosus	1194 <i>18.66</i>	713 <i>32.78</i>	388 <i>14.04</i>	160 <i>16.32</i>	10 <i>35.44</i>	28	2493 <i>20.01</i>	
Pulmonary valve atresia and stenosis	529 <i>8.27</i>	278 <i>12.78</i>	245 <i>8.87</i>	74 <i>7.55</i>	4 <i>14.17</i>	15	1145 <i>9.19</i>	
Pyloric stenosis	1252 <i>19.57</i>	200 <i>9.20</i>	624 <i>22.58</i>	91 <i>9.28</i>	13 <i>46.07</i>	12	2192 <i>17.59</i>	
Rectal and large intestinal atresia/stenosis	279 <i>4.36</i>	85 <i>3.91</i>	133 <i>4.81</i>	39 <i>3.98</i>	1 <i>3.54</i>	6	543 <i>4.36</i>	
Reduction deformity, lower limbs	69 <i>1.08</i>	23 <i>1.06</i>	20 <i>0.72</i>	9 <i>0.92</i>	1 <i>3.54</i>	0	122 <i>0.98</i>	
Reduction deformity, upper limbs	108 <i>1.69</i>	35 <i>1.61</i>	43 <i>1.56</i>	10 <i>1.02</i>	1 <i>3.54</i>	4	201 <i>1.61</i>	
Renal agenesis/hypoplasia	247 <i>3.86</i>	73 <i>3.36</i>	80 <i>2.90</i>	23 <i>2.35</i>	0 <i>0.00</i>	2	425 <i>3.41</i>	
Spina bifida without anencephalus	121 <i>1.89</i>	53 <i>2.44</i>	69 <i>2.50</i>	10 <i>1.02</i>	1 <i>3.54</i>	3	257 <i>2.06</i>	+
Tetralogy of Fallot	293 <i>4.58</i>	113 <i>5.20</i>	115 <i>4.16</i>	56 <i>5.71</i>	2 <i>7.09</i>	5	584 <i>4.69</i>	
Transposition of great arteries	290 <i>4.53</i>	85 <i>3.91</i>	112 <i>4.05</i>	37 <i>3.77</i>	0 <i>0.00</i>	4	528 <i>4.24</i>	
Tricuspid valve atresia and stenosis	52 <i>0.81</i>	39 <i>1.79</i>	26 <i>0.94</i>	9 <i>0.92</i>	1 <i>3.54</i>	2	129 <i>1.04</i>	
Trisomy 13 (Patau syndrome)	44 <i>0.69</i>	29 <i>1.33</i>	21 <i>0.76</i>	9 <i>0.92</i>	0 <i>0.00</i>	1	104 <i>0.83</i>	
Trisomy 18 (Edwards syndrome)	54 <i>0.84</i>	42 <i>1.93</i>	20 <i>0.72</i>	8 <i>0.82</i>	0 <i>0.00</i>	3	127 <i>1.02</i>	
Ventricular septal defect	2446 <i>38.23</i>	817 <i>37.57</i>	995 <i>36.01</i>	342 <i>34.89</i>	6 <i>21.26</i>	49	4655 <i>37.36</i>	
Total Live Births	639760	217488	276300	98014	2822		1246143	

New York

Trisomy Counts and Rates by Maternal Age 2001-2005

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	697 <i>6.96</i>	796 <i>32.57</i>	1493 <i>11.98</i>
Trisomy 13 (Patau syndrome)	70 <i>0.70</i>	34 <i>1.39</i>	104 <i>0.83</i>
Trisomy 18 (Edwards syndrome)	66 <i>0.66</i>	61 <i>2.50</i>	127 <i>1.02</i>
Total Live Births	1001471	244395	1246143

(**) Total includes unknown age

Notes:

- 1: NY state use BPA coding system.
- 2: 2001-2005, Anencephalus, Livebirths only
- 3: 2001-2005, Spina bifida without anencephalus, Livebirths only

North Carolina Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Amniotic bands	17 <i>0.81</i>	14 <i>1.70</i>	13 <i>2.48</i>	0 <i>0.00</i>	1 <i>2.04</i>	0	45 <i>1.25</i>	+
Anencephalus	60 <i>1.70</i>	23 <i>1.67</i>	32 <i>3.91</i>	2 <i>1.30</i>	2 <i>2.43</i>	22	141 <i>2.36</i>	+
Aniridia	17 <i>0.48</i>	10 <i>0.72</i>	5 <i>0.61</i>	2 <i>1.30</i>	1 <i>1.22</i>	0	35 <i>0.59</i>	
Anophthalmia/ microphthalmia	51 <i>1.45</i>	23 <i>1.67</i>	12 <i>1.47</i>	1 <i>0.65</i>	3 <i>3.65</i>	0	90 <i>1.51</i>	
Anotia/microtia	37 <i>1.05</i>	14 <i>1.01</i>	30 <i>3.66</i>	1 <i>0.65</i>	1 <i>1.22</i>	0	83 <i>1.39</i>	
Aortic valve stenosis	96 <i>2.73</i>	13 <i>0.94</i>	20 <i>2.44</i>	2 <i>1.30</i>	4 <i>4.86</i>	0	135 <i>2.26</i>	
Atrial septal defect	1576 <i>44.75</i>	914 <i>66.18</i>	370 <i>45.20</i>	56 <i>36.50</i>	51 <i>62.00</i>	4	2971 <i>49.81</i>	
Biliary atresia	59 <i>1.68</i>	40 <i>2.90</i>	11 <i>1.34</i>	3 <i>1.96</i>	1 <i>1.22</i>	0	114 <i>1.91</i>	
Bladder exstrophy	18 <i>0.51</i>	2 <i>0.14</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	20 <i>0.34</i>	
Choanal atresia	75 <i>2.13</i>	26 <i>1.88</i>	15 <i>1.83</i>	1 <i>0.65</i>	0 <i>0.00</i>	0	117 <i>1.96</i>	
Cleft lip with and without cleft palate	367 <i>10.42</i>	75 <i>5.43</i>	74 <i>9.04</i>	8 <i>5.21</i>	10 <i>12.16</i>	3	537 <i>9.00</i>	
Cleft palate without cleft lip	222 <i>6.30</i>	62 <i>4.49</i>	37 <i>4.52</i>	4 <i>2.61</i>	5 <i>6.08</i>	0	328 <i>5.50</i>	
Coarctation of aorta	211 <i>5.99</i>	58 <i>4.20</i>	47 <i>5.74</i>	6 <i>3.91</i>	9 <i>10.94</i>	0	331 <i>5.55</i>	
Common truncus	34 <i>0.97</i>	15 <i>1.09</i>	4 <i>0.49</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	53 <i>0.89</i>	
Congenital cataract	65 <i>1.85</i>	39 <i>2.82</i>	16 <i>1.95</i>	0 <i>0.00</i>	1 <i>1.22</i>	0	121 <i>2.03</i>	
Diaphragmatic hernia	128 <i>3.63</i>	44 <i>3.19</i>	29 <i>3.54</i>	7 <i>4.56</i>	4 <i>4.86</i>	1	213 <i>3.57</i>	
Down syndrome (Trisomy 21)	476 <i>13.52</i>	143 <i>10.35</i>	128 <i>15.64</i>	17 <i>11.08</i>	9 <i>10.94</i>	1	774 <i>12.98</i>	
Ebstein anomaly	20 <i>0.57</i>	10 <i>0.72</i>	15 <i>1.83</i>	1 <i>0.65</i>	2 <i>2.43</i>	0	48 <i>0.80</i>	
Encephalocele	23 <i>0.65</i>	19 <i>1.38</i>	12 <i>1.47</i>	1 <i>0.65</i>	0 <i>0.00</i>	3	58 <i>0.97</i>	
Endocardial cushion defect	165 <i>4.69</i>	81 <i>5.86</i>	30 <i>3.66</i>	5 <i>3.26</i>	5 <i>6.08</i>	2	288 <i>4.83</i>	
Esophageal atresia/ tracheoesophageal fistula	117 <i>3.32</i>	34 <i>2.46</i>	34 <i>4.15</i>	4 <i>2.61</i>	7 <i>8.51</i>	0	196 <i>3.29</i>	
Gastroschisis	146 <i>4.15</i>	36 <i>2.61</i>	31 <i>3.79</i>	5 <i>3.26</i>	3 <i>3.65</i>	0	221 <i>3.70</i>	
Hirschsprung disease (congenital megacolon)	83 <i>2.36</i>	65 <i>4.71</i>	15 <i>1.83</i>	7 <i>4.56</i>	2 <i>2.43</i>	0	172 <i>2.88</i>	
Hydrocephalus without Spina Bifida	347 <i>9.85</i>	176 <i>12.74</i>	81 <i>9.90</i>	11 <i>7.17</i>	10 <i>12.16</i>	6	631 <i>10.58</i>	
Hypoplastic left heart syndrome	87 <i>2.47</i>	44 <i>3.19</i>	17 <i>2.08</i>	1 <i>0.65</i>	7 <i>8.51</i>	1	157 <i>2.63</i>	
Hypospadias and Epispadias	1761 <i>50.00</i>	653 <i>47.28</i>	220 <i>26.88</i>	53 <i>34.55</i>	47 <i>57.14</i>	3	2737 <i>45.88</i>	
Microcephalus	196 <i>5.57</i>	128 <i>9.27</i>	47 <i>5.74</i>	10 <i>6.52</i>	9 <i>10.94</i>	2	392 <i>6.57</i>	
Obstructive genitourinary defect	876 <i>24.87</i>	317 <i>22.95</i>	222 <i>27.12</i>	42 <i>27.38</i>	22 <i>26.74</i>	4	1483 <i>24.86</i>	
Omphalocele	63 <i>1.79</i>	26 <i>1.88</i>	8 <i>0.98</i>	3 <i>1.96</i>	0 <i>0.00</i>	1	101 <i>1.69</i>	

North Carolina

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/ Other		
Patent ductus arteriosus	1429 <i>40.58</i>	672 <i>48.65</i>	384 <i>46.91</i>	48 <i>31.29</i>	37 <i>44.98</i>	2	2572 <i>43.12</i>	
Pulmonary valve atresia and stenosis	334 <i>9.48</i>	181 <i>13.10</i>	92 <i>11.24</i>	11 <i>7.17</i>	10 <i>12.16</i>	3	631 <i>10.58</i>	
Pyloric stenosis	803 <i>22.80</i>	158 <i>11.44</i>	191 <i>23.33</i>	8 <i>5.21</i>	35 <i>42.55</i>	2	1197 <i>20.07</i>	
Rectal and large intestinal atresia/stenosis	189 <i>5.37</i>	70 <i>5.07</i>	48 <i>5.86</i>	10 <i>6.52</i>	7 <i>8.51</i>	0	324 <i>5.43</i>	
Reduction deformity, lower limbs	42 <i>1.19</i>	29 <i>2.10</i>	18 <i>2.20</i>	3 <i>1.96</i>	1 <i>1.22</i>	1	94 <i>1.58</i>	
Reduction deformity, upper limbs	100 <i>2.84</i>	40 <i>2.90</i>	40 <i>4.89</i>	1 <i>0.65</i>	3 <i>3.65</i>	1	185 <i>3.10</i>	
Renal agenesis/hypoplasia	202 <i>5.74</i>	83 <i>6.01</i>	48 <i>5.86</i>	9 <i>5.87</i>	5 <i>6.08</i>	2	349 <i>5.85</i>	
Spina bifida without anencephalus	142 <i>4.03</i>	49 <i>3.55</i>	44 <i>5.38</i>	6 <i>3.91</i>	4 <i>4.86</i>	6	251 <i>4.21</i>	+
Tetralogy of Fallot	138 <i>3.92</i>	87 <i>6.30</i>	23 <i>2.81</i>	6 <i>3.91</i>	4 <i>4.86</i>	1	259 <i>4.34</i>	
Transposition of great arteries	157 <i>4.46</i>	68 <i>4.92</i>	34 <i>4.15</i>	7 <i>4.56</i>	5 <i>6.08</i>	0	271 <i>4.54</i>	
Tricuspid valve atresia and stenosis	53 <i>1.50</i>	28 <i>2.03</i>	8 <i>0.98</i>	1 <i>0.65</i>	3 <i>3.65</i>	1	94 <i>1.58</i>	
Trisomy 13 (Patau syndrome)	42 <i>1.19</i>	14 <i>1.01</i>	11 <i>1.34</i>	0 <i>0.00</i>	2 <i>2.43</i>	1	70 <i>1.17</i>	
Trisomy 18 (Edwards syndrome)	86 <i>2.44</i>	40 <i>2.90</i>	23 <i>2.81</i>	4 <i>2.61</i>	2 <i>2.43</i>	3	158 <i>2.65</i>	
Ventricular septal defect	1476 <i>41.91</i>	572 <i>41.41</i>	418 <i>51.06</i>	53 <i>34.55</i>	41 <i>49.84</i>	3	2563 <i>42.97</i>	
Total Live Births	352177	138118	81857	15342	8226		596524	

North Carolina

Trisomy Counts and Rates by Maternal Age 2001-2005

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	457 <i>8.69</i>	317 <i>45.08</i>	774 <i>12.98</i>
Trisomy 13 (Patau syndrome)	44 <i>0.84</i>	25 <i>3.56</i>	70 <i>1.17</i>
Trisomy 18 (Edwards syndrome)	103 <i>1.96</i>	54 <i>7.68</i>	158 <i>2.65</i>
Total Live Births	526194	70312	596524

(**) Total includes unknown age

(+)Notes:

- 1: 2005 data are provisional
- 2: BPA codes used to define birth defect groups
- 3: Cases include live births and fetal deaths; terminations < 20 weeks gestation are included only for anencephaly and spina bifida
- 4: 2004-2005, Anencephalus, Include livebirths, stillbirths, and terminations
- 5: 2004-2005, Spina bifida without anencephalus, Include livebirths, stillbirths, and terminations
- 6: Amniotic bands, 2003-2005 data only.

