IN 1854 A CHOLERA EPIDEMIC was raging through London. John Snow mapped the residences of cholera cases, and found clustering of cases around the Broad Street water pump. Snow removed the handle of the pump and shut down the epidemic. For this, he is fondly remembered as the “Father of Epidemiology.”**

One of the most striking aspects of Snow’s achievement was that he deduced the means of transmission without understanding the bacteriologic basis of cholera. Like Snow and cholera, there are many diseases the causes of which we do not fully understand. Nevertheless, epidemiologic analyses can point to “pump handles” for us to remove in order to reduce morbidity and mortality.

This edition of the CD Summary reviews what we know from epidemiologic studies about preventing Sudden Infant Death Syndrome (SIDS), even though we do not fully understand its causes. This article discusses emerging evidence that maternal smoking during pregnancy alone or in combination with bed-sharing increases the risk of SIDS.

SIDES RATES IN THE US & OREGON

SIDS is the leading cause of death among infants aged 2-12 months in Oregon.¹ Largely as a result of the national “Back to Sleep” campaign, SIDS mortality in the United States decreased by 52% in the 1990s.² Similarly, Oregon SIDS mortality decreased by 42%, from 1.19 per 1000 live births in 1992 to 0.69 in 2002.

** Actually, the epidemic was already ending by the time Snow figured it out. But part of epidemiology is taking credit whenever one can.
SO WHAT SHOULD YOU RECOMMEND TO YOUR PATIENTS?

- Encourage women to discontinue smoking before, during, and after pregnancy.
- Instruct parents to place infants on their backs to sleep. This message should be reinforced with grandparents and other caregivers.
- Emerging evidence suggests that infants of smoking mothers who sleep in their parents’ bed have an increased risk of SIDS, and that infants under 11 weeks old of non-smoking mothers who bed-share are also at increased risk. Current recommendations from the American Academy of Pediatrics Task Force on SIDS recommends: “Although bed-sharing rates are increasing in the United States for a number of reasons, including facilitation of breastfeeding, the task force concludes that the evidence is growing that bed-sharing, as practiced in the United States and other Western countries, is more hazardous than the infant sleeping on a separate sleep surface and, therefore, recommends that infants not bed share during sleep. Infants may be brought into bed for nursing or comforting but should be returned to their own crib or bassinet when the parent is ready to return to sleep.” This recommendation for non-smoking mothers is controversial and vigorously debated. Any risks associated with bed-sharing by non-smoking mothers should be balanced against the benefits of breastfeeding and the association of bed-sharing with breastfeeding. Encourage non-smoking mothers who bed-share to place infants supine, eliminate soft/thick/loose surfaces near the infant, and avoid places where the infant could become wedged.

REFERENCES


Safe sleep guidelines at www.sidscenter.org.

Nursing consultant for infant death issues: Cyndi Durham, RN, BSN at cyndi.durham@state.or.us.


You can refer patients for assistance with quitting smoking to the Oregon Quit Line at 877-270-7867 and www.smokefreefamilies.org has resources for health professionals.

CD SUMMARY

March 21, 2006
Vol. 55, No. 6

If you need this material in an alternate format, call us at 971/673-1111.

If you would prefer to have your CD Summary delivered by e-mail, zap your request to cd.summary@state.or.us. Please include your full name and mailing address (not just your e-mail address), so that we can effectively purge you from our print mailing list, thus saving trees, taxpayer dollars, postal worker injuries, etc.