Brazelton Neonatal Behavioral Assessment Scales and the Graham/ Rosenblith neurological soft signs scale showed hypertonia, irritability, abnormal cry, and other neurological soft signs at 2, 15, and 30 days. Brainstem auditory evoked responses and clinical EEG were essentially normal at 20 days, 3, 6, and 12 months. EEG sleep pattern was fragmented at 20 days and 3 months, and abnormal respiratory patterns were noted to 6 months. Psychometric (Bayley Scales, Terman Merril and McCarthy Scales) and diagnostic testing (Fagan Test of Infant Intelligence) yielded scores within normal limits out to 3 years. At every examination, however, testing protocols noted some combination of restlessness, agitation, distractibility, high energy level, lack of persistence, short attention span, and poor fine motor control. The mother describes the child as very difficult, with low frustration tolerance.

Lead-glazed ceramic ware, common in Mexico, is widely used by Hispanics in the United States, who often bring it from Mexico.<sup>1,2</sup> Tourists import such items as gifts, and the number of recalls of commercially imported ceramic ware likely underestimates the quantity of leaded items available.<sup>3</sup>

Uninformed physicians can adversely affect treatment of lead poisoning. Toxic levels of lead produce symptoms that can be confused with other disorders. The pattern of hospital admission, unconfirmed diagnoses, reduction of symptoms when the patient is removed from the lead source during hospital stay, discharge, and re-exposure has been noted before.4 Mothers with high lead levels expose their infants through maternal milk. Standardized psychometric tests are frequently without value in detecting damage from lead in children up to 3 years, even though behavioral disturbances are clear.

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## Could Sunscreens Increase Melanoma Risk?

Topically applied chemical sunscreens prevent sunburn.1 One of the most common sunscreens, para-aminobenzoic acid (PABA), was invented in 1922, and commercial products containing sunscreens became available in 1928.2 High sun protection factor (SPF) sunscreens, largely based on PABA and its esters, became widely available by the late 1960s and early 1970s.3,4 High SPF sunscreens have been widely recommended for the prevention of skin cancer, including melanoma.5-7 It has been assumed that the action spectrum for initiation and promotion of melanoma and basal cell carcinoma is identical to that of sunburn.8 Sunscreens have been strongly recommended for persons with fair coloring and those with a history of skin cancer, 9,10 and use of sunscreens has become widespread. A large proportion of adults in the United States report using sunscreens during recreation,11 and the American Medical Association has recommended that frequent use of sunscreens should become a standard procedure for children.6

Although sunscreens, including PABA and its esters prevent sunburn, 1,2,12 there has never been any epidemiological or laboratory evidence that they prevent either melanoma or basal cell carcinoma in humans.

Worldwide, the countries where chemical sunscreens have been recommended and adopted have experienced the greatest rise in cutaneous malignant melanoma, with a contemporaneous rise in death rates. In the United States, Canada, Australia, and the Scandinavian countries, melanoma rates have risen steeply in recent decades, with the greatest increase occurring after the introduction of sunscreens. 13-17 Death rates in the United States from melanoma doubled in women and tripled in men between the 1950s and the 1990s.18 The rise in melanoma has been unusually steep in Queensland, Australia, where sunscreens were earliest and most strongly promoted by the medical community.<sup>19</sup> Queensland now has the highest incidence rate of melanoma in the world.<sup>20</sup> In contrast, the rise in melanoma rates was notably delayed elsewhere in Australia,20 where sunscreens were not promoted until more re-

The SPF of sunscreens concerns solely their ability to absorb ultraviolet B (UV-B) light.<sup>21</sup> Even sunscreens with high SPF factors can be completely transparent to ultraviolet A (UV-A),<sup>21</sup> which includes 90% to 95% of ultraviolet light.<sup>22</sup> UV-A blocking ingredients, which have commonly been added to most sunscreens since 1989, block only half the UV-A spectrum and provide a protection factor against delayed UV-A induced erythema of only 1.7 at usual concentrations.<sup>23</sup>

Both UV-A and UV-B have been shown to mutate DNA and promote skin cancers in animals.<sup>24,25</sup> UV-A also penetrates deeper into the skin than UV-B.<sup>26</sup> Because of the energy distribution of sunlight<sup>22</sup> and filtering by the outermost layers of the skin,<sup>26</sup> melanocytes receive up to 70 photons of UV-A for every photon of UV-B.

While largely transparent to most of the UV-A spectrum, sunscreens effectively block UV-B. UV-B is the normal stimulus for accommodation of the skin to sun, such as thickening and increased pigmentation.<sup>27</sup> Sunscreens also inhibit the skin's production of vitamin D, which is similarly dependent on UV-B.<sup>28</sup> Laboratory findings indicate that vitamin D metabolites suppress growth of melanoma cells,<sup>29</sup> suggesting the possibility that vitamin D deficiency in the skin may have a role in the etiology of melanoma.

While few epidemiologic studies have examined the relationship of sunscreen use and skin cancer, two studies suggest that sunscreens may not be effective in preventing skin cancer. A large

case-control study showed higher risks of melanoma in men who used sunscreens, 30 and a large prospective study showed a higher incidence of basal cell carcinoma in women who used sunscreens. 31 The excess risks in the latter study persisted after multiple adjustment for differences in skin type and time spent outdoors.

Sunscreens suppress natural warnings of overexposure to the sun and allow excessive exposure to wavelengths of sunlight which they do not block. Because sunscreens create a false sense of security, more effective measures to reduce sunlight exposure, such as limiting time spent in the sun or use of hats and clothing, may be ignored.

It is time to review the efficacy of sunscreens in the prevention of melanoma and basal cell carcinomas. Untested but wide-spread public health recommendations concerning the use of sunscreens for the prevention of skin cancer may be more harmful than advice to control sun exposure by more traditional means.

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# Safe Sexual Practices Not Reliably Maintained by Homosexual Men

Since the start of the Amsterdam Cohort Study among homosexual men in October 1984, the annual incidence of HIV infections declined from 8.9% in 1985 to 1.0% in 1989.1 In 1990, however, HIV incidence rose to 2.8%. To assess whether possible changes in sexual behavior were related to this increase in HIV infection, we compared the 17 men who seroconverted as of December 1989 with all 521 participants who remained seronegative throughout the study period (1984 to 1990). In addition, changes in the probability of infection through anogenital receptive contact per partner were investigated.

We observed that among recent seroconverters the proportion of men practicing anogenital contact (protected or unprotected) increased from 33% in the first half of 1989 to 63% in the first half of 1990. Among seronegative men a significant lower proportion of 30% reported anogenital contact in the first half of 1990  $(\chi^2 = 7.9, P < .01)$ .

The mean number of partners with whom seroconverted men had anal sex, with or without condom, also increased significantly, from 0.8 in the first half of 1989 to 2.4 in the first half of 1990 (Wilcoxon, Z = 2.4, P < .02). This is significantly higher than the mean of 0.6 partners with whom seronegative men reported anogenital contact in the first half of 1990 (Student's t = 4.4, df = 443, P < .01).

No increase, however, was found in the mean number of partners with whom seroconverted participants reported only unprotected anal sex. This implies that the observed increase in the incidence of HIV infection is related to inconsistent or inadequate condom use. Alternatively, participants' reports of unprotected anal sex might have been incomplete.

Only two out of 17 seroconverted men reported not engaging in anogenital contact but engaging in receptive orogen-