

# Journal Pre-proofs

Short communication

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PII: S2211-3355(24)00049-4  
DOI: <https://doi.org/10.1016/j.pmedr.2024.102634>  
Reference: PMEDR 102634

To appear in: *Preventive Medicine Reports*

Received Date: 14 November 2023

Revised Date: 25 January 2024

Accepted Date: 27 January 2024



Please cite this article as: K.C. Henderson, N.G. Kute, L. Popova, D.L. Ashley, C.A. Spears, V. Churchill, S.R. Weaver, T.F. Pechacek, J. Huang, Content analysis of IQOS direct mail and email marketing in the US, *Preventive Medicine Reports* (2024), doi: <https://doi.org/10.1016/j.pmedr.2024.102634>

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# Content analysis of IQOS direct mail and email marketing in the US

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## Abstract

**Objective:** Novel nicotine and tobacco products, including heated tobacco products (HTPs) like IQOS, are growing in global popularity. IQOS was the first HTP authorized for sale by the US Food and Drug Administration, entering the US market in 2019 and being removed in 2021 due to patent-related legal challenges with the possibility of returning in 2024. Direct marketing is one method tobacco companies use to reach consumers of these products. The purpose of this study was to investigate the content of US IQOS direct mail and email marketing. **Methods:** Direct marketing items were collected between September 2019 and July 2021 by seven team members in the first US IQOS test market, Atlanta, Georgia. **Results:** Overall, 101 marketing items were collected, 59 of which were unique. Among the unique items that showed images of persons (“models”), 70% showed models appearing to be from racial/ethnic minoritized groups, 86.8% showed at least one female-presenting model, and 37.5% showed models appearing to be young adults (18-29 years). Items often had an embedded link/URL (91.5%) and mentioned topics such as online services (54.2%; for example, online ordering and tutorials), user experience (49.2%), social media (44.1%), and purchasing locations (37.3%). When examined for their main purpose, items focused on subjects such as store experience (37.7%), product introduction (18.6%), and product use (15.3%). **Conclusions:** Our study highlights the importance of better understanding how novel tobacco products are marketed, which can inform policymakers’ regulatory efforts and product authorization decisions.

**Keywords:** tobacco, marketing, heated tobacco products, direct marketing, IQOS, email/mail marketing, content analysis

**Abstract Word Count: 241**

**Main Text Word Count: 1,998**

## **1. Introduction**

Heated Tobacco Products (HTPs) are novel tobacco products that claim to heat rather than burn tobacco to create an inhalable aerosol. Philip Morris's (PM's) IQOS is the HTP market leader globally, sold in over 60 countries.<sup>1</sup> The IQOS device and associated HeatSticks entered the US market in 2019 in Atlanta, Georgia, expanding to 3 more states (Virginia, North Carolina, South Carolina) before being removed in November 2021 due to patent-related legal challenges, with the possibility that it could return to the market in 2024.<sup>2</sup> As the first HTP authorized for sale by the US Food and Drug Administration (FDA) and the first tobacco product to be authorized to use a 'reduced exposure' claim in its advertisements,<sup>3</sup> post-market (2019-2021) monitoring of IQOS marketing is needed to help inform policy and regulation for this and future similar products.

The tobacco industry uses a multitude of avenues to advertise to potential consumers including point-of-sale, print, online, social media, and direct-to-consumer marketing. IQOS has been marketed globally as "clean" or "chic," and PM has used both traditional strategies (point-of-sale, print) and more innovative strategies such as personal trials and sponsored events to gain traction in the global market.<sup>4 5</sup> Only a handful of studies have examined the IQOS marketing strategy during its brief time on the US market.<sup>6-9</sup> Recently, studies by Berg et al. (2023) and Duan et al. (2023) have examined IQOS print, TV, and online display advertisements, finding that prominent themes included "real tobacco" and innovation/technology and that ad-spend focused on media channels and images predominately geared towards women. The extant US research has mainly focused on print and online display strategies. However, another major form of marketing used by the tobacco industry, which is much harder to capture using traditional surveillance approaches, is direct marketing. Cigarette companies spent \$19.1 million in the US in 2021 on direct mail alone.<sup>10</sup> This appears to be a successful marketing strategy, with studies indicating a positive association between receipt of direct mail/email coupons and initiation or sustained smoking.<sup>11</sup> Additionally, as an avenue that is aimed at the individual, direct marketing can be used by companies to target segments of the population in which they want to grow their consumer base. This is of particular concern with the tobacco industry, which has a history of targeting specific market segments (women, minoritized

racial/ethnic groups),<sup>12-14</sup> especially in the context of recent IQOS findings by Berg et al. (2021), Duon et al. (2023), and Ganz et al. (2023) which all showed a focus on women.

