

According to a 2009 study conducted by Keep America Beautiful (KAB), tobacco products comprised 38 percent of roadway litter across the United States and 30 percent of all litter at "transition points", those places where smokers must discontinue smoking before proceeding.¹ Most of these littered tobacco products were cigarette butts. To help frame the future direction of KAB's successful Cigarette Litter Prevention Program, we researched policies that create transition points and what steps successfully abate cigarette litter at these locations. Here are our findings.

Most Americans cross multiple transition points every day.

State and local laws prohibit smoking in most public indoor spaces across the United States, so Americans are likely to cross multiple transition points each time they leave home.



Implication for cigarette litter prevention: Addressing cigarette litter near transition points means focusing on millions of locations throughout the country. At each of these locations, a person who is smoking must decide, often quickly, about what to do with a cigarette. Because of the ubiquity of these locations, cigarette litter prevention programs that are successful at encouraging smokers to properly dispose of their cigarette butt at transition points could have a huge impact on cigarette litter generally.



More littered cigarette butts were found near transition points than at control areas.

Overall, 33% more cigarette butts were counted near transition points than at nearby control areas, suggesting that smokers may litter cigarette butts as they approach a point at which smoking is prohibited more frequently than in other areas.

Implication for cigarette litter prevention: Since transition points can be a magnet for cigarette litter, successfully preventing cigarette litter at transition points may have significant impact on cigarette litter as a whole.

Preventing cigarette litter at transition points may require different strategies than preventing cigarette litter elsewhere.

Because transition points are typically an identifiable point rather than a dispersed area, cigarette litter prevention can focus on that point and therefore may be more effective than strategies directed at preventing cigarette litter generally. *Implication for cigarette litter prevention programs*: Activities that reduce cigarette litter, such as placement of ash receptacles or keeping transition points free of litter, can be targeted directly at or near a transition point for maximum effectiveness.

¹ The 2009 National Visible Litter Survey and Litter Cost Study was prepared by MidAtlantic Solid Waste Consultants for Keep America Beautiful, Inc. Keep America Beautiful, Inc. 2009 national litter and littering behavior research were conducted through a grant from Philip Morris USA, an Altria Company. Wm. Wrigley Jr. Company Foundation sponsored the creation of these fact sheets. All contents Copyright 2010 Keep America Beautiful, Inc. – www.kab.org. January 2010

Ash receptacles appeared to reduce the number of cigarette butts near transition points but were not a panacea.



Transition points in locations with the least amount of visible litter had few cigarette butts.

All surveyed locations with a minimal amount of other visible litter had few cigarette butts, a finding consistent with other litter studies conducted by KAB. However, locations with a medium or large amount of visible litter did not always high number of cigarette butts.

Implication for cigarette litter prevention programs: For a cigarette litter prevention program to succeed, the area must remain free of other litter. Other cigarette litter prevention measures appear to be less successful near transition points where even a moderate amount of litter was visible. Generally, transition points with ash receptacles had fewer littered cigarette butts than those without. The most cigarettelittered locations did not have ash receptacles. But several with ash receptacles had a significant number of littered cigarette butts (one had more than 20) and several without ash receptacles had few to no cigarette butts.

Implication for cigarette litter prevention programs: Convenient, highly visible, locked, and well-maintained ash receptacles are likely to reduce cigarette butt litter. This may be especially true where smokers are in a hurry to dispose of cigarette butts as they cross transition points, such as at bus stops and transit stations. Distribution of pocket ashtrays may also provide pedestrians at these type of transition points a convenient alternative to littering as well.







Several locations with the most cigarette butt litter also had degraded or damaged infrastructure.

Areas near transition points with broken or overgrown sidewalks or overflowing or damaged trash or ash receptacles also had the most cigarette butts. Even at Hartsfield-Jackson International Airport, which had relatively few cigarette butts, more littered cigarette butts were seen near the transition point when the Smoking Zone enclosures and ash receptacles were damaged or dismantled.

Implication for cigarette litter prevention programs: Maintaining infrastructure appears to reduce the number of littered cigarette butts near transition points.

Clean-up efforts sometimes appeared to contribute to cigarette litter near transition points.

In most surveyed locations, those areas near transition points where litter was cleaned up had few, if any cigarette butts. But in a couple of the surveyed locations, it appeared sweeping or blowing some part of the property shifted cigarette butts into the area near the transition point. *Implication for cigarette litter prevention programs*: Effective cigarette litter prevention programs at transition points need to ensure that littered cigarette butts are picked up rather than shifted from one location to another.





Areas near transition points abound with potential traps for cigarette butts.

Many areas near transition points are sidewalks or parking lots that typically have grooves, curbs, planted areas and other features that trap cigarette butts. Even when areas near transition points are cleaned routinely, cigarette butts may remain caught in these traps. *Implication for cigarette litter prevention programs:* In some cases, the traps that capture cigarette butt litter can be eliminated to prevent cigarette litter from accumulating but more commonly, they are either necessary (e.g., sidewalk grooves or curbs) or provide added benefit (e.g., planted areas) at the location. In these cases, extra effort and specialized equipment may be required to extract cigarette butts and other litter from these traps.

The findings of this study on Smoking Bans and Cigarette Litter at Transition Points suggest that to minimize cigarette litter at transition points, smoking bans should be accompanied by cigarette litter prevention programs at the transition point that include the following litter abatement measures:

- clear signage indicating where the no smoking area begins and what should be done with the cigarette butts;
- highly visible and locked ash receptacles at the transition point that are maintained and regularly emptied;
- distribution of pocket ashtrays at transition points where pedestrians may be crossing rapidly;
- maintenance of the infrastructure surrounding the transition point; and
- a rigorous cleanup protocol that includes picking up littered cigarette butts at and near the transition point, including removing them from planted areas, curbs, and other "traps".

These efforts are only effective if responsibilities for associated tasks, for example, emptying ash receptacles and picking up littered cigarette butts, are clearly assigned, with associated incentives for compliance and enforcement for non-compliance. The responsible party could be the local public works or sanitation department or a property owner or tenant, similar to the responsibility given for emptying trash containers in the public right-of-way. Specific prevention measures and the entity responsible should be articulated in no smoking or litter prevention ordinances or in lease agreements between property owners and tenants.