

Ditch the Flick: Film Audit Summary Report



Smoking Trends in the Top 20 Grossing Films in Each Decade from 1970 - 2010



Project Aims

1. Identify the trends in cigarette smoking rates, disposal methods and smoker behaviour in the highest grossing films from the 1970's to the 2010s.
2. Determine if there is a correlation between the trends observed in films and changes to smoking legislation.

Introduction

The ReefClean Australian Marine Debris Initiative (AMDII) data shows single-use plastics such as cigarette butts are one of the top 10 items of litter found around the Great Barrier Reef. We also know that cigarette butt litter is a persistent problem for many other communities around Australia. Many smokers may not realise that cigarette butts are made from single-use plastic and the subsequent impact of the habitual action of flicking a cigarette butt.

The ReefClean *Ditch the Flick* campaign was developed as an initiative to help drive behavioural change among smokers and reduce single-use plastic cigarette butts being littered around the Great Barrier Reef.

Background

A 2021 report “Flip The Script: Can Hollywood Help Us Imagine a Future Without Plastic?” by the USC Annenberg Norman Lear Center examined how single-use plastics are portrayed in film, television, and media. The report was commissioned by Plastic Pollution Coalition, with support from the Break Free From Plastic movement and Plastic Solutions Fund.

The project focused on 32 popular television shows from the 2019-2020 season. The analysis of the portrayal and prevalence of single-use plastics and reusable alternatives showed single-use plastics were common, appearing in every episode with an average of 28 single-use plastic items per episode.

The report suggests that “instead of portraying the unfortunate reality of excessive plastic use, films and TV shows could help change our society’s throwaway culture by modeling life with less single-use plastic and portraying a healthier, more just future.”

Project Description

This project aims to build on the 2021 “Flip The Script” report and focus on a specific single-use plastic item that is a top litter item across the Great Barrier Reef - cigarette butts. This project will identify trends in cigarette smoking rates, disposal methods and smoker behaviour and to determine any correlation between trends observed and changes in smoking legislation, the highest grossing films from the 1970's through the 2010s were analysed.

To avoid outlier films that were not representative of real-life situations and could not be compared to anything that we would experience in our own

lives, further criteria were established. The film criteria included: set on Earth in real existing locations, set in the decade in which it was released, not animated, aimed at adults. The main characters needed to be human and the film must have portrayed a typical, realistic setting for the majority of the film, with minimal sci-fi, supernatural or fantasy components.

Top films were selected based on the best quantitative metric: Box Office earnings. The top two highest grossing films from each year (1970 - 2019) were chosen for analysis. Each film was audited three times by different individuals for quality control.

Challenges & Lessons Learned

Collecting data was very time consuming. Staff needed to watch films in their entirety and allow extra time to pause and re-watch segments to capture all required information (approx 2-3 hours total). Three different staff needed to watch each film for replication, meaning that approximately 6-9 hours of staff time was required for each film to be audited.

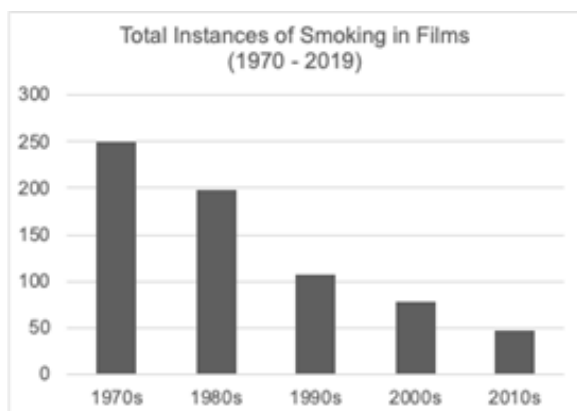
When selecting films, be sure to consider where and how the film can be accessed. Some films were readily available online at no cost, while others were only available on subscription viewing services or by rental which required fees for each viewer.

Ensure data being collected is chosen specifically to address the project aim. If the amount of data is too cumbersome or broad, significantly more time is required to audit the film and there is greater possibility of missing key information. Make the data collection process (spreadsheet/forms) as clear as possible so there is consistency between observers on what information is being captured.

