



Declining Rates of Circumcisions in Montana, 2000-2008¹

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Infant male circumcision is the norm in many religious and cultural groups but its status as a routine medical procedure is controversial. Circumcision may reduce the risk of acquisition and transmission of sexually transmitted diseases, although the potential public health impact may be small in the US and other developed countries. The World Health Organization (WHO) endorses circumcision as part of a comprehensive HIV prevention program in developing countries.² In the US, the Centers for Disease Control and Prevention (CDC) stopped short of recommending circumcision as a public health strategy.³ The American Academy of Pediatrics (AAP) has revised its position more than once. Its current stance is that "...data are not sufficient to recommend routine neonatal circumcision."⁴

The rate of circumcision is declining in the US. In the 1970s, it approached 90%.⁵ The rate estimated from the National Hospital Discharge Data set for 1999 was 65%,⁶ while the rate estimated from the 2005 National Inpatient Survey (NIS), was 56%.⁷ There are longstanding regional differences in the rate of routine circumcision. Rates are consistently higher in the Northeast than elsewhere and lowest in the West.⁶ In the West, the rate was 64% in 1979 and declined to 37% in 1999. Part of this difference may be attributable to the demographic makeup of regional populations, with greater concentrations of religious and ethnic groups that favor circumcision in the Northeast and greater concentrations of groups that do not favor circumcision in the West.⁸

Medicaid as payer is a strong independent predictor of rates of neonatal circumcision in hospital discharge analyses. Individual states determine whether routine circumcision is covered by Medicaid. Four of the six states that ended coverage for routine circumcision before 1999 were Western states (California, Nevada, Oregon, and Washington). Montana ended coverage in 2003. By 2005, eight of 13 Western states did not cover routine circumcision, compared to three of 12 Midwestern states, four of 17 Southern states, and none of eight Northeastern states. The other significant predictor of circumcision is a neonatal hospital stay of only one day or longer than six days (the latter possibly suggesting serious complications that would preclude an elective procedure such as circumcision).⁸

Routine circumcision (ICD-9-CM code 64.0)⁹ among male infants born to Montana-resident mothers declined from 76% in 2002 to 65% in 2003, when Montana Medicaid ceased to cover this procedure. The rate continued to

¹ The Montana Hospital Discharge Data system (MHDDS) receives annual de-identified hospital discharge data sets through a Memorandum of Agreement with the Montana Hospital Association. Most hospitals in Montana participate in voluntary reporting of discharge data from their Uniform Billing Forms, version 2004 (UB-04). The MHDDS receives information on more than 90% of the inpatient admissions from non-psychiatric facilities in the state; it does not receive data on emergency department visits or outpatient procedures at this time.

² <http://www.who.int/mediacentre/news/releases/2007/pr10/en/index.html>

³ Smith DK et al. 2010. *Public Health Rep* 125, Suppl 1:72-82.

⁴ American Academy of Pediatrics, Task force on Circumcision. 1999. Circumcision policy statement. *Pediatrics* 103:686-693; American Academy of Pediatrics. 2005. Policy Statement: Task Force on Circumcision Policy Statement. *Pediatrics* 116:796.