To our knowledge, no studies have examined the content of direct mail and email marketing of HTPs, including elements that may indicate race- and/or sex-based targeting, especially in the US context. This study aims to fill this research gap and build upon the existing literature by providing an in-depth examination of IQOS direct marketing content from its time on the US market.

## 2. Materials and Methods

### 2.1. Data Acquisition

Seven team members registered for IQOS mail and email from PM by creating accounts at IQOS.com, identifying as an adult smoker, and going through the identity verification process. Four team members registered in August/September of 2019, two in December 2019 and January 2020, and one in January 2021 (see supplemental table 1 for recipient information). Two team members purchased an IQOS device and one team member purchased HeatSticks for non-study-related research purposes during the time they were receiving mail and email. IQOS mail and email marketing items were collected and logged into a database between September 2019 and July 2021 as part of IQOS direct marketing surveillance.

### 2.2. Data Analysis

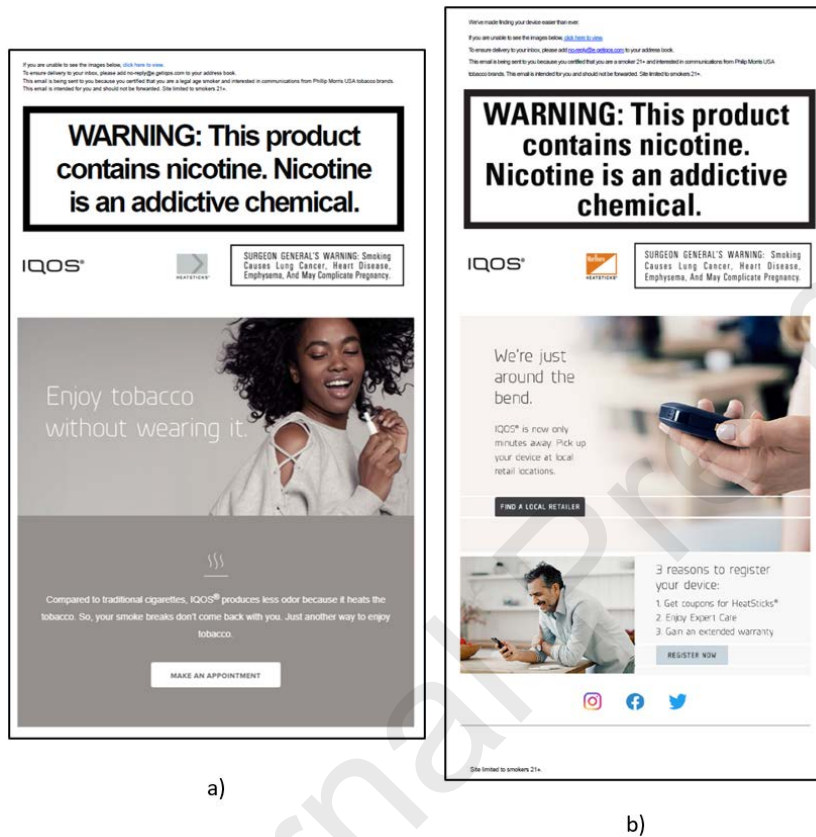
Authors (KH, NK, and JH) created an initial codebook by examining the literature and the database of marketing items. Two coders (KH and NK) reviewed the initial codebook and coded five unique marketing items (9% of the unique sample). They then met with author JH to resolve any discrepancies and adjust the codebook as needed. A second round of five marketing items were coded to verify agreement. Inter-coder reliability from the second round of five items showed an agreement of 80% or higher for all items except “prominence of nicotine warning” and “in-person services” (both had agreement of 60%), which were further clarified before proceeding. Then the full set of marketing items was divided between the coders and coding was completed using the finalized codes. See supplemental table 2 for descriptions and definitions of the coded variables. The coded data are available in *ScholarWorks: A2XS-3648*.<sup>15</sup> The number and prevalence of marketing items featuring each code were calculated for the unique marketing items.

