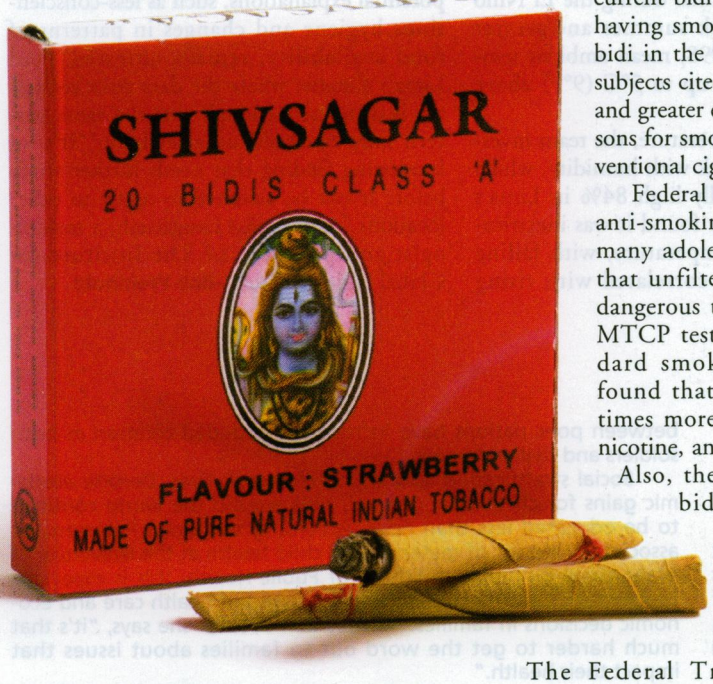
The Beat

edited by **Erin E. Dooley**

SMOKING

The Bidi Boom

Although most people recognize that smoking is bad for children's health, one smoking trend among teenagers and adolescents that is only recently getting the attention it deserves is the use of bidis, thin, hand-rolled, unfiltered cigarettes made with sun-dried tobacco that is wrapped in the leaf of the tendu, a plant grown in India's forests. Strong flavors such as vanilla, strawberry, cinnamon, and mango are added to mask the poor-quality tobacco, and serve to make the taste appealing to children. Bidi use was first observed during the mid-1990s, but several recent reports show that their popularity among teenagers is growing—in 1999, their use nearly equaled that of smokeless tobacco. Considered the "poor man's cigarette" in India due to their lower-quality tobacco content, bidis also cost significantly less than cigarettes, an added bonus to young users. Although bidis, as a tobacco product, may not be legally purchased by minors, they are sold at places such as convenience stores, grocery stores, gas stations, smoke shops, and Web sites, and thus are easily accessible by teenagers and adolescents.



In 1999, the American Legacy Foundation, a public interest organization dedicated to reducing youth tobacco product use and substance abuse, in collaboration with the Centers for Disease Control and Prevention, measured the prevalence of tobacco use among middle school and high school students. The study, the National Youth Tobacco Survey, revealed that 5% of all high school students and 2.4% of middle school students, respectively, smoke bidis. A report published in the 17 September 1999 issue of the *Morbidity and Mortality Weekly Report* conducted by the Massachusetts Tobacco Control Program (MTCP) assessed adolescents' knowledge and use of bidis. The report summarized preliminary data collected from a sample of Massachusetts adolescents during March and April 1999. Of the 642 youths surveyed, 40% reported that they had smoked bidis at least once and 16% were current bidi smokers (defined as having smoked more than one bidi in the last 30 days). Study subjects cited taste, cheaper cost, and greater ease of buying as reasons for smoking bidis over conventional cigarettes.

Federal health officials and anti-smoking activists say that many adolescents don't realize that unfiltered bidis are more dangerous than cigarettes. The MTCP tested bidis on a standard smoking machine and found that they produce 2–3 times more carbon monoxide, nicotine, and tar than cigarettes. Also, the leaf used to wrap bidis is denser than paper, thus smokers must inhale more deeply and more frequently to keep a bidi lit.

The Federal Trade Commission requires that bidi importers submit a plan detailing how they are going to comply with the Federal Cigarette Labeling and Advertising Act by labeling their packs and cartons with one of the four standard Surgeon General's warnings before the cigarettes can be imported into the United States. "There may people getting by without adequate warnings on their product, but we have asked Customs to look out for such cases," says Michael Ostheimer of the commission's division of advertising practices.

Although bidi sales are already illegal for minors, Arizona legislators have taken additional steps by specifically banning bidi sales to adolescents and increasing the penalties for illegal sales. The MTCP has said that additional research is needed to help answer other questions about bidi use such as how restrictions on sales should be enforced and about appropriate labeling of bidi packages. **–Lindsey A. Greene**

Another Reason to Grab the Top Bunk

Researchers from the Universitat Rovira i Virgili in Tarragona, Spain, have determined that sleeping in the bottom bed of a bunk bed may increase the risk of developing asthma. Their study of sibling pairs sleeping in bunk beds, published in the June 1999 issue of the *Annals of Allergy, Asthma, and Immunology*, confirmed that sleeping in the bottom bunk exposes the sleeper to higher amounts of household dust and dust mite allergens, which fall from the bedding of the top bunk as its occupant moves during sleep.

Ohio State University

Although higher levels of dust mite sensitization and allergic respiratory disease were not measured in bottom bunk sleepers compared to top bunk sleepers, the prevalence of asthma was significantly higher in bottom bunk occupants. The researchers advise families with a history of allergies to not purchase bunk beds, or to at least put children who are sensitized to dust mite allergens in the top bunk.

Folic Acid Saves Babies in China

A public health intervention project conducted in China by the CDC's National Center for Environmental Health and Beijing Medical University has demonstrated a reduction in neural tube defects by as much as 85% in infants of women who took the recommended daily dose of 400 mg of folic acid more than 80% of the time prior to becoming pregnant. Neural tube defects include spina bifida, the leading cause of childhood paralysis, and anencephaly, which affects the brain and can result in miscarriage, stillbirth, or early death.

Study scientist Robert J. Berry stresses that folic acid intake is important for all women of childbearing age because neural tube defects occur during the first weeks of pregnancy, before many women are aware they are pregnant. Once this period of development is over, Berry says, it is too late to prevent the damage.

Eat Zinc and Be Merry

A report in the December 1999 issue of the *Journal of Pediatrics* states that children may be protected against life-threatening diarrhea and pneumonia, the leading causes of childhood death in developing countries, by consuming sufficient amounts of zinc. In the study, when children from nine countries took 5–20 mg of zinc daily for 2–46 weeks, the risk of developing diarrhea and pneumonia was reduced by as much as 25% and 41%, respectively.

The effect of zinc supplementation on diarrhea compares favorably with other intervention treatments, and the effect on pneumonia is greater than that estimated for any other intervention, say the study authors, who add that these results indicate that adding zinc to the diet of developing country populations may be an important means of improving child survival.