Outcomes & Observations:

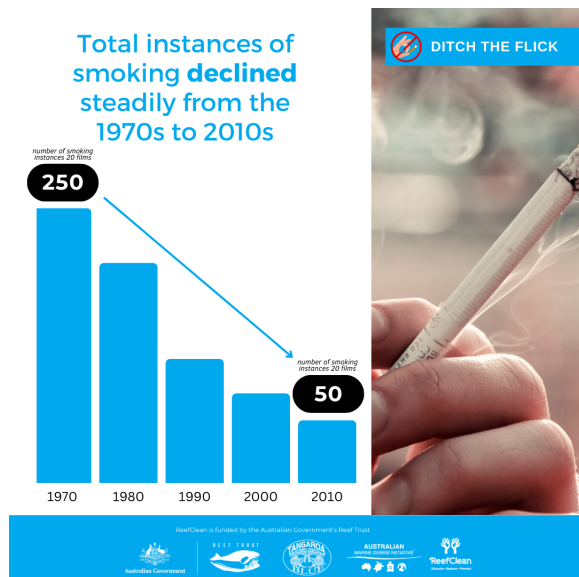
Trend 1: Smoking instances

Total instances of smoking declined steadily from the 1970s (250) to 2010s (50).



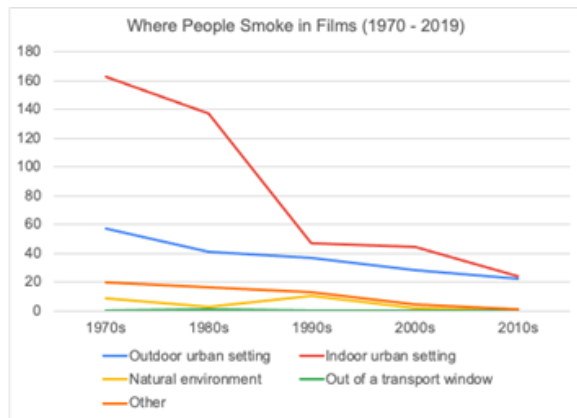
Awareness of negative health impacts began in the 1960s with the US Surgeon General report and grew through the 1970s as health warnings were put onto cigarette packs in both the US and Australia and cigarette ads were banned from television and radio. Legislation that limits smoking first came into effect in the late 1980s, including on domestic flights in Australia and the US. Widespread smoking bans began in the 1990s in specific indoor & enclosed areas (international flights, indoors, workplaces, restaurants) and were more pervasive throughout the 2000s with some state-wide bans in the US and Australia, including outdoor/public spaces. Smoking bans continued to expand in 2010's, especially in outdoor/public spaces.

In alignment with the legislative changes between the 1970s and 2010s, there was a clear shift in public perception of smoking and its health impacts, making smoking a less acceptable social practice. In a Gallup poll taken in 1966 and 2001, the percent of Americans that recognised smoking as a major cause of cancer increased from 40% to 71%, while the percentage that said smoking was only a minor cause of cancer decreased from 27% to 11%. Similarly in another Gallup poll, the percentage of smokers that listed smoking as an addiction increased from 37% in 1980 to 74% in 2002.

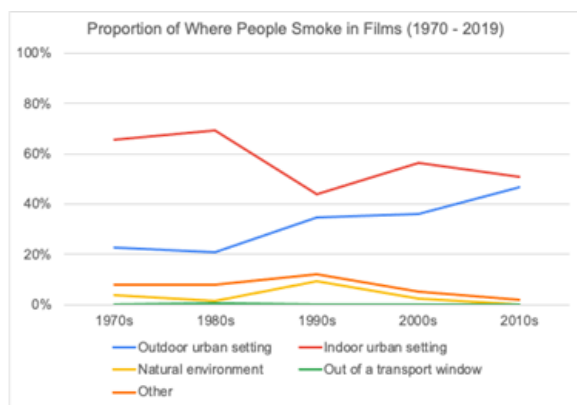


Trend 2: Where do people smoke

Most people in movies smoked in indoor urban settings, however smoking in movies indoors declined while smoking outdoors increased between 1970 - 2019.