North Dakota
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Amniotic bands	1 <i>0.30</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.25</i>	
Anencephalus	9 <i>2.72</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>2.02</i>	0 <i>0.00</i>	10 <i>2.50</i>	+
Aniridia	1 <i>0.30</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.25</i>	
Anophthalmia/ microphthalmia	2 <i>0.60</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>4.04</i>	0 <i>0.00</i>	4 <i>1.00</i>	
Anotia/microtia	2 <i>0.60</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.50</i>	
Aortic valve stenosis	9 <i>2.72</i>	2 <i>38.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	11 <i>2.75</i>	
Atrial septal defect	170 <i>51.29</i>	30 <i>576.92</i>	0 <i>0.00</i>	0 <i>0.00</i>	46 <i>92.93</i>	4 <i>2.02</i>	250 <i>62.57</i>	
Biliary atresia	3 <i>0.91</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>2.02</i>	0 <i>0.00</i>	4 <i>1.00</i>	
Bladder exstrophy	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>2.02</i>	0 <i>0.00</i>	1 <i>0.25</i>	
Choanal atresia	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Cleft lip with and without cleft palate	25 <i>7.54</i>	4 <i>76.92</i>	0 <i>0.00</i>	0 <i>0.00</i>	10 <i>20.20</i>	1 <i>1.00</i>	40 <i>10.01</i>	
Cleft palate without cleft lip	36 <i>10.86</i>	2 <i>38.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	5 <i>10.10</i>	0 <i>0.00</i>	43 <i>10.76</i>	
Coarctation of aorta	15 <i>4.53</i>	3 <i>57.69</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>8.08</i>	0 <i>0.00</i>	22 <i>5.51</i>	
Common truncus	1 <i>0.30</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>2.02</i>	0 <i>0.00</i>	2 <i>0.50</i>	
Congenital cataract	4 <i>1.21</i>	1 <i>19.23</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>2.02</i>	0 <i>0.00</i>	6 <i>1.50</i>	
Congenital hip dislocation	21 <i>6.34</i>	2 <i>38.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	5 <i>10.10</i>	0 <i>0.00</i>	28 <i>7.01</i>	
Diaphragmatic hernia	9 <i>2.72</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>6.06</i>	0 <i>0.00</i>	12 <i>3.00</i>	
Down syndrome (Trisomy 21)	38 <i>11.47</i>	2 <i>38.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	9 <i>18.18</i>	0 <i>0.00</i>	49 <i>12.26</i>	
Ebstein anomaly	2 <i>0.60</i>	1 <i>19.23</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>0.75</i>	
Encephalocele	1 <i>0.30</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.25</i>	
Endocardial cushion defect	9 <i>2.72</i>	1 <i>19.23</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>4.04</i>	0 <i>0.00</i>	12 <i>3.00</i>	
Esophageal atresia/ tracheoesophageal fistula	6 <i>1.81</i>	1 <i>19.23</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>4.04</i>	0 <i>0.00</i>	9 <i>2.25</i>	
Fetus or newborn affected by maternal alcohol use	12 <i>3.62</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	9 <i>18.18</i>	0 <i>0.00</i>	21 <i>5.26</i>	
Hirschsprung disease (congenital megacolon)	5 <i>1.51</i>	1 <i>19.23</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>2.02</i>	0 <i>0.00</i>	7 <i>1.75</i>	
Hydrocephalus without Spina Bifida	24 <i>7.24</i>	1 <i>19.23</i>	0 <i>0.00</i>	0 <i>0.00</i>	6 <i>12.12</i>	0 <i>0.00</i>	31 <i>7.76</i>	
Hypoplastic left heart syndrome	13 <i>3.92</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>2.02</i>	0 <i>0.00</i>	14 <i>3.50</i>	
Hypospadias and Epispadias	42 <i>12.67</i>	3 <i>57.69</i>	0 <i>0.00</i>	0 <i>0.00</i>	8 <i>16.16</i>	0 <i>0.00</i>	53 <i>13.26</i>	
Microcephalus	25 <i>7.54</i>	1 <i>19.23</i>	0 <i>0.00</i>	0 <i>0.00</i>	8 <i>16.16</i>	0 <i>0.00</i>	34 <i>8.51</i>	
Obstructive genitourinary defect	2 <i>0.60</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.50</i>	
Patent ductus arteriosus	77 <i>23.23</i>	18 <i>346.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	32 <i>64.65</i>	2 <i>2.02</i>	129 <i>32.29</i>	+

North Dakota

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Pulmonary valve atresia and stenosis	44 13.28	5 96.15	0 0.00	0 0.00	0 0.00	3 0	52 13.01	
Pyloric stenosis	54 16.29	6 115.38	0 0.00	0 0.00	26 52.53	0 0	86 21.52	
Rectal and large intestinal atresia/stenosis	10 3.02	3 57.69	0 0.00	0 0.00	10 20.20	0 0	23 5.76	
Reduction deformity, lower limbs	0 0.00	1 19.23	0 0.00	0 0.00	1 2.02	0 0	2 0.50	
Reduction deformity, upper limbs	1 0.30	1 19.23	0 0.00	0 0.00	1 2.02	0 0	3 0.75	
Renal agenesis/hypoplasia	18 5.43	0 0.00	0 0.00	0 0.00	1 2.02	0 0	19 4.76	
Spina bifida without anencephalus	19 5.73	0 0.00	0 0.00	0 0.00	4 8.08	0 0	23 5.76	+
Tetralogy of Fallot	15 4.53	1 19.23	0 0.00	0 0.00	2 4.04	0 0	18 4.51	
Transposition of great arteries	14 4.22	0 0.00	0 0.00	0 0.00	5 10.10	0 0	19 4.76	
Tricuspid valve atresia and stenosis	4 1.21	0 0.00	0 0.00	0 0.00	1 2.02	0 0	5 1.25	
Trisomy 13 (Patau syndrome)	4 1.21	0 0.00	0 0.00	0 0.00	1 2.02	0 0	5 1.25	
Trisomy 18 (Edwards syndrome)	4 1.21	0 0.00	0 0.00	0 0.00	1 2.02	0 0	5 1.25	
Ventricular septal defect	133 40.13	15 288.46	0 0.00	0 0.00	27 54.55	3 0	178 44.55	
Total Live Births	33143	520	796	501	4950		39955	

North Dakota

Trisomy Counts and Rates by Maternal Age 2001-2005

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	22 6.18	10 23.11	32 8.01
Trisomy 13 (Patau syndrome)	1 0.28	3 6.93	4 1.00
Trisomy 18 (Edwards syndrome)	3 0.84	1 2.31	4 1.00
Total Live Births	35624	4327	39955

(**) Total includes unknown age

(+)Notes:

- 1: North Dakota Vital Statistics collects data using ICD-10 codes.
- 2: Stillbirth is defined as pregnancy 20 weeks by gestation that results in other than live birth before or after labor begins. Although collection attempted, reporting is poor.
- 3: The NDBDMS master registry is translated to ICD-9.
- 4: There was no major methodologic changes in the registry for the year 2007.
- 5: 2001-2005, Anencephalus, Include livebirths and stillbirths.
- 6: 2001-2005, Spina bifida without anencephalus, Include livebirths and stillbirths.
- 7: 2001-2005, Patent ductus arteriosus, We are unable to exclude <2500 grams infants.

Oklahoma
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Amniotic bands	27 <i>1.58</i>	4 <i>1.73</i>	4 <i>1.42</i>	1 <i>1.94</i>	6 <i>2.28</i>	0	42 <i>1.65</i>	
Anencephalus	43 <i>2.52</i>	3 <i>1.30</i>	11 <i>3.91</i>	1 <i>1.94</i>	7 <i>2.66</i>	0	65 <i>2.56</i>	+
Aniridia	6 <i>0.35</i>	1 <i>0.43</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.38</i>	0	8 <i>0.31</i>	
Anophthalmia/ microphthalmia	29 <i>1.70</i>	6 <i>2.60</i>	7 <i>2.49</i>	3 <i>5.81</i>	6 <i>2.28</i>	1	52 <i>2.05</i>	
Anotia/microtia	16 <i>0.94</i>	1 <i>0.43</i>	4 <i>1.42</i>	1 <i>1.94</i>	4 <i>1.52</i>	0	26 <i>1.02</i>	
Aortic valve stenosis	75 <i>4.39</i>	5 <i>2.16</i>	5 <i>1.78</i>	0 <i>0.00</i>	15 <i>5.71</i>	0	100 <i>3.93</i>	
Atrial septal defect	1140 <i>66.73</i>	166 <i>71.83</i>	156 <i>55.41</i>	16 <i>30.98</i>	225 <i>85.66</i>	12	1715 <i>67.48</i>	
Biliary atresia	12 <i>0.70</i>	2 <i>0.87</i>	4 <i>1.42</i>	0 <i>0.00</i>	3 <i>1.14</i>	0	21 <i>0.83</i>	
Bladder exstrophy	9 <i>0.53</i>	2 <i>0.87</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.38</i>	0	12 <i>0.47</i>	
Choanal atresia	32 <i>1.87</i>	2 <i>0.87</i>	2 <i>0.71</i>	0 <i>0.00</i>	9 <i>3.43</i>	1	46 <i>1.81</i>	
Cleft lip with and without cleft palate	231 <i>13.52</i>	14 <i>6.06</i>	41 <i>14.56</i>	8 <i>15.49</i>	45 <i>17.13</i>	0	339 <i>13.34</i>	
Cleft palate without cleft lip	151 <i>8.84</i>	7 <i>3.03</i>	20 <i>7.10</i>	2 <i>3.87</i>	25 <i>9.52</i>	0	205 <i>8.07</i>	
Coarctation of aorta	97 <i>5.68</i>	7 <i>3.03</i>	11 <i>3.91</i>	5 <i>9.68</i>	8 <i>3.05</i>	1	129 <i>5.08</i>	
Common truncus	12 <i>0.70</i>	3 <i>1.30</i>	3 <i>1.07</i>	0 <i>0.00</i>	2 <i>0.76</i>	0	20 <i>0.79</i>	
Congenital cataract	42 <i>2.46</i>	9 <i>3.89</i>	8 <i>2.84</i>	2 <i>3.87</i>	6 <i>2.28</i>	0	67 <i>2.64</i>	
Congenital hip dislocation	87 <i>5.09</i>	9 <i>3.89</i>	14 <i>4.97</i>	1 <i>1.94</i>	12 <i>4.57</i>	0	123 <i>4.84</i>	
Diaphragmatic hernia	72 <i>4.21</i>	2 <i>0.87</i>	13 <i>4.62</i>	0 <i>0.00</i>	16 <i>6.09</i>	0	103 <i>4.05</i>	
Down syndrome (Trisomy 21)	229 <i>13.40</i>	24 <i>10.39</i>	41 <i>14.56</i>	8 <i>15.49</i>	27 <i>10.28</i>	4	333 <i>13.10</i>	
Ebstein anomaly	15 <i>0.88</i>	1 <i>0.43</i>	4 <i>1.42</i>	0 <i>0.00</i>	5 <i>1.90</i>	0	25 <i>0.98</i>	
Encephalocele	15 <i>0.88</i>	4 <i>1.73</i>	4 <i>1.42</i>	0 <i>0.00</i>	2 <i>0.76</i>	1	26 <i>1.02</i>	
Endocardial cushion defect	84 <i>4.92</i>	10 <i>4.33</i>	9 <i>3.20</i>	3 <i>5.81</i>	14 <i>5.33</i>	1	121 <i>4.76</i>	
Esophageal atresia/ tracheoesophageal fistula	51 <i>2.99</i>	8 <i>3.46</i>	4 <i>1.42</i>	1 <i>1.94</i>	5 <i>1.90</i>	0	69 <i>2.71</i>	
Fetus or newborn affected by maternal alcohol use	2 <i>0.12</i>	1 <i>0.43</i>	0 <i>0.00</i>	1 <i>1.94</i>	3 <i>1.14</i>	0	7 <i>0.28</i>	
Gastroschisis	109 <i>6.38</i>	10 <i>4.33</i>	18 <i>6.39</i>	2 <i>3.87</i>	15 <i>5.71</i>	0	154 <i>6.06</i>	
Hirschsprung disease (congenital megacolon)	44 <i>2.58</i>	9 <i>3.89</i>	1 <i>0.36</i>	0 <i>0.00</i>	5 <i>1.90</i>	0	59 <i>2.32</i>	
Hydrocephalus without Spina Bifida	133 <i>7.79</i>	25 <i>10.82</i>	17 <i>6.04</i>	8 <i>15.49</i>	14 <i>5.33</i>	4	201 <i>7.91</i>	
Hypoplastic left heart syndrome	45 <i>2.63</i>	7 <i>3.03</i>	7 <i>2.49</i>	1 <i>1.94</i>	6 <i>2.28</i>	0	66 <i>2.60</i>	
Hypospadias and Epispadias	414 <i>24.23</i>	53 <i>22.93</i>	18 <i>6.39</i>	1 <i>1.94</i>	38 <i>14.47</i>	3	527 <i>20.74</i>	
Microcephalus	122 <i>7.14</i>	19 <i>8.22</i>	17 <i>6.04</i>	2 <i>3.87</i>	31 <i>11.80</i>	2	193 <i>7.59</i>	
Obstructive genitourinary defect	473 <i>27.69</i>	68 <i>29.42</i>	98 <i>34.81</i>	12 <i>23.24</i>	67 <i>25.51</i>	5	723 <i>28.45</i>	

