Cigarette and alcohol purchases were measured only if the child correctly identified the product or bought it even after being told by the researcher what it was. Purchases were not counted if a child misidentified the item after being told what it was (referring to beer as soda, for instance).

Children whose parents smoked were nearly four times more likely to purchase cigarettes than children of nonsmokers (odds ratio [OR] 3.90, 95% confidence interval 1.20 to 12.63). And children whose parents drank alcohol at least once a month were significantly more likely to buy alcohol than children whose parents drank less often (OR 3.04, 95% confidence interval 1.02 to 9.10). But the children of smokers and drinkers were not the only children buying cigarettes and alcohol.

“We asked about parental tobacco and alcohol use because at that age parents tend to be the primary role models for children, but I think [the results] are indicative of all adult behavior that children are exposed to,” said Dalton, who is also a researcher at Dartmouth’s Norris Cotton Cancer Center.

Of the 34 children (28.3%) who bought cigarettes, half correctly identified them as such, and six (17.7%) were able to name them by brand. Of the 74 children (61.7%) who bought alcohol, 43 (58.1%) were able to identify it as beer, wine, or “booze,” although the researchers did not note the same level of brand awareness for alcohol as for cigarettes. Twenty-nine children (24%) purchased both cigarettes and alcohol.

Dalton said her team was surprised by those numbers.

“At age 2 to 6, we didn’t expect such a high percentage of children would be tuned into these products and didn’t expect them to think they would be necessary for a social evening,” she said. “I hope it prompts people to question whether we should be waiting until adolescence to intervene.”

The message for parents in all this is clear, said Dalton, who has children herself.

“It’s really important to be mindful of your behavior and the messages your behavior is sending your children,” she said. “Parents shouldn’t smoke at all, but if they do, they shouldn’t smoke around their children. It’s bad for their own health and their children’s health, and it’s also bad modeling behavior.”

The message for alcohol is a bit more complicated, she noted, because moderate drinking is not harmful and may actually have health benefits. However, parents can make sure that alcohol isn’t the focus of socialization or coping. “It’s important to provide that balance,” she said.

QUITTING STILL BEST STRATEGY FOR REDUCING RISKS OF SMOKING

Smokers who are serious about reducing the health risks from their habit are better off quitting than just cutting back, two recent studies suggest. One paper, published in *Tobacco Control* (2005;14:315–320), finds that smoking as few as one to four cigarettes daily can significantly raise the risk of dying compared with a nonsmoker. The other report, from *JAMA* (2005;294:1505–1510), shows that although

One 6-year-old boy, offering a Barbie doll a newspaper and cigarettes, said, “Honey, have some smokes. Do you like smokes? I like smokes.”

Choosing a pack of Camels in the store, a 4-year-old girl said, “I need this for my man. A man needs cigarettes.”

A 6-year-old boy pointed to cigarettes in the store and said, “I’m definitely not going to buy those; they can kill you.”

It is well-known that children of parents who smoke or drink alcohol are more likely to adopt those habits themselves, Dalton said. “This study provides a little insight into why that might be,” she explained. “Children are developing these perceptions really early in life and they’re unquestioned beliefs that they carry through to later in life.”

Comments the children made while playing show just how “tuned in” they really are—to messages both positive *and* negative.
heavy smokers can reduce their lung cancer risk by reducing the number of cigarettes they smoke, their risk is still significantly higher than that of nonsmokers or former smokers.

The findings suggest that “harm reduction” from tobacco use remains an elusive goal.

The paper from Tobacco Control refutes the tobacco industry claim that there is no evidence that smoking only a few cigarettes per day is a significant health hazard. The study was conducted by Kjell Bjartveit, MD, PhD, MPH, Director Emeritus of Norway’s National Health Screening Service, and Aage Tverdal, PhD, Professor, Senior Researcher, Norwegian Institute of Public Health. Bjartveit is a noted tobacco researcher and recipient of the American Cancer Society (ACS)’s Luther L. Terry award, which recognizes excellence in tobacco control efforts. Their study included 43,000 women and men, aged 35 to 49 years, who were followed for more than 25 years. The authors found increasing health risks with increasing numbers of daily cigarettes. But even a few cigarettes per day significantly raised the risk of dying from all causes. For ischemic heart disease, the steepest risk increase was in both sexes between zero and one to four cigarettes per day. Above this level, the slope was less pronounced. Light smoking women and men had close to three times higher risk of dying from ischemic heart disease, compared with never smokers.

The risk of dying from lung cancer was also elevated, although the level reached significance only in women. That may be due to the small number of lung cancer cases among the light smokers in the cohort. Of more than 23,000 men in the study, just 627 said they smoked one to four cigarettes daily, and of this group, only four died of lung cancer. Nevertheless, the risk of dying from lung cancer was nearly three times higher for light-smoking men than for nonsmoking men. For women, the risk was five times greater.