## 3. Results

A total of 101 marketing items were received during the study period, including 88 direct email and 13 mailer items. Some of the same emails and mailers were sent to multiple team members. Ultimately, 59 unique items were received by the team, including 51 unique emails and 8 unique mailers. The number of marketing items received by each recipient varied widely, with four receiving less than 5 items in the study period, two receiving 19, and one receiving 55 (refer to supplemental table 1 for recipient details). Month-to-month receipt of email items and mail items can be seen in supplemental figure 1, which uses recipient 1 as an example. Figure 1 shows examples of IQOS emails and mailers. Each email and mailer received

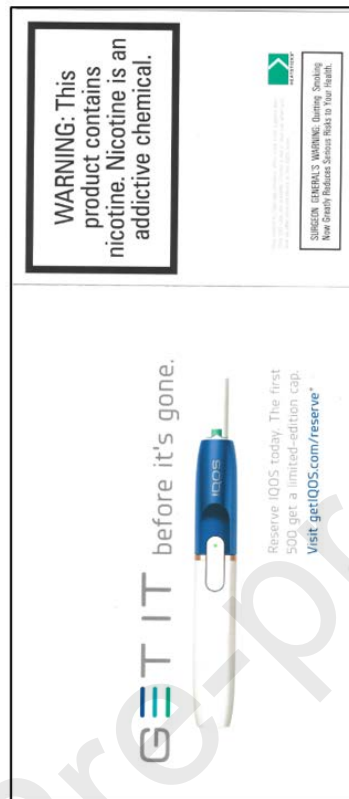
(referred to collectively as “marketing items”) was coded for content variables. We focus the results of the content analysis on the unique items.

**Figure 1.** Example marketing items (a-d)





c)



d)

Table 1 presents a description of the marketing content for the unique items only. Regarding image content, 89.8% of unique items had an image showing the IQOS device or HeatSticks and 10.2% showed IQOS accessories, such as cases and chargers. One or more persons (referred to as “models”) were shown in 67.8% (n=40) of marketing items. Among the items showing models (n=40), 82.5% showed the models’ faces, with 93.9% of those showing faces (n=33) depicting a positive facial expression. Among the items showing models (n=40), 70% showed one or more models appearing to be racial or ethnic minorities, 86.8% showed at least one female-presenting model (excluding two where sexual presentation could not be visually determined), and 37.5% showed one or more models appearing to be young adults (18-29 years old).

Most items (96.6%) had one or more prominent nicotine warnings and most (94.9%) also had one or more Surgeon General’s warnings, the majority of which (96.4%) were not prominently featured. The FDA-authorized MRTP statement appeared in two (3.4%) of the items; both were not prominent and both were received in September 2020 (post-authorization of the reduced exposure claim). Most items (94.9%) also contained age restriction language.

The marketing items contained a wide variety of topics, often referencing several topics per item (range: 0-8; mean: 4). Most items (91.5%) had an embedded link or printed URL leading to the IQOS website or official social media pages. Items also referenced online services (54.2%; for example, online ordering, tutorials, and scheduling in-person appointments online), use experience (49.2%), official IQOS social media (44.1%), purchasing locations (37.3%), IQOS being improved compared to cigarettes/e-cigarettes (35.6%), in-person customer services (23.7%), introducing the product (22%), coupons or price promotions (22%), flavor (13.6%), and corporate social responsibility (3.2%); none mentioned promotional events.

Since most items featured several topics, they were also coded for their main purpose. Items were mainly oriented towards discussing the IQOS store experience (37.7%), introducing the product (18.6%), describing the product use experience to potential consumers (15.3%), providing coupons/price promotions (8.5%), or describing online purchasing and services (8.5%).

**Table 1.** Content of Unique IQOS Marketing Items

Overall (N)	59
<b>Image Content</b>	<b>n (%)</b>
Device / Product shown (n=59)	53 (89.8)
Accessories shown (n=59)	6 (10.2)
One or more people (models) shown (n=59)	40 (67.8)
Number of models (n=40)	
	1 22 (55.0)
	2 10 (25.0)
	3+ 8 (20.0)
One or more faces shown <sup>b</sup> (n=40)	33 (82.5)
Positive facial expressions shown <sup>c</sup> (n=33)	31 (93.9)