Oklahoma

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	42 <i>2.46</i>	9 <i>3.89</i>	5 <i>1.78</i>	1 <i>1.94</i>	2 <i>0.76</i>	0	59 <i>2.32</i>	
Pulmonary valve atresia and stenosis	118 <i>6.91</i>	15 <i>6.49</i>	17 <i>6.04</i>	2 <i>3.87</i>	24 <i>9.14</i>	1	177 <i>6.96</i>	
Pyloric stenosis	573 <i>33.54</i>	44 <i>19.04</i>	58 <i>20.60</i>	3 <i>5.81</i>	102 <i>38.83</i>	2	782 <i>30.77</i>	
Rectal and large intestinal atresia/stenosis	110 <i>6.44</i>	14 <i>6.06</i>	24 <i>8.52</i>	1 <i>1.94</i>	17 <i>6.47</i>	0	166 <i>6.53</i>	
Reduction deformity, lower limbs	40 <i>2.34</i>	3 <i>1.30</i>	3 <i>1.07</i>	0 <i>0.00</i>	5 <i>1.90</i>	0	51 <i>2.01</i>	
Reduction deformity, upper limbs	68 <i>3.98</i>	9 <i>3.89</i>	13 <i>4.62</i>	1 <i>1.94</i>	6 <i>2.28</i>	1	98 <i>3.86</i>	
Renal agenesis/hypoplasia	90 <i>5.27</i>	10 <i>4.33</i>	8 <i>2.84</i>	0 <i>0.00</i>	12 <i>4.57</i>	0	120 <i>4.72</i>	
Spina bifida without anencephalus	61 <i>3.57</i>	6 <i>2.60</i>	18 <i>6.39</i>	1 <i>1.94</i>	9 <i>3.43</i>	0	95 <i>3.74</i>	+
Tetralogy of Fallot	77 <i>4.51</i>	7 <i>3.03</i>	12 <i>4.26</i>	1 <i>1.94</i>	8 <i>3.05</i>	0	105 <i>4.13</i>	
Transposition of great arteries	94 <i>5.50</i>	5 <i>2.16</i>	16 <i>5.68</i>	3 <i>5.81</i>	16 <i>6.09</i>	1	135 <i>5.31</i>	
Tricuspid valve atresia and stenosis	14 <i>0.82</i>	5 <i>2.16</i>	2 <i>0.71</i>	0 <i>0.00</i>	2 <i>0.76</i>	0	23 <i>0.90</i>	
Trisomy 13 (Patau syndrome)	16 <i>0.94</i>	2 <i>0.87</i>	3 <i>1.07</i>	2 <i>3.87</i>	5 <i>1.90</i>	0	28 <i>1.10</i>	
Trisomy 18 (Edwards syndrome)	38 <i>2.22</i>	6 <i>2.60</i>	2 <i>0.71</i>	0 <i>0.00</i>	3 <i>1.14</i>	0	49 <i>1.93</i>	
Ventricular septal defect	871 <i>50.98</i>	109 <i>47.17</i>	152 <i>53.99</i>	12 <i>23.24</i>	122 <i>46.45</i>	7	1273 <i>50.09</i>	
Total Live Births	170835	23110	28154	5164	26267		254145	

Oklahoma

Trisomy Counts and Rates by Maternal Age 2001-2005

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	222 <i>9.50</i>	110 <i>53.76</i>	333 <i>13.10</i>
Trisomy 13 (Patau syndrome)	22 <i>0.94</i>	6 <i>2.93</i>	28 <i>1.10</i>
Trisomy 18 (Edwards syndrome)	33 <i>1.41</i>	16 <i>7.82</i>	49 <i>1.93</i>
Total Live Births	233638	20461	254145

(**) Total includes unknown age

(+)Notes:

- 1: OK begins collecting at 20 weeks gestational age.
- 2: OK uses CDC/BPA
- 3: Stillbirths are defined as Apgar scores of "00"
- 4: 2001-2005, Anencephalus, Include livebirths, stillbirths, and terminations
- 5: 2001-2005, Spina bifida without anencephalus, Include livebirths, stillbirths, and terminations

Puerto Rico

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Anencephalus			85				85	
			3.25				3.25	+
Aortic valve stenosis			25				25	
			1.64				1.64	+
Atrial septal defect			282				282	
			18.46				18.46	+
Cleft lip with and without cleft palate			212				212	
			8.10				8.10	
Cleft palate without cleft lip			152				152	
			5.81				5.81	
Coarctation of aorta			47				47	
			3.08				3.08	+
Common truncus			11				11	
			0.72				0.72	+
Down syndrome (Trisomy 21)			293				293	
			11.20				11.20	
Ebstein anomaly			14				14	
			0.92				0.92	+
Encephalocele			18				18	
			0.69				0.69	
Endocardial cushion defect			62				62	
			4.06				4.06	+
Gastroschisis			85				85	
			3.25				3.25	
Hypoplastic left heart syndrome			29				29	
			1.90				1.90	+
Omphalocele			22				22	
			1.44				1.44	+
Patent ductus arteriosus			336				336	
			22.00				22.00	+
Pulmonary valve atresia and stenosis			129				129	
			8.45				8.45	+
Reduction deformity, lower limbs			33				33	
			1.26				1.26	
Reduction deformity, upper limbs			51				51	
			1.94				1.94	
Spina bifida without anencephalus			116				116	
			4.43				4.43	+
Tetralogy of Fallot			54				54	
			3.54				3.54	+
Transposition of great arteries			54				54	
			3.54				3.54	+
Tricuspid valve atresia and stenosis			27				27	
			1.77				1.77	+
Trisomy 13 (Patau syndrome)			12				12	
			0.79				0.79	+
Trisomy 18 (Edwards syndrome)			33				33	
			2.16				2.16	+
Ventricular septal defect			262				262	
			17.15				17.15	+
Total Live Births			261583				261583	

Puerto Rico**Trisomy Counts and Rates by Maternal Age 2001-2005**

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
	167	121	293
Down syndrome (Trisomy 21)	6.94	58.27	11.20
Trisomy 13 (Patau syndrome)	9	3	12
(2003 data only)	0.64	2.48	0.79
Trisomy 18 (Edwards syndrome)	20	12	33
(2003 data only)	1.42	9.91	2.16
Total Live Births	240702	20766	261583

(**) Total includes unknown age

(+)Notes:

- 1: Probable/possible diagnoses were not included.
- 2: We include stillbirths and terminations in our counts.
- 3: The coding system used was ICD 9 CM
- 4: 2003-2005, Common truncus: only includes persistent truncus arteriosus and aortic pulmonary window.
- 5: 2003-2005, Endocardial cushion defect: only includes AV Canal.
- 6: 2003-2005, Transposition of great arteries: only includes ICD9CM codes 745.10 and 745.12.
- 7: 2003-2005, Tricuspid valve atresia and stenosis: only includes tricuspid valve atresia.
- 8: 2001-2005, Anencephalus, Include livebirths, stillbirths, and terminations
- 9: 2001-2005, Spina bifida without anencephalus, Include livebirths, stillbirths, and terminations
- 10: 2003-2005, Common truncus, 2003-2005 data only.
- 11: 2003-2005, Transposition of great arteries, 2003-2005 data only.
- 12: 2003-2005, Tetralogy of Fallot, 2003-2005 data only.
- 13: 2003-2005, Ventricular septal defect, We don't include probable cases. 2003-2005 data only.
- 14: 2003-2005, Atrial septal defect, 2003-2005 data only.
- 15: 2003-2005, Endocardial cushion defect, 2003-2005 data only.
- 16: 2003-2005, Pulmonary valve atresia and stenosis, 2003-2005 data only.
- 17: 2003-2005, Tricuspid valve atresia and stenosis, 2003-2005 data only.
- 18: 2003-2005, Ebstein anomaly, 2003-2005 data only.
- 19: 2003-2005, Aortic valve stenosis, 2003-2005 data only.
- 20: 2003-2005, Hypoplastic left heart syndrome, 2003-2005 data only.
- 21: 2003-2005, Patent ductus arteriosus, We Include infants only if weight \geq 2500 grams. 2003-2005 data only.
- 22: 2003-2005, Coarctation of aorta, 2003-2005 data only.
- 23: 2003-2005, Trisomy 13 (Patau syndrome), 2003-2005 data only.
- 24: 2003-2005, Trisomy 18 (Edwards syndrome), 2003-2005 data only.
- 25: 2003-2005, Omphalocele, 2003-2005 data only.

Rhode Island
Birth Defects Counts and Rates 2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/ Other		
Amniotic bands	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Anencephalus	1 <i>1.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.82</i>	+
Aniridia	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Anophthalmia/ microphthalmia	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>5.94</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.82</i>	
Anotia/microtia	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Aortic valve stenosis	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Atrial septal defect	44 <i>50.65</i>	4 <i>34.51</i>	10 <i>59.38</i>	1 <i>18.05</i>	1 <i>166.67</i>	1 <i>0.00</i>	61 <i>49.93</i>	
Biliary atresia	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Bladder exstrophy	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Choanal atresia	0 <i>0.00</i>	1 <i>8.63</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.82</i>	
Cleft lip with and without cleft palate	10 <i>11.51</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	10 <i>8.18</i>	
Cleft palate without cleft lip	10 <i>11.51</i>	0 <i>0.00</i>	1 <i>5.94</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	11 <i>9.00</i>	
Coarctation of aorta	3 <i>3.45</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>18.05</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>3.27</i>	
Common truncus	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Congenital cataract	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Congenital hip dislocation	8 <i>9.21</i>	2 <i>17.26</i>	1 <i>5.94</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	11 <i>9.00</i>	
Diaphragmatic hernia	1 <i>1.15</i>	0 <i>0.00</i>	1 <i>5.94</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>1.64</i>	
Down syndrome (Trisomy 21)	17 <i>19.57</i>	1 <i>8.63</i>	1 <i>5.94</i>	1 <i>18.05</i>	0 <i>0.00</i>	0 <i>0.00</i>	20 <i>16.37</i>	
Ebstein anomaly	1 <i>1.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.82</i>	
Encephalocele	1 <i>1.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.82</i>	
Endocardial cushion defect	0 <i>0.00</i>	1 <i>8.63</i>	1 <i>5.94</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>1.64</i>	
Esophageal atresia/ tracheoesophageal fistula	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>11.88</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>1.64</i>	
Fetus or newborn affected by maternal alcohol use	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Gastroschisis	3 <i>3.45</i>	1 <i>8.63</i>	5 <i>29.69</i>	1 <i>18.05</i>	0 <i>0.00</i>	0 <i>0.00</i>	10 <i>8.18</i>	
Hirschsprung disease (congenital megacolon)	1 <i>1.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.82</i>	
Hydrocephalus without Spina Bifida	3 <i>3.45</i>	1 <i>8.63</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>3.27</i>	
Hypoplastic left heart syndrome	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>5.94</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.82</i>	
Hypospadias and Epispadias	34 <i>39.14</i>	3 <i>25.88</i>	7 <i>41.57</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	44 <i>36.01</i>	
Microcephalus	3 <i>3.45</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>2.46</i>	
Obstructive genitourinary defect	24 <i>27.63</i>	6 <i>51.77</i>	5 <i>29.69</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	35 <i>28.65</i>	

Rhode Island

Birth Defects Counts and Rates 2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	1 1.15	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 0.82	
Patent ductus arteriosus	43 49.50	7 60.40	12 71.26	2 36.10	1 166.67	0 0.00	65 53.20	
Pulmonary valve atresia and stenosis	13 14.96	1 8.63	4 23.75	1 18.05	0 0.00	1 0.00	20 16.37	
Pyloric stenosis	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	
Rectal and large intestinal atresia/stenosis	4 4.60	0 0.00	1 5.94	0 0.00	0 0.00	0 0.00	5 4.09	
Reduction deformity, lower limbs	1 1.15	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	1 0.82	
Reduction deformity, upper limbs	4 4.60	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	4 3.27	
Renal agenesis/hypoplasia	1 1.15	2 17.26	0 0.00	0 0.00	0 0.00	0 0.00	3 2.46	
Spina bifida without anencephalus	3 3.45	1 8.63	0 0.00	0 0.00	0 0.00	0 0.00	4 3.27	+
Tetralogy of Fallot	5 5.76	1 8.63	2 11.88	0 0.00	0 0.00	0 0.00	8 6.55	
Transposition of great arteries	1 1.15	0 0.00	1 5.94	0 0.00	0 0.00	0 0.00	2 1.64	
Tricuspid valve atresia and stenosis	1 1.15	1 8.63	0 0.00	0 0.00	0 0.00	0 0.00	2 1.64	
Trisomy 13 (Patau syndrome)	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	
Trisomy 18 (Edwards syndrome)	0 0.00	1 8.63	0 0.00	0 0.00	0 0.00	0 0.00	1 0.82	
Ventricular septal defect	33 37.99	1 8.63	5 29.69	1 18.05	0 0.00	1 0.00	41 33.56	
Total Live Births	8687	1159	1684	554	60		12218	

Rhode Island

Trisomy Counts and Rates by Maternal Age 2005

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	11 11.07	9 39.49	21 17.19
Trisomy 13 (Patau syndrome)	0 0.00	0 0.00	0 0.00
Trisomy 18 (Edwards syndrome)	0 0.00	0 0.00	0 0.00
Total Live Births	9939	2279	12218

(**) Total includes unknown age

(+)Notes:

1: 2005, Anencephalus, Livebirths only.

2: 2005, Spina bifida without anencephalus, Livebirths only.