“This study demonstrates once again that, despite what we would wish, there is no such thing as a safe level of smoking,” said Thomas Glynn, PhD, Director of Cancer Science and Trends at the ACS.

The authors of the JAMA paper, who were led by Nina S. Godtfredsen, MD, PhD, of Copenhagen University Hospital and Hvidovre Hospital in Denmark, also say it’s too soon to adopt a strategy of harm reduction through smoking less.

“More data from long-term studies of smoking reduction are warranted, but for the present, smoking cessation and not smoking reduction should still be advocated as the ultimate method of reducing harm from smoking,” they write.

Godtfredsen and her colleagues studied nearly 20,000 men and women aged 20 to 93 years who completed a physical examination and questionnaires about lifestyle, including smoking habits. The participants were followed for as many as 31 years (mean 18 years); lung cancer incidence was confirmed through the Danish National Cancer Registry.

Smoking categories included heavy smokers (15 or more grams of tobacco per day, with 1 g being equal to one cigarette), light smokers (1 to 14 g of tobacco per day), former smokers, and nonsmokers. “Reducers” were defined as heavy smokers who cut back by 50% or more over the course of the study. “Quitters” were those smokers (heavy and light) who stopped smoking during the study.

Compared with continued heavy smokers, the “reducers” did see their lung cancer risk drop. But this drop was not proportionate to their smoking reduction: a mean decrease of 62% in tobacco consumption led to only a 27% reduction in lung cancer risk (hazard ratio [HR] 0.73). Light smokers had a 56% lower risk of lung cancer than heavy smokers (HR 0.44), and the quitters (heavy and light smokers who quit during the study) had a 50% lower risk (HR 0.50).

Former smokers had an 83% reduction in lung cancer risk (HR 0.17) compared with the heavy smokers. But even that figure was significantly higher than the risk for nonsmokers (HR 0.09).
Furthermore, the risks of heart disease and lung diseases other than cancer were not reduced by smoking less.

Those findings are important, said Glynn, because new restrictions on public smoking have led many smokers to cut back on how much they smoke.

“By doing so, they often feel that they are sharply reducing or eliminating the health dangers from smoking, but this study shows that this is not the case,” he said.

“Reducing smoking can reduce lung cancer risk somewhat, but that risk remains high. And even with reduced cigarette consumption, the risk of heart disease and [other] lung disease remains the same.”

“Compensatory” smoking is likely the reason why cutting back on cigarettes doesn’t have a more positive effect on health, Glynn said. Even when they smoke less, smokers may unconsciously inhale more deeply or smoke the cigarette closer to the filter—and that keeps the level of carcinogens they ingest high.

“Fortunately, smokers now have a variety of medications and programs they can use to help them stop smoking, including the ACS’s telephone Quitline, which is available at 1-877-YES-QUIT (1-877-937-7848),” Glynn noted.

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FAMILY CAREGIVERS OFTEN NEGLECT THEIR OWN MENTAL HEALTH

Researchers have known for some time that people caring for a loved one with cancer often neglect their own physical well-being—forgetting to eat, losing sleep, skipping exercise. Now there’s evidence that caregivers may also be neglecting their mental health. Researchers from the Dana-Farber Cancer Institute and the Yale University School of Medicine found that almost half of cancer caregivers who met diagnostic criteria for a psychiatric disorder did not seek treatment for it. Their findings were published in the Journal of Clinical Oncology (2005; 23:6899–6907).

The study involved 200 people who were the primary informal caregiver for a person with advanced cancer, performing duties ranging from administering medication to household chores, to handling the patient’s money, to helping with bathing and feeding, to offering emotional support. Most were spouses of the cancer patient.

The researchers conducted a structured clinical interview with each caregiver, using criteria from the Diagnostic and Statistical Manual of Mental Disorders IV to identify several specific mental illnesses: major depressive disorder, posttraumatic stress disorder, generalized anxiety disorder, and panic disorder. Caregivers also were asked about whether they had discussed their mental health with a health care provider or sought treatment for a mental health concern.

Twenty-six (13%) of the caregivers met the diagnostic criteria for one or more psychiatric disorders. Twenty-one (80.8%) of them said they had discussed a mental health concern with a health care provider before their loved one was diagnosed with cancer, but only 12 of them (46.2%) had sought professional help with their mental health after their loved one’s diagnosis.

“These caregivers are experiencing a clinically significant level of distress,” said study coauthor Holly Prigerson, PhD, Director of the Center for Psycho-oncology and Palliative Care Research at Dana-Farber, “yet they seem to be neglecting their own mental health needs, quite possibly due to the lack of time, energy, or financial resources associated with caregiving.”

Previous research has established that many caregivers experience significant psychological distress because of caring for a loved one with advanced cancer, but Prigerson’s study is one of only a few to use actual diagnostic criteria to identify psychiatric illness.

“This study actually assigned a diagnosis, which is something that can be treated,” said Bonnie Teschendorf, PhD, Director of Quality of Life Science for the ACS.

The most common disorder among the caregivers was panic disorder, which affected