⁵ Carpenter LM. 2010. *Social Health Illness* 32:613-630

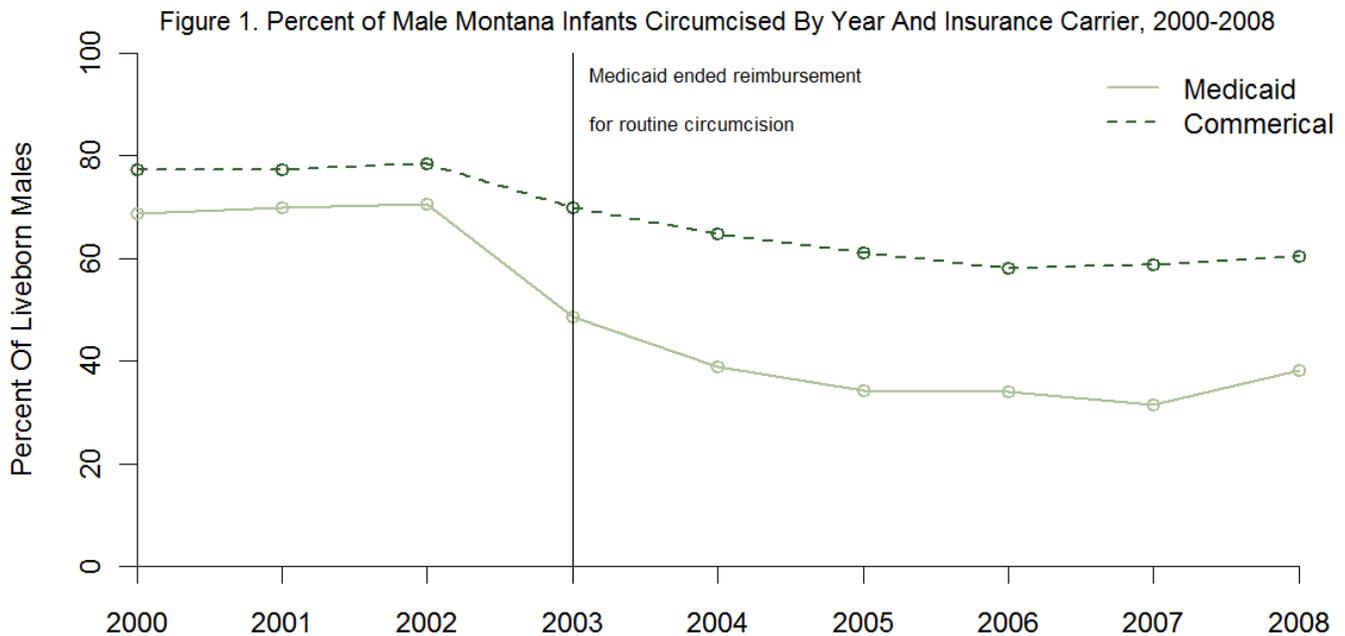
⁶ <http://www.cdc.gov/nchs/hestat/circumcision/circumcisions.htm>

⁷ Merrill CT et al. 2008. HCUP Statistical Brief # 45. <http://hcup-us.ahrq.gov/reports/statbriefs/sb45.jsp>

⁸ Liebowitz AA et al. 2009. *Am J Public Health* 99:138-145.

⁹ <http://icd9cm.chrisendres.com/>

decline slightly through 2008. An average of 27% of Montana births each year are covered by Medicaid. The decline in circumcision rate was largest for infants covered by Medicaid, from 71% in 2002 to 49% in 2003, with a continuing slight decline to 38% in 2008 (Figure 1). There was a more modest decline among infants covered by commercial insurance carriers, from 79% in 2002 to 70% in 2003 and to 60% in 2008.



Consistent with previous reports, infants who experienced long postpartum stays were less likely to be circumcised than those who experience short stays. In the MHDDS data, 64% of infants whose stays were five days or less underwent circumcision, compared to 47% of infants whose stays were six or more days.

Circumcision rates in Montana were not as low as those reported for the Pacific Coast states (California, 22%; Oregon, 27%; Washington, 23%).¹⁰ Montana rates are more similar to rates in the other Mountain states such as Colorado (63%) and Utah (49%). None of these Western states offer Medicaid coverage for routine circumcision.

Summary and Conclusions

It is difficult to assess the effect of recommendations by organizations such as the CDC, WHO, and AAP on circumcision rates, or the roles that religious and cultural differences no doubt play. However, a change in Medicaid coverage resulted in a prompt and substantial decrease in the rate of routine circumcision among Montana infants covered by Medicaid. A smaller decrease also occurred among infants covered by private insurance carriers, resulting in an increased gap in prevalence between infants covered by public and private carriers.

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Please visit our website at <http://dphhs.mt.gov/PHSD/MTHDDS/>

¹⁰ <http://www.cirp.org/library/statistics/USA/state-by-state/>