South Carolina**Birth Defects Counts and Rates 2001-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Anencephalus	62 3.90	18 1.99	9 4.70	3 7.32	1 12.05	0	93 3.32	
Encephalocele	20 1.26	6 0.66	4 2.09	0 0.00	0 0.00	0	30 1.07	
Hydrocephalus without Spina Bifida	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0	0 0.00	
Spina bifida without anencephalus	61 3.83	36 3.97	10 5.22	1 2.44	1 12.05	0	109 3.90	
Total Live Births	159121	90658	19166	4101	830		279743	

(+)Notes:

1: 2001-2005, Anencephalus, Include livebirths, stillbirths, and terminations

2: 2001-2005, Spina bifida without anencephalus, Include livebirths, stillbirths, and terminations

Tennessee
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/ Other		
Anencephalus	46 <i>1.69</i>	15 <i>1.77</i>	7 <i>2.40</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	68 <i>1.72</i>	+
Aniridia	6 <i>0.22</i>	1 <i>0.12</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	7 <i>0.18</i>	
Anophthalmia/ microphthalmia	24 <i>0.88</i>	9 <i>1.06</i>	4 <i>1.37</i>	1 <i>1.35</i>	0 <i>0.00</i>	1	39 <i>0.99</i>	
Anotia/microtia	14 <i>0.51</i>	2 <i>0.24</i>	5 <i>1.72</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	21 <i>0.53</i>	
Aortic valve stenosis	54 <i>1.98</i>	9 <i>1.06</i>	3 <i>1.03</i>	2 <i>2.70</i>	0 <i>0.00</i>	0	68 <i>1.72</i>	
Atrial septal defect	1307 <i>48.04</i>	367 <i>43.19</i>	87 <i>29.87</i>	25 <i>33.81</i>	5 <i>50.10</i>	4	1795 <i>45.34</i>	
Biliary atresia	19 <i>0.70</i>	11 <i>1.29</i>	1 <i>0.34</i>	1 <i>1.35</i>	0 <i>0.00</i>	0	32 <i>0.81</i>	
Bladder exstrophy	14 <i>0.51</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	14 <i>0.35</i>	
Choanal atresia	68 <i>2.50</i>	12 <i>1.41</i>	4 <i>1.37</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	84 <i>2.12</i>	
Cleft lip with and without cleft palate	352 <i>12.94</i>	63 <i>7.41</i>	28 <i>9.61</i>	6 <i>8.11</i>	2 <i>20.04</i>	2	453 <i>11.44</i>	
Cleft palate without cleft lip	227 <i>8.34</i>	38 <i>4.47</i>	19 <i>6.52</i>	6 <i>8.11</i>	2 <i>20.04</i>	2	294 <i>7.43</i>	
Coarctation of aorta	177 <i>6.51</i>	34 <i>4.00</i>	14 <i>4.81</i>	3 <i>4.06</i>	1 <i>10.02</i>	1	230 <i>5.81</i>	
Common truncus	30 <i>1.10</i>	10 <i>1.18</i>	2 <i>0.69</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	42 <i>1.06</i>	
Congenital cataract	58 <i>2.13</i>	20 <i>2.35</i>	6 <i>2.06</i>	2 <i>2.70</i>	1 <i>10.02</i>	0	87 <i>2.20</i>	
Congenital hip dislocation	233 <i>8.56</i>	26 <i>3.06</i>	15 <i>5.15</i>	6 <i>8.11</i>	0 <i>0.00</i>	0	280 <i>7.07</i>	
Diaphragmatic hernia	75 <i>2.76</i>	29 <i>3.41</i>	9 <i>3.09</i>	3 <i>4.06</i>	0 <i>0.00</i>	0	116 <i>2.93</i>	
Down syndrome (Trisomy 21)	359 <i>13.19</i>	100 <i>11.77</i>	46 <i>15.79</i>	5 <i>6.76</i>	0 <i>0.00</i>	1	511 <i>12.91</i>	
Ebstein anomaly	23 <i>0.85</i>	4 <i>0.47</i>	2 <i>0.69</i>	1 <i>1.35</i>	0 <i>0.00</i>	0	30 <i>0.76</i>	
Encephalocele	24 <i>0.88</i>	13 <i>1.53</i>	4 <i>1.37</i>	2 <i>2.70</i>	0 <i>0.00</i>	0	43 <i>1.09</i>	
Endocardial cushion defect	97 <i>3.57</i>	33 <i>3.88</i>	9 <i>3.09</i>	2 <i>2.70</i>	0 <i>0.00</i>	0	141 <i>3.56</i>	
Esophageal atresia/ tracheoesophageal fistula	82 <i>3.01</i>	23 <i>2.71</i>	5 <i>1.72</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	110 <i>2.78</i>	
Fetus or newborn affected by maternal alcohol use	35 <i>1.29</i>	39 <i>4.59</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>10.02</i>	0	75 <i>1.89</i>	
Gastroschisis	145 <i>5.33</i>	31 <i>3.65</i>	7 <i>2.40</i>	5 <i>6.76</i>	0 <i>0.00</i>	0	188 <i>4.75</i>	+
Hirschsprung disease (congenital megacolon)	69 <i>2.54</i>	32 <i>3.77</i>	9 <i>3.09</i>	1 <i>1.35</i>	0 <i>0.00</i>	0	111 <i>2.80</i>	
Hydrocephalus without Spina Bifida	197 <i>7.24</i>	79 <i>9.30</i>	18 <i>6.18</i>	5 <i>6.76</i>	0 <i>0.00</i>	1	300 <i>7.58</i>	
Hypoplastic left heart syndrome	86 <i>3.16</i>	28 <i>3.30</i>	8 <i>2.75</i>	1 <i>1.35</i>	0 <i>0.00</i>	0	123 <i>3.11</i>	
Hypospadias and Epispadias	1475 <i>54.21</i>	411 <i>48.37</i>	58 <i>19.91</i>	20 <i>27.05</i>	4 <i>40.08</i>	2	1970 <i>49.76</i>	
Microcephalus	147 <i>5.40</i>	73 <i>8.59</i>	23 <i>7.90</i>	3 <i>4.06</i>	1 <i>10.02</i>	1	248 <i>6.26</i>	
Obstructive genitourinary defect	733 <i>26.94</i>	118 <i>13.89</i>	55 <i>18.88</i>	15 <i>20.29</i>	4 <i>40.08</i>	1	926 <i>23.39</i>	
Omphalocele	77 <i>2.83</i>	31 <i>3.65</i>	3 <i>1.03</i>	2 <i>2.70</i>	0 <i>0.00</i>	0	113 <i>2.85</i>	+

Tennessee

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Patent ductus arteriosus	1205 <i>44.29</i>	435 <i>51.19</i>	104 <i>35.71</i>	23 <i>31.11</i>	5 <i>50.10</i>	5	1777 <i>44.89</i>	+
Pulmonary valve atresia and stenosis	283 <i>10.40</i>	104 <i>12.24</i>	20 <i>6.87</i>	6 <i>8.11</i>	1 <i>10.02</i>	0	414 <i>10.46</i>	
Pyloric stenosis	1041 <i>38.26</i>	121 <i>14.24</i>	102 <i>35.02</i>	4 <i>5.41</i>	3 <i>30.06</i>	1	1272 <i>32.13</i>	
Rectal and large intestinal atresia/stenosis	143 <i>5.26</i>	45 <i>5.30</i>	12 <i>4.12</i>	2 <i>2.70</i>	0 <i>0.00</i>	0	202 <i>5.10</i>	
Reduction deformity, lower limbs	31 <i>1.14</i>	16 <i>1.88</i>	3 <i>1.03</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	50 <i>1.26</i>	
Reduction deformity, upper limbs	59 <i>2.17</i>	19 <i>2.24</i>	5 <i>1.72</i>	1 <i>1.35</i>	0 <i>0.00</i>	1	85 <i>2.15</i>	
Renal agenesis/hypoplasia	86 <i>3.16</i>	34 <i>4.00</i>	12 <i>4.12</i>	1 <i>1.35</i>	1 <i>10.02</i>	0	134 <i>3.38</i>	
Spina bifida without anencephalus	114 <i>4.19</i>	22 <i>2.59</i>	23 <i>7.90</i>	2 <i>2.70</i>	0 <i>0.00</i>	1	162 <i>4.09</i>	+
Tetralogy of Fallot	125 <i>4.59</i>	60 <i>7.06</i>	6 <i>2.06</i>	7 <i>9.47</i>	1 <i>10.02</i>	0	199 <i>5.03</i>	
Transposition of great arteries	167 <i>6.14</i>	35 <i>4.12</i>	18 <i>6.18</i>	2 <i>2.70</i>	0 <i>0.00</i>	1	223 <i>5.63</i>	
Tricuspid valve atresia and stenosis	32 <i>1.18</i>	12 <i>1.41</i>	3 <i>1.03</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	47 <i>1.19</i>	
Trisomy 13 (Patau syndrome)	21 <i>0.77</i>	11 <i>1.29</i>	2 <i>0.69</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	34 <i>0.86</i>	
Trisomy 18 (Edwards syndrome)	35 <i>1.29</i>	24 <i>2.82</i>	4 <i>1.37</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	63 <i>1.59</i>	
Ventricular septal defect	1235 <i>45.39</i>	330 <i>38.83</i>	117 <i>40.17</i>	17 <i>22.99</i>	7 <i>70.14</i>	3	1709 <i>43.17</i>	+
Total Live Births	272075	84977	29127	7394	998		395884	

Tennessee

Trisomy Counts and Rates by Maternal Age 2001-2005

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	315 <i>8.86</i>	195 <i>49.39</i>	511 <i>12.91</i>
Trisomy 13 (Patau syndrome)	25 <i>0.70</i>	9 <i>2.28</i>	34 <i>0.86</i>
Trisomy 18 (Edwards syndrome)	44 <i>1.24</i>	20 <i>5.07</i>	64 <i>1.62</i>
Total Live Births	355617	39479	395884

(**) Total includes unknown age

(+)Notes:

- 1: Fetal Deaths include fetuses 500 grams or more, or in the absence of weight, of 22 completed weeks of gestation or more.
- 2: TBDR includes fetals deaths (stillbirths) but does not include terminations.
- 3: TBDR uses the ICD-9 coding system for diagnoses.
- 4: 2001-2005, Anencephalus, Include livebirths and stillbirths 500 grams or more; else, 22 weeks gestation or more.
- 5: 2001-2005, Spina bifida without anencephalus, Include livebirths and stillbirths 500 grams or more; else, 22 weeks gestation or more.
- 6: 2001-2005, Ventricular septal defect, Includes probable cases
- 7: 2001-2005, Patent ductus arteriosus, birthweight \geq 2500 grams
- 8: 2001-2005, Gastroschisis, ICD-9 Procedure Code = 54.71
- 9: 2001-2005, Omphalocele, ICD-9 Procedure Code not equal to 54.71

Texas
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/ Other		
Amniotic bands	41 <i>0.60</i>	20 <i>0.97</i>	54 <i>0.59</i>	2 <i>0.31</i>	1 <i>2.65</i>	2	120 <i>0.64</i>	
Anencephalus	134 <i>1.95</i>	41 <i>1.99</i>	259 <i>2.83</i>	15 <i>2.36</i>	2 <i>5.30</i>	15	466 <i>2.48</i>	+
Aniridia	8 <i>0.12</i>	4 <i>0.19</i>	17 <i>0.19</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	29 <i>0.15</i>	
Anophthalmia/ microphthalmia	208 <i>3.02</i>	46 <i>2.24</i>	274 <i>3.00</i>	9 <i>1.41</i>	3 <i>7.94</i>	5	545 <i>2.90</i>	
Anotia/microtia	131 <i>1.90</i>	28 <i>1.36</i>	382 <i>4.18</i>	15 <i>2.36</i>	1 <i>2.65</i>	3	560 <i>2.98</i>	
Aortic valve stenosis	199 <i>2.89</i>	26 <i>1.26</i>	205 <i>2.24</i>	7 <i>1.10</i>	0 <i>0.00</i>	2	439 <i>2.33</i>	
Atrial septal defect	3294 <i>47.89</i>	1025 <i>49.84</i>	4941 <i>54.05</i>	222 <i>34.87</i>	17 <i>45.02</i>	86	9585 <i>50.93</i>	
Biliary atresia	35 <i>0.51</i>	20 <i>0.97</i>	68 <i>0.74</i>	9 <i>1.41</i>	0 <i>0.00</i>	0	132 <i>0.70</i>	
Bladder exstrophy	27 <i>0.39</i>	4 <i>0.19</i>	9 <i>0.10</i>	1 <i>0.16</i>	0 <i>0.00</i>	0	41 <i>0.22</i>	
Choanal atresia	80 <i>1.16</i>	24 <i>1.17</i>	89 <i>0.97</i>	4 <i>0.63</i>	0 <i>0.00</i>	3	200 <i>1.06</i>	
Cleft lip with and without cleft palate	739 <i>10.74</i>	156 <i>7.59</i>	1072 <i>11.73</i>	61 <i>9.58</i>	5 <i>13.24</i>	31	2064 <i>10.97</i>	
Cleft palate without cleft lip	456 <i>6.63</i>	88 <i>4.28</i>	480 <i>5.25</i>	45 <i>7.07</i>	0 <i>0.00</i>	12	1081 <i>5.74</i>	
Coarctation of aorta	391 <i>5.68</i>	72 <i>3.50</i>	433 <i>4.74</i>	20 <i>3.14</i>	3 <i>7.94</i>	8	927 <i>4.93</i>	
Common truncus	68 <i>0.99</i>	14 <i>0.68</i>	86 <i>0.94</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	168 <i>0.89</i>	
Congenital cataract	127 <i>1.85</i>	41 <i>1.99</i>	152 <i>1.66</i>	12 <i>1.88</i>	1 <i>2.65</i>	5	338 <i>1.80</i>	
Congenital hip dislocation	342 <i>4.97</i>	30 <i>1.46</i>	411 <i>4.50</i>	24 <i>3.77</i>	1 <i>2.65</i>	7	815 <i>4.33</i>	
Diaphragmatic hernia	169 <i>2.46</i>	41 <i>1.99</i>	258 <i>2.82</i>	12 <i>1.88</i>	1 <i>2.65</i>	5	486 <i>2.58</i>	
Down syndrome (Trisomy 21)	833 <i>12.11</i>	183 <i>8.90</i>	1276 <i>13.96</i>	59 <i>9.27</i>	3 <i>7.94</i>	37	2391 <i>12.71</i>	
Ebstein anomaly	42 <i>0.61</i>	13 <i>0.63</i>	72 <i>0.79</i>	4 <i>0.63</i>	1 <i>2.65</i>	4	136 <i>0.72</i>	
Encephalocele	35 <i>0.51</i>	18 <i>0.88</i>	88 <i>0.96</i>	5 <i>0.79</i>	1 <i>2.65</i>	3	150 <i>0.80</i>	
Endocardial cushion defect	303 <i>4.40</i>	92 <i>4.47</i>	336 <i>3.68</i>	22 <i>3.46</i>	1 <i>2.65</i>	6	760 <i>4.04</i>	
Esophageal atresia/ tracheoesophageal fistula	154 <i>2.24</i>	34 <i>1.65</i>	174 <i>1.90</i>	10 <i>1.57</i>	2 <i>5.30</i>	5	379 <i>2.01</i>	
Fetus or newborn affected by maternal alcohol use	18 <i>0.26</i>	12 <i>0.58</i>	16 <i>0.18</i>	0 <i>0.00</i>	1 <i>2.65</i>	0	47 <i>0.25</i>	
Gastroschisis	301 <i>4.38</i>	58 <i>2.82</i>	464 <i>5.08</i>	14 <i>2.20</i>	0 <i>0.00</i>	13	850 <i>4.52</i>	
Hirschsprung disease (congenital megacolon)	113 <i>1.64</i>	38 <i>1.85</i>	79 <i>0.86</i>	10 <i>1.57</i>	0 <i>0.00</i>	1	241 <i>1.28</i>	
Hydrocephalus without Spina Bifida	423 <i>6.15</i>	161 <i>7.83</i>	596 <i>6.52</i>	23 <i>3.61</i>	2 <i>5.30</i>	21	1226 <i>6.51</i>	
Hypoplastic left heart syndrome	167 <i>2.43</i>	47 <i>2.29</i>	163 <i>1.78</i>	7 <i>1.10</i>	1 <i>2.65</i>	3	388 <i>2.06</i>	
Hypospadias and Epispadias	2772 <i>40.30</i>	640 <i>31.12</i>	1645 <i>18.00</i>	162 <i>25.45</i>	9 <i>23.83</i>	64	5292 <i>28.12</i>	
Microcephalus	514 <i>7.47</i>	248 <i>12.06</i>	732 <i>8.01</i>	46 <i>7.23</i>	3 <i>7.94</i>	13	1556 <i>8.27</i>	
Obstructive genitourinary defect	2568 <i>37.33</i>	546 <i>26.55</i>	3223 <i>35.26</i>	189 <i>29.69</i>	13 <i>34.43</i>	61	6600 <i>35.07</i>	+