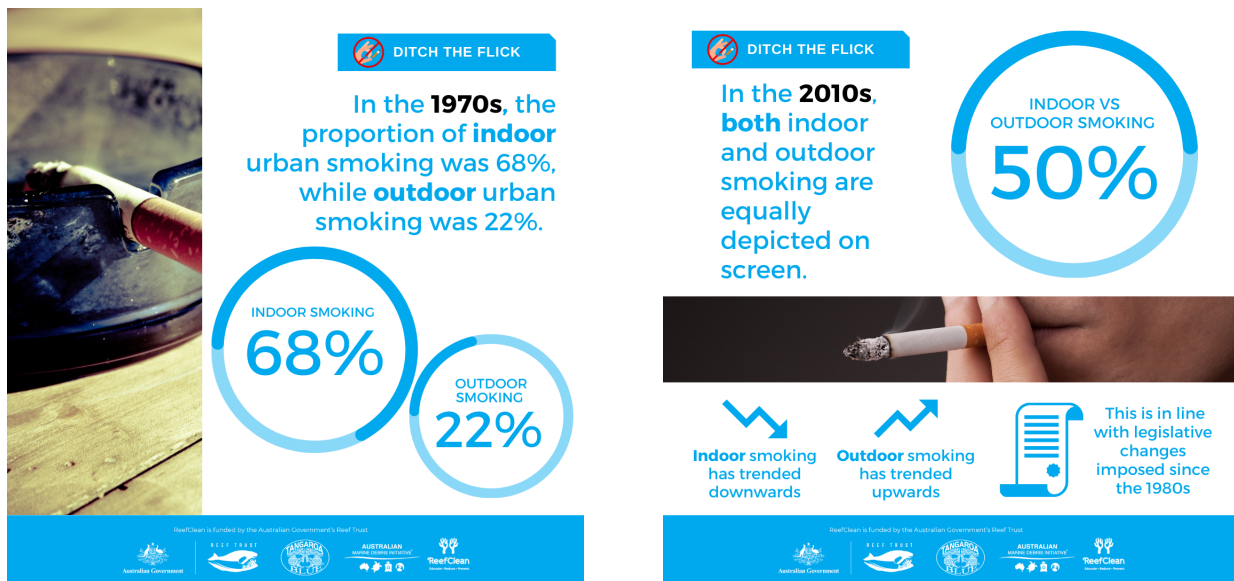
Instances of smoking indoors declined over two-fold from >130 in 1970s and 1980s to <50 from 1990s onwards (red line).



The proportion of movies showing smoking indoors was highest (>60%) in 1970s and 1980s and has stayed below 60% from 1990s onwards (red line). Simultaneously, the proportion of movies showing smoking outdoors doubled from 23% in the 1970s to 47% in the 2010s (blue line).

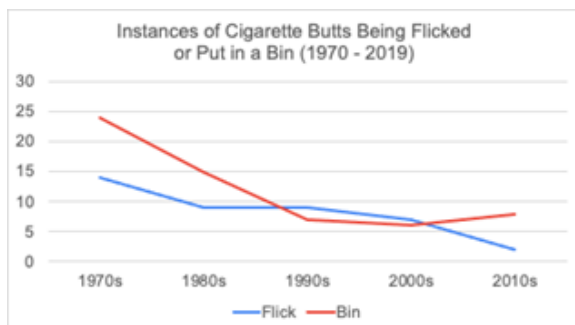
Note: It's interesting that most recently in the 2010s, people are equally depicted (nearly 50/50) as smoking indoors (red line) and outdoors (blue line).

Smoking was permitted in most settings until the late 1980s. Most changes in films began in the 1990s; this is when widespread smoking bans began in specific indoor & enclosed areas (international flights, indoors, workplaces, restaurants). Smoking bans continued to be more pervasive throughout the 2000s with some state-wide bans in the US and Australia. Smoking bans continued to expand in the 2010s, especially in outdoor/public spaces. In a Gallup poll, Americans that favoured a ban on smoking in all public places increased from 39% in 2001 to 59% in 2011.



Trend 3: Disposal

Instances of flicking a cigarette butt declined steadily over time, from 14 instances in the 1970s to just 2 instances in the 2010s (blue line). Instances of disposing of a cigarette butt in a bin also decreased steadily from 24 instances in the 1970s to less than 10 from the 1990s onward (red line).