Model Sex <sup>d</sup> (n=38)	
All Male-Presenting	5 (13.2)
All Female-Presenting	20 (52.6)
Multiple Sexes	13 (34.2)
Presence of young adult models <sup>e</sup> (n=40)	15 (37.5)
Presence of models from racial/ethnic minoritized groups <sup>f</sup> (n=40)	28 (70.0)
Presence of symbols or models from sexual minoritized groups (n=59)	0
<b>Warnings and MRTP Statement</b>	
Number of Nicotine Warnings <sup>g</sup> (n=59)	
0	2 (3.4)
1	49 (83.1)
2	3 (5.1)
3+	5 (8.5)
Prominent Nicotine Warning <sup>g</sup> (n=57)	57 (100.0)
Number of Surgeon General's Warnings <sup>h</sup> (n=59)	
0	3 (5.1)
1	50 (84.7)
2	3 (5.1)



	3+ 3 (5.1)
Prominent Surgeon General's Warnings <sup>h</sup> (n=56)	2 (3.6)
Presence of MRTP Statement (n=59)	2 (3.4)
Prominent MRTP Statement <sup>i</sup> (n=2)	0
Age Restriction Language (n=59)	56 (94.9)
<b>Marketing Content Topics (n=59)</b>	
Embedded link or URL	54 (91.5)
Online services	32 (54.2)
Use experience	29 (49.2)
Social media	26 (44.1)
Purchasing locations	22 (37.3)
Improvement claim	21 (35.6)
In-person services	14 (23.7)
Product introduction	13 (22.0)
Coupons or price promotions	13 (22.0)
Flavor	8 (13.6)
Corporate social responsibility	2 (3.4)
Event promotion	0

Main Purpose <sup>j</sup> (n=59)	
Store Experience	22 (37.7)
Product Introduction	11 (18.6)
Product Use	9 (15.3)
Coupons/Promotions	5 (8.5)
Online Experience	5 (8.5)
Sign-Up	3 (5.1)
Modified Risk	2 (3.4)
Other	2 (3.4)

N: Total number

#: Frequency

<sup>a</sup> Number of models, N (%), among items with one or more models shown.

<sup>b</sup> Number of items showing models' faces, N (%), among items showing one or more models.

<sup>c</sup> Presence of positive facial expressions, N (%), among items showing one or more faces.

<sup>d</sup> Model sex, N (%), among items with one or more models, where sexual presentation was discernable. Among unique items received, there were 2 items with models where sexual presentation was not discernable.

<sup>e</sup> Presence of young adult models, (i.e. appearing to be 18-29 years of age), N (%), among items showing one or more models

<sup>f</sup> Presence of any models appearing to be from racial/ethnic minoritized groups, N (%), among items showing one or more models

<sup>g</sup> Prominence of nicotine warnings, N (%), among items with one or more nicotine warnings, coded as prominent or not prominent.

<sup>h</sup> Prominence of Surgeon General's warnings, N (%), among items with one or more Surgeon General's warnings, coded as prominent or not prominent.

<sup>i</sup> Prominence of the MRTP Statement, N (%), among items showing the MRTP statement, coded as prominent or not prominent.

<sup>j</sup> Only one main purpose could be selected for each item. Purpose was determined by examining the email's subject and body or mailer's front page and body to determine the most prominent theme.

#### 4. Discussion

As the first HTP authorized to be sold in the US, it is important to monitor IQOS marketing in order to inform future policy and regulatory decisions for similar novel products entering the market. This study is the first to examine IQOS direct mail/email marketing in the US context, including detailed examination of the marketing content. Our findings regarding the main purpose of the IQOS mail and email marketing items (store experience, product introduction, product use) align with findings from recent research on other marketing formats such as print and TV (real tobacco, less odor/ash, innovation or technology, Get IQOS).<sup>6,7</sup> These types of themes point to a strategy that aims to differentiate IQOS from other tobacco products and encourages people to try the product, a strategy which has been documented among other novel products such as oral nicotine pouches.<sup>16</sup> However, our results also highlight a particular focus on other topics such as links, online services, and in-person services which drive consumers to secondary online and in-person locations where they can be further persuaded of the product's merits. In particular, recipients were linked to the IQOS website/social media, where they would see additional online marketing, and were encouraged to visit IQOS flagship stores, where promotional activities such as personal IQOS trials were employed and where they would be exposed to point-of-sale marketing.<sup>4,9</sup> Since research shows that exposure to marketing is associated with initiation and sustained smoking among cigarette smokers,<sup>11</sup> it will likely be important to keep monitoring how direct, point-of-sale, digital, in-person, and other forms of marketing may interact to influence use behavior for novel products as well.