Texas**Birth Defects Counts and Rates 2001-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	156 <i>2.27</i>	42 <i>2.04</i>	175 <i>1.91</i>	10 <i>1.57</i>	1 <i>2.65</i>	7 <i>2.65</i>	391 <i>2.08</i>	
Patent ductus arteriosus	3147 <i>45.75</i>	929 <i>45.17</i>	4677 <i>51.16</i>	214 <i>33.61</i>	17 <i>45.02</i>	104 <i>45.02</i>	9088 <i>48.29</i>	+
Pulmonary valve atresia and stenosis	556 <i>8.08</i>	178 <i>8.66</i>	747 <i>8.17</i>	33 <i>5.18</i>	2 <i>5.30</i>	16 <i>5.30</i>	1532 <i>8.14</i>	
Pyloric stenosis	1397 <i>20.31</i>	172 <i>8.36</i>	1764 <i>19.30</i>	28 <i>4.40</i>	3 <i>7.94</i>	47 <i>7.94</i>	3411 <i>18.13</i>	
Rectal and large intestinal atresia/stenosis	373 <i>5.42</i>	79 <i>3.84</i>	519 <i>5.68</i>	26 <i>4.08</i>	1 <i>2.65</i>	10 <i>2.65</i>	1008 <i>5.36</i>	
Reduction deformity, lower limbs	140 <i>2.04</i>	38 <i>1.85</i>	172 <i>1.88</i>	9 <i>1.41</i>	1 <i>2.65</i>	2 <i>2.65</i>	362 <i>1.92</i>	
Reduction deformity, upper limbs	276 <i>4.01</i>	76 <i>3.70</i>	373 <i>4.08</i>	17 <i>2.67</i>	2 <i>5.30</i>	8 <i>5.30</i>	752 <i>4.00</i>	
Renal agenesis/hypoplasia	338 <i>4.91</i>	97 <i>4.72</i>	515 <i>5.63</i>	23 <i>3.61</i>	2 <i>5.30</i>	15 <i>5.30</i>	990 <i>5.26</i>	
Spina bifida without anencephalus	219 <i>3.18</i>	46 <i>2.24</i>	392 <i>4.29</i>	10 <i>1.57</i>	0 <i>0.00</i>	7 <i>0.00</i>	674 <i>3.58</i>	+
Tetralogy of Fallot	237 <i>3.45</i>	80 <i>3.89</i>	313 <i>3.42</i>	19 <i>2.98</i>	0 <i>0.00</i>	10 <i>0.00</i>	659 <i>3.50</i>	
Transposition of great arteries	304 <i>4.42</i>	80 <i>3.89</i>	477 <i>5.22</i>	30 <i>4.71</i>	6 <i>15.89</i>	9 <i>15.89</i>	906 <i>4.81</i>	
Tricuspid valve atresia and stenosis	102 <i>1.48</i>	38 <i>1.85</i>	156 <i>1.71</i>	9 <i>1.41</i>	1 <i>2.65</i>	3 <i>2.65</i>	309 <i>1.64</i>	+
Trisomy 13 (Patau syndrome)	78 <i>1.13</i>	21 <i>1.02</i>	96 <i>1.05</i>	10 <i>1.57</i>	0 <i>0.00</i>	4 <i>0.00</i>	209 <i>1.11</i>	
Trisomy 18 (Edwards syndrome)	164 <i>2.38</i>	61 <i>2.97</i>	185 <i>2.02</i>	11 <i>1.73</i>	0 <i>0.00</i>	15 <i>0.00</i>	436 <i>2.32</i>	
Ventricular septal defect	3234 <i>47.01</i>	763 <i>37.10</i>	5162 <i>56.47</i>	229 <i>35.97</i>	11 <i>29.13</i>	105 <i>29.13</i>	9504 <i>50.50</i>	
Total Live Births	687881	205648	914140	63666	3776	3776	1881824	+

Texas**Trisomy Counts and Rates by Maternal Age 2001-2005**

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
	1353	1038	2391
Down syndrome (Trisomy 21)	8.06	51.27	12.71
	152	57	209
Trisomy 13 (Patau syndrome)	0.91	2.82	1.11
	234	202	436
Trisomy 18 (Edwards syndrome)	1.39	9.98	2.32
Total Live Births	1679151	202471	1881824

(**) Total includes unknown age

(+)Notes:

- 1: Live births: Texas resident live births data for 2005 are provisional.
- 2: Obstructive genitourinary defect: Readers who compare the data in this report to earlier reports will notice an increase in the number of cases in the category 'obstructive genitourinary defect'. Due to changes in birth defect coding, we now assign BPA code 753.290 to some conditions that were previously assigned other codes. In 2008 we edited all records in the Texas birth defects registry to reflect these coding changes.
- 3: Our case definition includes stillbirths and terminations at any length of gestation and any birthweight.
- 4: Patent ductus arteriosus: In Texas, coding of patent ductus arteriosus (PDA) is based on the following criteria. PDA is never coded if the infant was less than 36 weeks gestation and less than 12 weeks of age at diagnosis, or if the infant was on prostaglandin. If the infant was greater than or equal to 36 weeks gestation and less than 12 weeks of age at diagnosis, PDA is coded only if there is another reportable defect present, or if there was a medical/surgical intervention for this problem. PDA is always coded if the infant is greater than or equal to 12 weeks of age at diagnosis, unless the infant was on prostaglandin.
- 5: Texas uses the CDC/BPA coding system.
- 6: The reported tabulations include definite diagnoses only; we have excluded cases with possible/probable diagnoses.
- 7: Tricuspid valve atresia and stenosis: Readers who compare the data in this report to earlier reports will notice a decrease in the number of cases in the category 'tricuspid valve atresia and stenosis'. For several years, due to changes in birth defect coding during 2003, we included in BPA code 746.100 some defects of the tricuspid valve that were not strictly atresia or stenosis. In 2008 we edited all records in the Texas birth defects registry to remove those additional tricuspid valve defects from BPA code 746.100.
- 8: 2001-2005, Anencephalus, Include livebirths, stillbirths, and terminations
- 9: 2001-2005, Spina bifida without anencephalus, Include livebirths, stillbirths, and terminations

Utah
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Amniotic bands	26 <i>1.30</i>	1 <i>5.72</i>	6 <i>1.69</i>	2 <i>2.63</i>	0 <i>0.00</i>	0	35 <i>1.41</i>	
Anencephalus	41 <i>2.06</i>	0 <i>0.00</i>	15 <i>4.23</i>	1 <i>1.31</i>	0 <i>0.00</i>	1	58 <i>2.33</i>	+
Aniridia	4 <i>0.20</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	4 <i>0.16</i>	
Anophthalmia/ microphthalmia	24 <i>1.20</i>	0 <i>0.00</i>	14 <i>3.95</i>	1 <i>1.31</i>	0 <i>0.00</i>	0	39 <i>1.57</i>	
Anotia/microtia	51 <i>2.56</i>	0 <i>0.00</i>	19 <i>5.36</i>	2 <i>2.63</i>	1 <i>3.16</i>	1	74 <i>2.97</i>	
Aortic valve stenosis	64 <i>3.21</i>	0 <i>0.00</i>	7 <i>1.98</i>	1 <i>1.31</i>	2 <i>6.32</i>	0	74 <i>2.97</i>	
Atrial septal defect	448 <i>22.46</i>	7 <i>40.05</i>	104 <i>29.35</i>	17 <i>22.32</i>	10 <i>31.58</i>	1	587 <i>23.57</i>	
Biliary atresia	14 <i>0.70</i>	1 <i>5.72</i>	0 <i>0.00</i>	1 <i>1.31</i>	0 <i>0.00</i>	0	16 <i>0.64</i>	
Bladder exstrophy	4 <i>0.20</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	4 <i>0.16</i>	
Choanal atresia	23 <i>1.15</i>	1 <i>5.72</i>	12 <i>3.39</i>	0 <i>0.00</i>	0 <i>0.00</i>	1	37 <i>1.49</i>	
Cleft lip with and without cleft palate	260 <i>13.04</i>	2 <i>11.44</i>	49 <i>13.83</i>	11 <i>14.45</i>	8 <i>25.26</i>	1	331 <i>13.29</i>	
Cleft palate without cleft lip	154 <i>7.72</i>	0 <i>0.00</i>	25 <i>7.05</i>	9 <i>11.82</i>	2 <i>6.32</i>	0	190 <i>7.63</i>	
Coarctation of aorta	175 <i>8.77</i>	0 <i>0.00</i>	23 <i>6.49</i>	1 <i>1.31</i>	1 <i>3.16</i>	1	201 <i>8.07</i>	
Common truncus	21 <i>1.05</i>	0 <i>0.00</i>	2 <i>0.56</i>	1 <i>1.31</i>	0 <i>0.00</i>	0	24 <i>0.96</i>	
Congenital cataract	54 <i>2.71</i>	1 <i>5.72</i>	6 <i>1.69</i>	0 <i>0.00</i>	1 <i>3.16</i>	1	63 <i>2.53</i>	
Diaphragmatic hernia	79 <i>3.96</i>	1 <i>5.72</i>	7 <i>1.98</i>	1 <i>1.31</i>	0 <i>0.00</i>	0	88 <i>3.53</i>	
Down syndrome (Trisomy 21)	295 <i>14.79</i>	1 <i>5.72</i>	75 <i>21.16</i>	12 <i>15.76</i>	5 <i>15.79</i>	4	392 <i>15.74</i>	
Ebstein anomaly	12 <i>0.60</i>	0 <i>0.00</i>	1 <i>0.28</i>	1 <i>1.31</i>	0 <i>0.00</i>	0	14 <i>0.56</i>	
Encephalocele	14 <i>0.70</i>	0 <i>0.00</i>	7 <i>1.98</i>	0 <i>0.00</i>	1 <i>3.16</i>	1	23 <i>0.92</i>	
Endocardial cushion defect	113 <i>5.67</i>	1 <i>5.72</i>	15 <i>4.23</i>	5 <i>6.57</i>	3 <i>9.47</i>	0	137 <i>5.50</i>	
Esophageal atresia/ tracheoesophageal fistula	51 <i>2.56</i>	0 <i>0.00</i>	10 <i>2.82</i>	2 <i>2.63</i>	1 <i>3.16</i>	0	64 <i>2.57</i>	
Gastroschisis	95 <i>4.76</i>	3 <i>17.16</i>	27 <i>7.62</i>	5 <i>6.57</i>	2 <i>6.32</i>	0	132 <i>5.30</i>	
Hirschsprung disease (congenital megacolon)	40 <i>2.01</i>	1 <i>5.72</i>	2 <i>0.56</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	43 <i>1.73</i>	
Hydrocephalus without Spina Bifida	106 <i>5.31</i>	0 <i>0.00</i>	15 <i>4.23</i>	4 <i>5.25</i>	1 <i>3.16</i>	0	126 <i>5.06</i>	
Hypoplastic left heart syndrome	78 <i>3.91</i>	0 <i>0.00</i>	8 <i>2.26</i>	2 <i>2.63</i>	0 <i>0.00</i>	3	91 <i>3.65</i>	
Hypospadias and Epispadias	697 <i>34.95</i>	5 <i>28.60</i>	34 <i>9.59</i>	18 <i>23.64</i>	7 <i>22.10</i>	2	763 <i>30.64</i>	+
Microcephalus	87 <i>4.36</i>	2 <i>11.44</i>	29 <i>8.18</i>	1 <i>1.31</i>	2 <i>6.32</i>	1	122 <i>4.90</i>	
Obstructive genitourinary defect	411 <i>20.61</i>	2 <i>11.44</i>	56 <i>15.80</i>	13 <i>17.07</i>	3 <i>9.47</i>	1	486 <i>19.51</i>	
Omphalocele	44 <i>2.21</i>	0 <i>0.00</i>	13 <i>3.67</i>	4 <i>5.25</i>	0 <i>0.00</i>	0	61 <i>2.45</i>	
Pulmonary valve atresia and stenosis	244 <i>12.23</i>	2 <i>11.44</i>	38 <i>10.72</i>	9 <i>11.82</i>	1 <i>3.16</i>	0	294 <i>11.80</i>	

