



Letter to the Editor

Cigarette Butts: The Collateral Effects of Cigarettes on Humans, Animals and the Environment[☆]



Las colillas: efectos colaterales de los cigarrillos sobre los humanos, los animales y el medioambiente

To the Editor,

Not only cigarettes, but also the remains of cigarettes, the butts, should be a target for anti-smoking campaigns, due to their collateral effects on both smokers and non-smokers. Cigarette butts (CB) are a widespread source of pollution in cities, parks, country areas, rivers, beaches, and seas, and cause severe environmental damage.¹ They contain toxins which can filter into soil and water and are slow to break down. In a recent study, Bonanomi et al.² demonstrated the slow degradation process of CBs in a 2-year experiment in a standard decomposing organic substrate, showing the resistance of the materials to attack by microorganisms. Novotny et al.³ published an excellent comprehensive review of the toxic effects of CBs in humans, animals, and the environment. They concluded that this ubiquitous litter has such a potentially toxic effect on health that further research and clear-cut legislation should be implemented to protect the environment and mankind. Numerous substances have been isolated from CBs, including pesticides (present in filters at potentially toxic environmental levels with capacity for bioaccumulation in the human food chain), ethylphenol (a potentially lethal flavor enhancer that accumulates in the filter), nicotine (toxic in humans and animals), menthol (an additive), diethylene glycol (a moistening agent), various metals (Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Sr, Ti, and Zn), tar, and carcinogenics.⁴ Rath et al.⁵ published an interesting study in which they asked smokers about their attitude and beliefs regarding CBs. They found that most smokers (74.1%) admitted to sometimes carelessly discarding CBs and that those who did not think of CBs as litter were 3.5 times more likely to throw them on the ground. This mindset was more common among men,

and not seeing CBs as litter was the only attitude which predicted throwing CBs on the ground.

This is a significant problem. CBs are globally the most common item of litter, and it is thought that 4.5 trillion CBs from the 6 trillion cigarettes smoked every year worldwide end up in the environment.⁴ Given the media bombardment of news and reports on protecting the environment, it is surprising to note the scant mention made by policy makers, health authorities and the media to the pollution caused by CBs. New environmental interventions and alliances between anti-smoking and environmental groups are needed to reduce the effects of CBs. These interventions will help to further denormalize smoking, reduce consumption, and will also raise awareness of the noxious effects of CBs on the environment, by promoting and supporting continued tobacco control and recycling activities.

References

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