Notably, IQOS direct marketing images focused on racial/ethnic minoritized and female-presenting models. This is of particular concern due to the tobacco industry's history of targeting certain sociodemographic groups. For example, they have targeted women by using discounts, promoting images of luxury, and developing brands specifically for women,<sup>12</sup> and targeted racial/ethnic minoritized groups through tactics such as increased density of tobacco marketing in Black/African American neighborhoods and tailoring marketing of menthol cigarettes towards Black/African Americans as "fresh and modern."<sup>13</sup> <sup>14</sup> Concerningly, research has shown that alcohol and tobacco use behaviors and behavioral intentions are associated with increased identification with media content (like models), indicating that depicting specific demographic groups in ads may serve to increase usership among these groups.<sup>17,18</sup> Although it is possible that racial/ethnic minoritized models were used in IQOS marketing because the initial launch was in Atlanta, which has a population that is 49.8% Black/African American,<sup>19</sup> it is also possible that the initial IQOS direct marketing campaign was designed to increase interest among racial/ethnic minoritized groups. Furthermore, while women comprise about 51% of the Atlanta population,<sup>19</sup> our findings showed that when IQOS marketing images showed people, 86.8% included depictions of women. In examining IQOS online/print/mobile ad content, Berg et al. (2023) found that 29.2% of these types of ads featured images of women, indicating that the targeting strategies may be intensified in direct marketing compared with other marketing avenues. Using images depicting racial/ethnic minoritized models and women may be part of a larger marketing tactic designed to increase the perceived desirability of IQOS among these populations and increase the product's consumer base<sup>7,8</sup> -- a tactic that appears to be partly effective since the rates of interest and use of IQOS are higher among racial/ethnic minoritized groups.<sup>20</sup>

Study limitations include collection of marketing items only by residents of Georgia; thus, results may not be generalizable to direct marketing in other US states. Only 7 team members were registered and only 59 unique marketing items were received. While this allowed us to capture a wide range of IQOS email/mailers, we cannot be certain that the items in our database show the full range of marketing activities during the study period. The diversity of our recipients was limited (see supplemental table 1),

and we don't know if recipients with different characteristics would have received different marketing items.

## 5. Conclusions

As IQOS and other novel tobacco products enter new markets globally, ongoing surveillance of marketing and consumer impact, especially among the less visible distribution channels, will be needed to inform regulatory efforts. This study provides an updated description of the tactics used to directly market HTPs to US consumers, including elements that may indicate race- and sex-based targeting. Researchers should continue to monitor tobacco marketing for the tactics identified in this study, especially among novel products, and examine how these tactics influence consumer interest and use patterns.

**Supplementary Materials:** The following supporting information is available Supplemental Table 1: Recipient information; Supplemental Table 2: Variable Definitions; Supplemental Figure 1: Recipient 1 monthly marketing.

**Author Contributions:** Conceptualization, K.H., L.P., D.A., and J.H.; methodology, K.H., L.P., D.A., S.W., T.P. and J.H.; validation, K.H., N.K., and J.H.; formal analysis, K.H. and N.K.; investigation, K.H.; data curation, K.H. V.C., and S.W.; writing—original draft preparation, K.H.; writing—review and editing, K.H., N.K., L.P., C.S., V.C., D.A., S.W., T.P., and J.H.; visualization, K.H.; supervision, J.H.; project administration, K.H.; funding acquisition, L.P., D.A., and J.H. All authors have read and agreed to the published version of the manuscript.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Acknowledgments:** We would like to thank the researchers at John Snow Inc. (JSI) for their assistance in data collection.

**Funding:** This research was funded by the National Institute of Drug Abuse of the National Institutes of Health and Food and Drug Administration Center for Tobacco Products (R01DA047397-02S1 to LP and DLA); the National Cancer Institute (R01CA194681-05S1 to JH) and the Robert Wood Johnson Foundation. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health, Robert Wood Johnson Foundation, and the Food and Drug Administration.

**Conflicts of Interest:** David L. Ashley has received funds for work done for the World Health Organization Tobacco Free Initiative, as a Special Government Employee of the U.S. Food and Drug Administration, as a consultant for Pfizer, as an employee of Cherokee National Operational Systems and as an independent contractor for McKing Consulting. Dr. Pechacek has served as an expert in litigation involving e-cigarettes. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

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## Declaration of interests

☐ The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

☒ The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

David L. Ashley has received funds for work done for the World Health Organization Tobacco Free Initiative, as a Special Government Employee of the U.S. Food and Drug Administration, as a consultant for Pfizer, as an employee of Cherokee National Operational Systems and as an independent contractor for McKing Consulting. Dr. Pechacek has served as an expert in litigation involving e-cigarettes.