Utah**Birth Defects Counts and Rates 2001-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/ Other		
Pyloric stenosis	266 <i>13.34</i>	0 <i>0.00</i>	53 <i>14.96</i>	4 <i>5.25</i>	0 <i>0.00</i>	0	323 <i>12.97</i>	
Rectal and large intestinal atresia/stenosis	76 <i>3.81</i>	0 <i>0.00</i>	14 <i>3.95</i>	4 <i>5.25</i>	0 <i>0.00</i>	0	94 <i>3.77</i>	
Reduction deformity, lower limbs	35 <i>1.75</i>	0 <i>0.00</i>	8 <i>2.26</i>	1 <i>1.31</i>	0 <i>0.00</i>	0	44 <i>1.77</i>	
Reduction deformity, upper limbs	123 <i>6.17</i>	0 <i>0.00</i>	26 <i>7.34</i>	8 <i>10.51</i>	1 <i>3.16</i>	0	158 <i>6.34</i>	
Renal agenesis/hypoplasia	74 <i>3.71</i>	1 <i>5.72</i>	11 <i>3.10</i>	5 <i>6.57</i>	1 <i>3.16</i>	0	92 <i>3.69</i>	
Spina bifida without anencephalus	82 <i>4.11</i>	0 <i>0.00</i>	22 <i>6.21</i>	1 <i>1.31</i>	0 <i>0.00</i>	0	105 <i>4.22</i>	+
Tetralogy of Fallot	73 <i>3.66</i>	2 <i>11.44</i>	12 <i>3.39</i>	1 <i>1.31</i>	2 <i>6.32</i>	0	90 <i>3.61</i>	
Transposition of great arteries	87 <i>4.36</i>	2 <i>11.44</i>	17 <i>4.80</i>	2 <i>2.63</i>	3 <i>9.47</i>	0	111 <i>4.46</i>	
Tricuspid valve atresia and stenosis	26 <i>1.30</i>	1 <i>5.72</i>	6 <i>1.69</i>	1 <i>1.31</i>	1 <i>3.16</i>	0	35 <i>1.41</i>	
Trisomy 13 (Patau syndrome)	30 <i>1.50</i>	0 <i>0.00</i>	10 <i>2.82</i>	1 <i>1.31</i>	0 <i>0.00</i>	1	42 <i>1.69</i>	
Trisomy 18 (Edwards syndrome)	58 <i>2.91</i>	0 <i>0.00</i>	19 <i>5.36</i>	3 <i>3.94</i>	0 <i>0.00</i>	1	81 <i>3.25</i>	
Ventricular septal defect	157 <i>7.87</i>	2 <i>11.44</i>	41 <i>11.57</i>	8 <i>10.51</i>	4 <i>12.63</i>	0	212 <i>8.51</i>	
Total Live Births	199445	1748	35439	7615	3167		249059	

Utah**Trisomy Counts and Rates by Maternal Age 2001-2005**

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
Down syndrome (Trisomy 21)	236 <i>10.40</i>	156 <i>70.73</i>	392 <i>15.74</i>
Trisomy 13 (Patau syndrome)	28 <i>1.23</i>	14 <i>6.35</i>	42 <i>1.69</i>
Trisomy 18 (Edwards syndrome)	49 <i>2.16</i>	32 <i>14.51</i>	81 <i>3.25</i>
Total Live Births	226987	22055	249059

(**) Total includes unknown age

(+)Notes:

- 1: Coding: ICD-9-BPA modified (NBDPS)
- 2: Defect specific notes: Utah does not track PDA, Congenital Hip Dislocation, or Fetus/Newborn affected by maternal alcohol use. Only perimembranous VSD are tracked beginning in 2003.
- 3: No possible or probable cases are included all cases are confirmed.
- 4: Stillbirths: ≥ 20 weeks gestation
- 5: Terminations: Any gestational age
- 6: 2001-2005, Anencephalus, Include livebirths, stillbirths, and terminations
- 7: 2001-2005, Spina bifida without anencephalus, Include livebirths, stillbirths, and terminations
- 8: 2001-2005, Hypospadias and Epispadias, 1st degree with repair - 2nd & 3rd degree with or without repair

Virginia
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/ Other		
Amniotic bands	1 <i>0.03</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.02</i>	
Anencephalus	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	17 <i>0.00</i>	17 <i>0.34</i>	+
Aniridia	1 <i>0.03</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>0.00</i>	5 <i>0.10</i>	
Anophthalmia/ microphthalmia	3 <i>0.10</i>	1 <i>0.09</i>	1 <i>0.19</i>	1 <i>0.32</i>	0 <i>0.00</i>	18 <i>0.00</i>	24 <i>0.47</i>	
Anotia/microtia	2 <i>0.06</i>	1 <i>0.09</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	20 <i>0.00</i>	23 <i>0.45</i>	
Aortic valve stenosis	4 <i>0.13</i>	1 <i>0.09</i>	1 <i>0.19</i>	0 <i>0.00</i>	0 <i>0.00</i>	71 <i>0.00</i>	77 <i>1.52</i>	
Atrial septal defect	239 <i>7.76</i>	62 <i>5.68</i>	37 <i>6.86</i>	8 <i>2.59</i>	0 <i>0.00</i>	3211 <i>0.00</i>	3557 <i>70.21</i>	
Biliary atresia	2 <i>0.06</i>	3 <i>0.27</i>	2 <i>0.37</i>	0 <i>0.00</i>	0 <i>0.00</i>	48 <i>0.00</i>	55 <i>1.09</i>	
Bladder exstrophy	1 <i>0.03</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	9 <i>0.00</i>	10 <i>0.20</i>	
Choanal atresia	11 <i>0.36</i>	1 <i>0.09</i>	0 <i>0.00</i>	1 <i>0.32</i>	0 <i>0.00</i>	66 <i>0.00</i>	79 <i>1.56</i>	
Cleft lip with and without cleft palate	45 <i>1.46</i>	8 <i>0.73</i>	8 <i>1.48</i>	4 <i>1.30</i>	0 <i>0.00</i>	455 <i>0.00</i>	520 <i>10.26</i>	
Cleft palate without cleft lip	25 <i>0.81</i>	2 <i>0.18</i>	2 <i>0.37</i>	1 <i>0.32</i>	0 <i>0.00</i>	352 <i>0.00</i>	382 <i>7.54</i>	
Coarctation of aorta	24 <i>0.78</i>	1 <i>0.09</i>	3 <i>0.56</i>	1 <i>0.32</i>	0 <i>0.00</i>	217 <i>0.00</i>	246 <i>4.86</i>	
Common truncus	1 <i>0.03</i>	3 <i>0.27</i>	0 <i>0.00</i>	1 <i>0.32</i>	0 <i>0.00</i>	45 <i>0.00</i>	50 <i>0.99</i>	
Congenital cataract	5 <i>0.16</i>	2 <i>0.18</i>	1 <i>0.19</i>	0 <i>0.00</i>	0 <i>0.00</i>	42 <i>0.00</i>	50 <i>0.99</i>	
Congenital hip dislocation	28 <i>0.91</i>	5 <i>0.46</i>	0 <i>0.00</i>	1 <i>0.32</i>	0 <i>0.00</i>	269 <i>0.00</i>	303 <i>5.98</i>	
Diaphragmatic hernia	10 <i>0.32</i>	4 <i>0.37</i>	1 <i>0.19</i>	0 <i>0.00</i>	0 <i>0.00</i>	112 <i>0.00</i>	127 <i>2.51</i>	
Down syndrome (Trisomy 21)	102 <i>3.31</i>	25 <i>2.29</i>	13 <i>2.41</i>	3 <i>0.97</i>	0 <i>0.00</i>	508 <i>0.00</i>	651 <i>12.85</i>	
Ebstein anomaly	5 <i>0.16</i>	0 <i>0.00</i>	1 <i>0.19</i>	0 <i>0.00</i>	0 <i>0.00</i>	39 <i>0.00</i>	45 <i>0.89</i>	
Encephalocele	5 <i>0.16</i>	1 <i>0.09</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	25 <i>0.00</i>	31 <i>0.61</i>	
Endocardial cushion defect	29 <i>0.94</i>	11 <i>1.01</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	168 <i>0.00</i>	208 <i>4.11</i>	
Esophageal atresia/ tracheoesophageal fistula	13 <i>0.42</i>	4 <i>0.37</i>	1 <i>0.19</i>	1 <i>0.32</i>	0 <i>0.00</i>	82 <i>0.00</i>	101 <i>1.99</i>	
Fetus or newborn affected by maternal alcohol use	1 <i>0.03</i>	6 <i>0.55</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	45 <i>0.00</i>	52 <i>1.03</i>	
Hirschsprung disease (congenital megacolon)	9 <i>0.29</i>	6 <i>0.55</i>	1 <i>0.19</i>	0 <i>0.00</i>	0 <i>0.00</i>	116 <i>0.00</i>	132 <i>2.61</i>	
Hydrocephalus without Spina Bifida	24 <i>0.78</i>	15 <i>1.37</i>	1 <i>0.19</i>	0 <i>0.00</i>	0 <i>0.00</i>	198 <i>0.00</i>	238 <i>4.70</i>	
Hypoplastic left heart syndrome	14 <i>0.45</i>	2 <i>0.18</i>	1 <i>0.19</i>	0 <i>0.00</i>	0 <i>0.00</i>	111 <i>0.00</i>	128 <i>2.53</i>	
Hypospadias and Epispadias	106 <i>3.44</i>	25 <i>2.29</i>	3 <i>0.56</i>	2 <i>0.65</i>	0 <i>0.00</i>	1128 <i>0.00</i>	1264 <i>24.95</i>	
Microcephalus	19 <i>0.62</i>	14 <i>1.28</i>	5 <i>0.93</i>	1 <i>0.32</i>	0 <i>0.00</i>	217 <i>0.00</i>	256 <i>5.05</i>	
Obstructive genitourinary defect	18 <i>0.58</i>	6 <i>0.55</i>	8 <i>1.48</i>	3 <i>0.97</i>	0 <i>0.00</i>	804 <i>0.00</i>	839 <i>16.56</i>	
Patent ductus arteriosus	280 <i>9.09</i>	133 <i>12.19</i>	47 <i>8.72</i>	14 <i>4.54</i>	0 <i>0.00</i>	4272 <i>0.00</i>	4746 <i>93.68</i>	+

Virginia

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Pulmonary valve atresia and stenosis	35 <i>1.14</i>	18 <i>1.65</i>	6 <i>1.11</i>	1 <i>0.32</i>	0 <i>0.00</i>	550	610 <i>12.04</i>	
Pyloric stenosis	38 <i>1.23</i>	5 <i>0.46</i>	4 <i>0.74</i>	1 <i>0.32</i>	0 <i>0.00</i>	801	849 <i>16.76</i>	
Rectal and large intestinal atresia/stenosis	14 <i>0.45</i>	3 <i>0.27</i>	1 <i>0.19</i>	0 <i>0.00</i>	0 <i>0.00</i>	160	178 <i>3.51</i>	
Reduction deformity, lower limbs	9 <i>0.29</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	58	67 <i>1.32</i>	
Reduction deformity, upper limbs	9 <i>0.29</i>	4 <i>0.37</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	78	91 <i>1.80</i>	
Renal agenesis/hypoplasia	12 <i>0.39</i>	3 <i>0.27</i>	1 <i>0.19</i>	1 <i>0.32</i>	1 <i>15.13</i>	125	143 <i>2.82</i>	
Spina bifida without anencephalus	7 <i>0.23</i>	1 <i>0.09</i>	4 <i>0.74</i>	0 <i>0.00</i>	0 <i>0.00</i>	188	200 <i>3.95</i>	+
Tetralogy of Fallot	32 <i>1.04</i>	10 <i>0.92</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	211	253 <i>4.99</i>	
Transposition of great arteries	17 <i>0.55</i>	4 <i>0.37</i>	2 <i>0.37</i>	0 <i>0.00</i>	0 <i>0.00</i>	227	250 <i>4.93</i>	
Tricuspid valve atresia and stenosis	4 <i>0.13</i>	2 <i>0.18</i>	1 <i>0.19</i>	2 <i>0.65</i>	0 <i>0.00</i>	47	56 <i>1.11</i>	
Trisomy 13 (Patau syndrome)	1 <i>0.03</i>	2 <i>0.18</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	36	39 <i>0.77</i>	
Trisomy 18 (Edwards syndrome)	3 <i>0.10</i>	1 <i>0.09</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	54	58 <i>1.14</i>	
Ventricular septal defect	145 <i>4.71</i>	41 <i>3.76</i>	25 <i>4.64</i>	8 <i>2.59</i>	0 <i>0.00</i>	1843	2062 <i>40.70</i>	
Total Live Births	307879	109150	53897	30831	661		506645	

Virginia

Trisomy Counts and Rates by Maternal Age 2001-2005

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
Down syndrome (Trisomy 21)	214 <i>5.04</i>	216 <i>26.36</i>	601 <i>11.86</i>
Trisomy 13 (Patau syndrome)	19 <i>0.45</i>	7 <i>0.85</i>	39 <i>0.77</i>
Trisomy 18 (Edwards syndrome)	17 <i>0.40</i>	19 <i>2.32</i>	58 <i>1.14</i>
Total Live Births	424465	81930	506645

(**) Total includes unknown age

(+)Notes:

- 1: Stillbirths and terminations are not including in the data collection for Virginia's birth defects registry (VaCARES).
- 2: The coding system used is ICD-9-CM.
- 3: 2001-2005, Anencephalus, Livebirths only.
- 4: 2001-2005, Spina bifida without anencephalus, Livebirths only.
- 5: 2001-2005, Patent ductus arteriosus, Virginia is unable to exclude infants less than 2500 grams.