DITCH THE FLICK

1970s & 1980s

More cigarettes were disposed of in a bin than flicked




ReelClean is funded by the Australian Government's Reef Trust

Australian Government | REEF TRUST | AUSTRALIAN MARINE DEPARTMENT | ReefClean

DITCH THE FLICK



1990s & 2000s

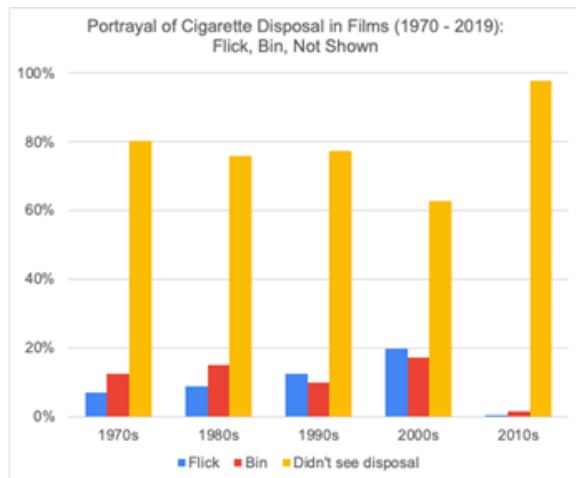
More cigarettes were flicked rather than disposed of in a bin



ReelClean is funded by the Australian Government's Reef Trust

Australian Government | REEF TRUST | AUSTRALIAN MARINE DEPARTMENT | ReefClean

Across all films (1970 - 2019), 88% of cigarettes were not disposed of on screen.



DITCH THE FLICK

Across all years, 88% of cigarettes were **not** disposed of on screen.

88%

This was most prevalent in recent years. In the 2010s, rates of cigarettes **not** disposed of on screen were at 98%.

98%

"Out of sight, out of mind?"

ReelClean is funded by the Australian Government's Reef Trust

Australian Government | REEF TRUST | AUSTRALIAN MARINE DEPARTMENT | ReefClean

Main Takeaway Messages

1. This audit revealed that trends in cigarette smoking rates, disposal methods and smoker behaviour in the highest grossing films from the 1970's to the 2010s did align with changes in smoking legislation over the same time period.
2. The highest grossing films from the 1970's to the 2010s have

perpetuated the idea that single-use plastic items like cigarette butts simply go away.

Conclusion

What is portrayed in pop culture both mimics real life and influences people. As Dana Weinstein, M.A., Project Specialist at USC Annenberg Norman Lear Center states “Decades of research show that scripted entertainment plays a powerful role in shaping our social norms, attitudes, and behaviour on a wide variety of health and social issues. Thus, entertainment can be a highly effective medium for modelling sustainable practices and systems.” This is reinforced by Jack Bender, television producer and director on Game of Thrones, The Sopranos, and Lost who says, “Movies and TV shows tell stories and model behaviours that have the power to deeply influence popular culture.”

On a broader time scale, this film audit reinforces the findings from the 2021 “Flip the Script” report where 93% of single-use plastic items were not disposed of on screen. In this film audit, 88% of cigarettes shown in top films across the last five decades are not disposed of on screen. As stated in the report, this contributes to the false narrative of “magically disappearing trash”. Plastic does not simply go away; it persists in our environment and is a threat to entire ecosystems and humans.

This audit found that smoking trends in films aligned with changes in legislation over the past five decades. While we do not suggest one caused the other, there did seem to be a positive relationship. Campaigning for changes to legislation on single use litter items like cigarette butts may alter the portrayal of these items on screen which may help to change the narrative of what society deems socially acceptable. As Dianna Cohen, Co-Founder and CEO, Plastic Pollution Coalition states, “We are shaped and formed by what we watch. Media has the power to reimagine the world and blaze a trail to a regenerative, reusable, refillable, healthy, thriving plastic-free world for all living beings, if only we commit and act now.”

This supports Tangaroa Blue Foundation's approach to go beyond clean-ups and be data-driven using the Australian Marine Debris Initiative® (AMDI) database to engage with communities, stakeholders and policymakers on a local, national and international scale to push for legislative changes that will lead to large scale behavioural change.

Tangaroa Blue Foundation would like to acknowledge Dr Annett Finger and Dr Jennifer Lavers for their assistance in designing the movie audit design. Brett Tait for the original project concept and all the Tangaroa Blue Foundation staff and volunteers for completing the movie audits!