West Virginia
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Anencephalus	11 <i>1.26</i>	1 <i>3.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	12 <i>1.30</i>	
Aniridia	4 <i>0.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>0.43</i>	
Anophthalmia/ microphthalmia	4 <i>0.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>0.43</i>	
Anotia/microtia	4 <i>0.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>0.43</i>	
Aortic valve stenosis	14 <i>1.60</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	14 <i>1.51</i>	
Atrial septal defect	585 <i>66.95</i>	16 <i>50.39</i>	2 <i>33.28</i>	3 <i>40.27</i>	2 <i>227.27</i>	6 <i>66.35</i>	614 <i>66.35</i>	
Biliary atresia	4 <i>0.46</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	4 <i>0.43</i>	
Bladder exstrophy	2 <i>0.23</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>0.22</i>	
Choanal atresia	5 <i>0.57</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	5 <i>0.54</i>	
Cleft lip with and without cleft palate	18 <i>2.06</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	18 <i>1.95</i>	
Cleft palate without cleft lip	41 <i>4.69</i>	1 <i>3.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	42 <i>4.54</i>	
Coarctation of aorta	30 <i>3.43</i>	2 <i>6.30</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	32 <i>3.46</i>	
Common truncus	14 <i>1.60</i>	1 <i>3.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	15 <i>1.62</i>	
Congenital cataract	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Congenital hip dislocation	20 <i>2.29</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	20 <i>2.16</i>	
Diaphragmatic hernia	21 <i>2.40</i>	1 <i>3.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	22 <i>2.38</i>	
Down syndrome (Trisomy 21)	92 <i>10.53</i>	4 <i>12.60</i>	0 <i>0.00</i>	1 <i>13.42</i>	0 <i>0.00</i>	2 <i>10.70</i>	99 <i>10.70</i>	
Ebstein anomaly	3 <i>0.34</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>0.32</i>	
Encephalocele	4 <i>0.46</i>	1 <i>3.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	5 <i>0.54</i>	
Endocardial cushion defect	27 <i>3.09</i>	1 <i>3.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	28 <i>3.03</i>	
Esophageal atresia/ tracheoesophageal fistula	14 <i>1.60</i>	2 <i>6.30</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	16 <i>1.73</i>	
Fetus or newborn affected by maternal alcohol use	20 <i>2.29</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	6 <i>2.81</i>	26 <i>2.81</i>	
Hirschsprung disease (congenital megacolon)	9 <i>1.03</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	9 <i>0.97</i>	
Hydrocephalus without Spina Bifida	27 <i>3.09</i>	1 <i>3.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	28 <i>3.03</i>	
Hypoplastic left heart syndrome	15 <i>1.72</i>	1 <i>3.15</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	16 <i>1.73</i>	
Hypospadias and Epispadias	155 <i>17.74</i>	5 <i>15.75</i>	1 <i>16.64</i>	2 <i>26.85</i>	0 <i>0.00</i>	2 <i>17.83</i>	165 <i>17.83</i>	
Microcephalus	47 <i>5.38</i>	2 <i>6.30</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	2 <i>5.51</i>	51 <i>5.51</i>	
Obstructive genitourinary defect	96 <i>10.99</i>	3 <i>9.45</i>	0 <i>0.00</i>	2 <i>26.85</i>	0 <i>0.00</i>	1 <i>11.02</i>	102 <i>11.02</i>	
Patent ductus arteriosus	153 <i>17.51</i>	4 <i>12.60</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	157 <i>16.97</i>	+
Pulmonary valve atresia and stenosis	38 <i>4.35</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>113.64</i>	0 <i>4.21</i>	39 <i>4.21</i>	

West Virginia

Birth Defects Counts and Rates 2001-2005

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Pyloric stenosis	61 6.98	1 3.15	0 0.00	0 0.00	0 0.00	0 0	62 6.70	
Rectal and large intestinal atresia/stenosis	29 3.32	1 3.15	0 0.00	0 0.00	0 0.00	0 0	30 3.24	
Reduction deformity, lower limbs	5 0.57	0 0.00	0 0.00	0 0.00	0 0.00	0 0	5 0.54	
Reduction deformity, upper limbs	5 0.57	0 0.00	0 0.00	0 0.00	0 0.00	0 0	5 0.54	
Renal agenesis/hypoplasia	20 2.29	1 3.15	0 0.00	0 0.00	0 0.00	0 0	21 2.27	
Spina bifida without anencephalus	36 4.12	0 0.00	0 0.00	0 0.00	0 0.00	0 0	36 3.89	
Tetralogy of Fallot	36 4.12	1 3.15	1 16.64	1 13.42	0 0.00	1 0	40 4.32	
Transposition of great arteries	32 3.66	1 3.15	0 0.00	0 0.00	0 0.00	1 0	34 3.67	
Tricuspid valve atresia and stenosis	7 0.80	0 0.00	0 0.00	0 0.00	0 0.00	0 0	7 0.76	
Trisomy 13 (Patau syndrome)	6 0.69	1 3.15	1 16.64	0 0.00	0 0.00	0 0	8 0.86	
Trisomy 18 (Edwards syndrome)	7 0.80	0 0.00	0 0.00	0 0.00	0 0.00	0 0	7 0.76	
Ventricular septal defect	208 23.80	2 6.30	0 0.00	1 13.42	0 0.00	2 0	213 23.02	
Total Live Births	87380	3175	601	745	88		92539	

West Virginia

Trisomy Counts and Rates by Maternal Age 2001-2005

(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	65 7.62	40 54.96	105 11.35
Trisomy 13 (Patau syndrome)	5 0.59	3 4.12	8 0.86
Trisomy 18 (Edwards syndrome)	3 0.35	3 4.12	6 0.65
Total Live Births	85261	7278	92539

(**) Total includes unknown age

(+)Notes:

- 1: Birth defects defined by ICD-9 coding.
- 2: No methodologic changes during this period.
- 3: Probable causes are included.
- 4: Stillbirths and terminations per birth defect are not collected.
- 5: 2001-2005, Patent ductus arteriosus, Include only if weight ≥ 2500 grams, please note if you are unable to exclude < 2500 grams infants.

Wisconsin
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Amniotic bands	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Anencephalus	34 <i>1.35</i>	3 <i>0.94</i>	9 <i>3.29</i>	1 <i>0.87</i>	0 <i>0.00</i>	3 <i>1.53</i>	50 <i>1.53</i>	+
Aniridia	3 <i>0.12</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	3 <i>0.09</i>	
Anophthalmia/ microphthalmia	10 <i>0.40</i>	2 <i>0.63</i>	2 <i>0.73</i>	2 <i>1.74</i>	0 <i>0.00</i>	0 <i>0.49</i>	16 <i>0.49</i>	
Anotia/microtia	12 <i>0.48</i>	0 <i>0.00</i>	3 <i>1.10</i>	0 <i>0.00</i>	1 <i>2.12</i>	0 <i>0.49</i>	16 <i>0.49</i>	
Aortic valve stenosis	23 <i>0.91</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>0.87</i>	1 <i>2.12</i>	0 <i>0.76</i>	25 <i>0.76</i>	
Atrial septal defect	664 <i>26.36</i>	125 <i>39.25</i>	65 <i>23.74</i>	26 <i>22.66</i>	26 <i>54.99</i>	0 <i>27.67</i>	906 <i>27.67</i>	
Biliary atresia	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	1 <i>2.12</i>	0 <i>0.03</i>	1 <i>0.03</i>	
Bladder exstrophy	12 <i>0.48</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.37</i>	12 <i>0.37</i>	
Choanal atresia	30 <i>1.19</i>	1 <i>0.31</i>	6 <i>2.19</i>	1 <i>0.87</i>	0 <i>0.00</i>	0 <i>1.16</i>	38 <i>1.16</i>	
Cleft lip with and without cleft palate	240 <i>9.53</i>	13 <i>4.08</i>	29 <i>10.59</i>	9 <i>7.84</i>	8 <i>16.92</i>	0 <i>9.13</i>	299 <i>9.13</i>	
Cleft palate without cleft lip	169 <i>6.71</i>	11 <i>3.45</i>	17 <i>6.21</i>	6 <i>5.23</i>	3 <i>6.35</i>	0 <i>6.29</i>	206 <i>6.29</i>	
Coarctation of aorta	47 <i>1.87</i>	0 <i>0.00</i>	6 <i>2.19</i>	3 <i>2.61</i>	1 <i>2.12</i>	0 <i>1.74</i>	57 <i>1.74</i>	
Common truncus	5 <i>0.20</i>	3 <i>0.94</i>	5 <i>1.83</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.40</i>	13 <i>0.40</i>	
Congenital cataract	22 <i>0.87</i>	3 <i>0.94</i>	4 <i>1.46</i>	1 <i>0.87</i>	0 <i>0.00</i>	0 <i>0.92</i>	30 <i>0.92</i>	
Congenital hip dislocation	249 <i>9.88</i>	11 <i>3.45</i>	18 <i>6.58</i>	9 <i>7.84</i>	2 <i>4.23</i>	0 <i>8.83</i>	289 <i>8.83</i>	
Diaphragmatic hernia	55 <i>2.18</i>	14 <i>4.40</i>	8 <i>2.92</i>	1 <i>0.87</i>	0 <i>0.00</i>	0 <i>2.38</i>	78 <i>2.38</i>	
Down syndrome (Trisomy 21)	276 <i>10.96</i>	21 <i>6.59</i>	35 <i>12.78</i>	11 <i>9.59</i>	7 <i>14.81</i>	0 <i>10.69</i>	350 <i>10.69</i>	
Ebstein anomaly	14 <i>0.56</i>	1 <i>0.31</i>	1 <i>0.37</i>	1 <i>0.87</i>	0 <i>0.00</i>	0 <i>0.52</i>	17 <i>0.52</i>	
Encephalocele	13 <i>0.52</i>	6 <i>1.88</i>	1 <i>0.37</i>	0 <i>0.00</i>	1 <i>2.12</i>	0 <i>0.64</i>	21 <i>0.64</i>	
Endocardial cushion defect	36 <i>1.43</i>	4 <i>1.26</i>	4 <i>1.46</i>	1 <i>0.87</i>	1 <i>2.12</i>	0 <i>1.40</i>	46 <i>1.40</i>	
Esophageal atresia/ tracheoesophageal fistula	48 <i>1.91</i>	5 <i>1.57</i>	5 <i>1.83</i>	2 <i>1.74</i>	1 <i>2.12</i>	0 <i>1.86</i>	61 <i>1.86</i>	
Fetus or newborn affected by maternal alcohol use	17 <i>0.67</i>	23 <i>7.22</i>	2 <i>0.73</i>	0 <i>0.00</i>	3 <i>6.35</i>	0 <i>1.37</i>	45 <i>1.37</i>	
Gastroschisis	138 <i>5.48</i>	29 <i>9.11</i>	13 <i>4.75</i>	10 <i>8.72</i>	6 <i>12.69</i>	0 <i>5.99</i>	196 <i>5.99</i>	
Hirschsprung disease (congenital megacolon)	15 <i>0.60</i>	2 <i>0.63</i>	2 <i>0.73</i>	1 <i>0.87</i>	1 <i>2.12</i>	0 <i>0.64</i>	21 <i>0.64</i>	
Hydrocephalus without Spina Bifida	59 <i>2.34</i>	23 <i>7.22</i>	9 <i>3.29</i>	4 <i>3.49</i>	4 <i>8.46</i>	0 <i>3.02</i>	99 <i>3.02</i>	
Hypoplastic left heart syndrome	36 <i>1.43</i>	6 <i>1.88</i>	3 <i>1.10</i>	2 <i>1.74</i>	2 <i>4.23</i>	0 <i>1.50</i>	49 <i>1.50</i>	
Hypospadias and Epispadias	902 <i>35.81</i>	88 <i>27.63</i>	35 <i>12.78</i>	16 <i>13.94</i>	9 <i>19.04</i>	1 <i>32.10</i>	1051 <i>32.10</i>	
Microcephalus	40 <i>1.59</i>	15 <i>4.71</i>	3 <i>1.10</i>	1 <i>0.87</i>	0 <i>0.00</i>	0 <i>1.80</i>	59 <i>1.80</i>	
Obstructive genitourinary defect	439 <i>17.43</i>	38 <i>11.93</i>	34 <i>12.42</i>	16 <i>13.94</i>	8 <i>16.92</i>	1 <i>16.37</i>	536 <i>16.37</i>	

Wisconsin**Birth Defects Counts and Rates 2001-2005**

(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Omphalocele	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	
Patent ductus arteriosus	518 <i>20.56</i>	67 <i>21.04</i>	49 <i>17.90</i>	13 <i>11.33</i>	20 <i>42.30</i>	0 <i>20.37</i>	667 <i>20.37</i>	
Pulmonary valve atresia and stenosis	88 <i>3.49</i>	30 <i>9.42</i>	10 <i>3.65</i>	3 <i>2.61</i>	1 <i>2.12</i>	0 <i>4.03</i>	132 <i>4.03</i>	
Pyloric stenosis	3 <i>0.12</i>	2 <i>0.63</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.15</i>	5 <i>0.15</i>	
Rectal and large intestinal atresia/stenosis	78 <i>3.10</i>	9 <i>2.83</i>	5 <i>1.83</i>	3 <i>2.61</i>	1 <i>2.12</i>	0 <i>2.93</i>	96 <i>2.93</i>	
Reduction deformity, lower limbs	35 <i>1.39</i>	3 <i>0.94</i>	3 <i>1.10</i>	0 <i>0.00</i>	1 <i>2.12</i>	0 <i>1.28</i>	42 <i>1.28</i>	
Reduction deformity, upper limbs	74 <i>2.94</i>	8 <i>2.51</i>	8 <i>2.92</i>	2 <i>1.74</i>	4 <i>8.46</i>	0 <i>2.93</i>	96 <i>2.93</i>	
Renal agenesis/hypoplasia	63 <i>2.50</i>	9 <i>2.83</i>	10 <i>3.65</i>	3 <i>2.61</i>	2 <i>4.23</i>	0 <i>2.66</i>	87 <i>2.66</i>	
Spina bifida without anencephalus	73 <i>2.90</i>	7 <i>2.20</i>	5 <i>1.83</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>2.60</i>	85 <i>2.60</i>	+
Tetralogy of Fallot	44 <i>1.75</i>	5 <i>1.57</i>	6 <i>2.19</i>	5 <i>4.36</i>	2 <i>4.23</i>	0 <i>1.89</i>	62 <i>1.89</i>	
Transposition of great arteries	46 <i>1.83</i>	2 <i>0.63</i>	5 <i>1.83</i>	2 <i>1.74</i>	2 <i>4.23</i>	0 <i>1.74</i>	57 <i>1.74</i>	
Tricuspid valve atresia and stenosis	16 <i>0.64</i>	3 <i>0.94</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>0.58</i>	19 <i>0.58</i>	
Trisomy 13 (Patau syndrome)	11 <i>0.44</i>	2 <i>0.63</i>	2 <i>0.73</i>	2 <i>1.74</i>	1 <i>2.12</i>	0 <i>0.55</i>	18 <i>0.55</i>	
Trisomy 18 (Edwards syndrome)	28 <i>1.11</i>	5 <i>1.57</i>	2 <i>0.73</i>	0 <i>0.00</i>	0 <i>0.00</i>	0 <i>1.07</i>	35 <i>1.07</i>	
Ventricular septal defect	636 <i>25.25</i>	54 <i>16.96</i>	73 <i>26.67</i>	26 <i>22.66</i>	17 <i>35.96</i>	0 <i>24.62</i>	806 <i>24.62</i>	
Total Live Births	251897	31847	27376	11474	4728		327423	

Wisconsin**Trisomy Counts and Rates by Maternal Age 2001-2005**

(Rates per 10,000 Live Births)

Defect	Age		Total (**)
	<35	35 and >	
Down syndrome (Trisomy 21)	172 <i>6.07</i>	178 <i>40.38</i>	350 <i>10.69</i>
Trisomy 13 (Patau syndrome)	13 <i>0.46</i>	5 <i>1.13</i>	18 <i>0.55</i>
Trisomy 18 (Edwards syndrome)	20 <i>0.71</i>	15 <i>3.40</i>	35 <i>1.07</i>
Total Live Births	283333	44076	327423

(+)Notes:

- 1: 2001-2005, Anencephalus, Include livebirths and stillbirths
- 2: 2001-2005, Spina bifida without anencephalus, Include livebirths and stillbirths
- 3: Ventricular septal defects are those with any diagnosis code 7454 through 74549.
- 4: 2000-2004, Anencephalus, Includes live births and still births
- 5: 2000-2004, Spina bifida without anencephalus, Includes live births and still births

Department of Defense
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Anencephalus	13 <i>0.42</i>	5 <i>0.63</i>	2 <i>0.41</i>	1 <i>0.51</i>	1 <i>1.31</i>	0	22 <i>0.47</i>	
Aniridia	9 <i>0.29</i>	3 <i>0.38</i>	2 <i>0.41</i>	0 <i>0.00</i>	0 <i>0.00</i>	0	14 <i>0.30</i>	
Anophthalmia/ microphthalmia	77 <i>2.51</i>	22 <i>2.77</i>	10 <i>2.03</i>	6 <i>3.06</i>	3 <i>3.94</i>	3	121 <i>2.56</i>	
Anotia/microtia	54 <i>1.76</i>	7 <i>0.88</i>	10 <i>2.03</i>	7 <i>3.56</i>	2 <i>2.63</i>	3	83 <i>1.75</i>	
Aortic valve stenosis	138 <i>4.50</i>	15 <i>1.89</i>	13 <i>2.64</i>	4 <i>2.04</i>	0 <i>0.00</i>	5	175 <i>3.70</i>	
Biliary atresia	41 <i>1.34</i>	14 <i>1.76</i>	9 <i>1.83</i>	1 <i>0.51</i>	0 <i>0.00</i>	0	65 <i>1.37</i>	
Bladder exstrophy	13 <i>0.42</i>	4 <i>0.50</i>	1 <i>0.20</i>	1 <i>0.51</i>	0 <i>0.00</i>	1	20 <i>0.42</i>	
Choanal atresia	88 <i>2.87</i>	14 <i>1.76</i>	12 <i>2.44</i>	0 <i>0.00</i>	0 <i>0.00</i>	1	115 <i>2.43</i>	
Cleft lip with and without cleft palate	429 <i>14.00</i>	35 <i>4.41</i>	52 <i>10.55</i>	16 <i>8.15</i>	11 <i>14.45</i>	10	553 <i>11.69</i>	
Cleft palate without cleft lip	424 <i>13.83</i>	50 <i>6.30</i>	48 <i>9.74</i>	20 <i>10.18</i>	10 <i>13.13</i>	12	564 <i>11.93</i>	
Coarctation of aorta	284 <i>9.27</i>	52 <i>6.55</i>	39 <i>7.91</i>	13 <i>6.62</i>	3 <i>3.94</i>	10	401 <i>8.48</i>	
Common truncus	41 <i>1.34</i>	10 <i>1.26</i>	7 <i>1.42</i>	4 <i>2.04</i>	0 <i>0.00</i>	1	63 <i>1.33</i>	
Congenital cataract	120 <i>3.91</i>	27 <i>3.40</i>	13 <i>2.64</i>	3 <i>1.53</i>	0 <i>0.00</i>	3	166 <i>3.51</i>	
Congenital hip dislocation	824 <i>26.88</i>	100 <i>12.59</i>	101 <i>20.50</i>	37 <i>18.84</i>	22 <i>28.89</i>	20	1104 <i>23.34</i>	
Diaphragmatic hernia	135 <i>4.40</i>	32 <i>4.03</i>	20 <i>4.06</i>	8 <i>4.07</i>	4 <i>5.25</i>	3	202 <i>4.27</i>	
Down syndrome (Trisomy 21)	422 <i>13.77</i>	91 <i>11.46</i>	69 <i>14.00</i>	24 <i>12.22</i>	11 <i>14.45</i>	21	638 <i>13.49</i>	
Ebstein anomaly	40 <i>1.30</i>	2 <i>0.25</i>	3 <i>0.61</i>	0 <i>0.00</i>	2 <i>2.63</i>	0	47 <i>0.99</i>	
Encephalocele	39 <i>1.27</i>	12 <i>1.51</i>	6 <i>1.22</i>	2 <i>1.02</i>	0 <i>0.00</i>	0	59 <i>1.25</i>	
Endocardial cushion defect	191 <i>6.23</i>	50 <i>6.30</i>	25 <i>5.07</i>	8 <i>4.07</i>	4 <i>5.25</i>	7	285 <i>6.03</i>	
Esophageal atresia/ tracheoesophageal fistula	67 <i>2.19</i>	23 <i>2.90</i>	13 <i>2.64</i>	3 <i>1.53</i>	1 <i>1.31</i>	2	109 <i>2.30</i>	
Fetus or newborn affected by maternal alcohol use	15 <i>0.49</i>	6 <i>0.76</i>	2 <i>0.41</i>	0 <i>0.00</i>	0 <i>0.00</i>	3	26 <i>0.55</i>	
Hirschsprung disease (congenital megacolon)	137 <i>4.47</i>	49 <i>6.17</i>	17 <i>3.45</i>	8 <i>4.07</i>	3 <i>3.94</i>	4	218 <i>4.61</i>	
Hydrocephalus without Spina Bifida	328 <i>10.70</i>	112 <i>14.10</i>	45 <i>9.13</i>	12 <i>6.11</i>	12 <i>15.76</i>	9	518 <i>10.95</i>	
Hypoplastic left heart syndrome	154 <i>5.02</i>	42 <i>5.29</i>	25 <i>5.07</i>	3 <i>1.53</i>	0 <i>0.00</i>	7	231 <i>4.88</i>	
Hypospadias and Epispadias	1533 <i>50.01</i>	363 <i>45.70</i>	168 <i>34.09</i>	76 <i>38.70</i>	27 <i>35.46</i>	48	2215 <i>46.83</i>	
Microcephalus	270 <i>8.81</i>	100 <i>12.59</i>	38 <i>7.71</i>	17 <i>8.66</i>	3 <i>3.94</i>	7	435 <i>9.20</i>	
Obstructive genitourinary defect	1130 <i>36.87</i>	240 <i>30.22</i>	176 <i>35.72</i>	65 <i>33.10</i>	21 <i>27.58</i>	41	1673 <i>35.37</i>	
Pulmonary valve atresia and stenosis	638 <i>20.81</i>	245 <i>30.85</i>	101 <i>20.50</i>	43 <i>21.90</i>	16 <i>21.01</i>	22	1065 <i>22.52</i>	
Pyloric stenosis	839 <i>27.37</i>	105 <i>13.22</i>	121 <i>24.55</i>	15 <i>7.64</i>	23 <i>30.20</i>	16	1119 <i>23.66</i>	
Rectal and large intestinal atresia/stenosis	197 <i>6.43</i>	47 <i>5.92</i>	22 <i>4.46</i>	7 <i>3.56</i>	4 <i>5.25</i>	10	287 <i>6.07</i>	

Department of Defense
Birth Defects Counts and Rates 2001-2005
(Rates per 10,000 Live Births)

Defect	Race/Ethnicity						Total	Notes (+)
	Non-Hispanic White	Non-Hispanic Black or African	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	Unknown/Other		
Reduction deformity, lower limbs	76 2.48	15 1.89	5 1.01	3 1.53	1 1.31	3	103 2.18	
Reduction deformity, upper limbs	106 3.46	20 2.52	17 3.45	4 2.04	1 1.31	2	150 3.17	
Renal agenesis/hypoplasia	131 4.27	23 2.90	25 5.07	3 1.53	3 3.94	7	192 4.06	
Spina bifida without anencephalus	147 4.80	21 2.64	20 4.06	3 1.53	3 3.94	7	201 4.25	
Tetralogy of Fallot	222 7.24	68 8.56	27 5.48	10 5.09	5 6.57	5	337 7.13	
Transposition of great arteries	182 5.94	37 4.66	25 5.07	20 10.18	1 1.31	4	269 5.69	
Tricuspid valve atresia and stenosis	62 2.02	10 1.26	10 2.03	4 2.04	0 0.00	1	87 1.84	
Trisomy 13 (Patau syndrome)	36 1.17	9 1.13	3 0.61	1 0.51	0 0.00	0	49 1.04	
Trisomy 18 (Edwards syndrome)	41 1.34	12 1.51	5 1.01	3 1.53	2 2.63	1	64 1.35	
Ventricular septal defect	2122 69.23	495 62.32	311 63.11	107 54.49	53 69.60	64	3152 66.65	
Total Live Births	306521	79428	49279	19637	7615		472949	

Department of Defense
Trisomy Counts and Rates by Maternal Age 2001-2005
(Rates per 10,000 Live Births)

Defect	Age		
	<35	35 and >	Total (**)
Down syndrome (Trisomy 21)	396 9.56	219 50.67	638 13.49
Trisomy 13 (Patau syndrome)	35 0.84	12 2.78	49 1.04
Trisomy 18 (Edwards syndrome)	35 0.84	27 6.25	64 1.35
Total Live Births	414316	43223	472949

(**) Total includes unknown age

(+)Notes:

- 1: Still births and terminations are not captured by DoD Registry.
- 2: Atrial septal defect is not reported; ICD-9-CM coding over-represents defect cases. Validation efforts are currently underway.
- 3: Patent ductus arteriosus is not reported; ICD-9-CM coding over-represents defect cases. Validation efforts are currently underway.
- 4: ICD-9-CM coding does not differentiate gastroschisis and omphalocele; counts are not included.
- 5: Amniotic bands are not captured by DoD Registry.

Method Changes:

*Criteria for a case: The diagnosis must appear at least once in an inpatient record, or at least twice on two separate dates for outpatient records.

*Infants that appear as multiples of same gender are excluded from analysis.