

# HEALTH AND ADDICTION PERCEPTIONS OF A NOVEL NON-TOBACCO SMOKELESS PRODUCT

Ed Carmines<sup>1</sup>, Lise Fraissinet<sup>1</sup>, Azure Steele<sup>2</sup>, Mark Hanson<sup>3</sup>  
Chemular Inc<sup>1</sup>, Hudson, MI, M/A/R/C Research<sup>2</sup>, High Point, NC, Black Buffalo Inc<sup>3</sup>, Chicago, IL

TSRC Poster #68

## ABSTRACT

Smokeless tobacco products are perceived to have a lower health and addiction risk than conventional cigarettes. Black Buffalo Inc. has designed a novel alternative smokeless product that is based on a common non-tobacco food crop. The non-tobacco food crop leaf is cured and processed like tobacco but does not contain TSNAs or PAHs. Tobacco derived nicotine is added to the processed leaf. The products are available in two forms: loose (Long Cut) and fleece-portioned (Pouches). The filler material inside the Pouches products is the same as that used for the Long Cut products. Black Buffalo's products are designed to emulate the organoleptic, ritualistic, and pharmacokinetic aspects of traditional smokeless products. A cross sectional online survey was conducted in approximately 4500 adults. Smokers, former smokers, never smokers and smokeless tobacco users were surveyed. 2250 respondents were shown Black Buffalo packaging and asked questions about perceptions of the health and addiction risks of the products compared to conventional cigarettes, smokeless tobacco products, e-cigarettes, and NRT (Nicotine Replacement Therapy). Marlboro Gold cigarettes were used as a control product concept. The Marlboro Gold results were the same as conventional cigarettes (CCs) validating the approach and methods used. The risk of addiction to Black Buffalo products was consistently perceived to be lower than Marlboro Gold but consistent with other smokeless tobacco products by across respondents Smokeless tobacco users perceived the addition risk of Black Buffalo products to be less than the smokeless category in general. The health risks of Black Buffalo products were perceived to be less than Marlboro Gold, the smokeless, and e-cigarette categories. Smokeless tobacco users perceived the health risks of Black Buffalo products to be much less than the smokeless category and in general almost equivalent to NRT.

## OBJECTIVE

Determine the health and addiction perceptions of a novel non-tobacco smokeless product.

## THE PRODUCT

Black Buffalo's tobacco alternative products were developed as an alternative to traditional moist smokeless tobacco (MST) products, with the intent of eliminating user exposure to the TSNAs and PAHs found in traditional tobacco-based MST products. Black Buffalo (BB) products are made by applying food-grade flavors, pharmaceutical-grade tobacco derived nicotine, salt, water, preservatives, humectants, and pH modifiers to a leafy vegetable food that has been flue-cured (i.e., dried using indirect heat), cut, and processed into a low-moisture biomass that resembles finely shredded tobacco.

The product does not contain any tobacco leaf or tobacco stem material, but it does contain tobacco derived nicotine and is intended to emulate the organoleptic, ritualistic, and pharmacokinetic aspects of traditional MST products. The product is intended to be placed in the mouth between the cheek and gum for a period of time determined by the user (typically 30 to 60 minutes).

**Black Buffalo** is a smokelesstobacco alternative. It is an oral nicotine product that contains no tobacco plant matter.



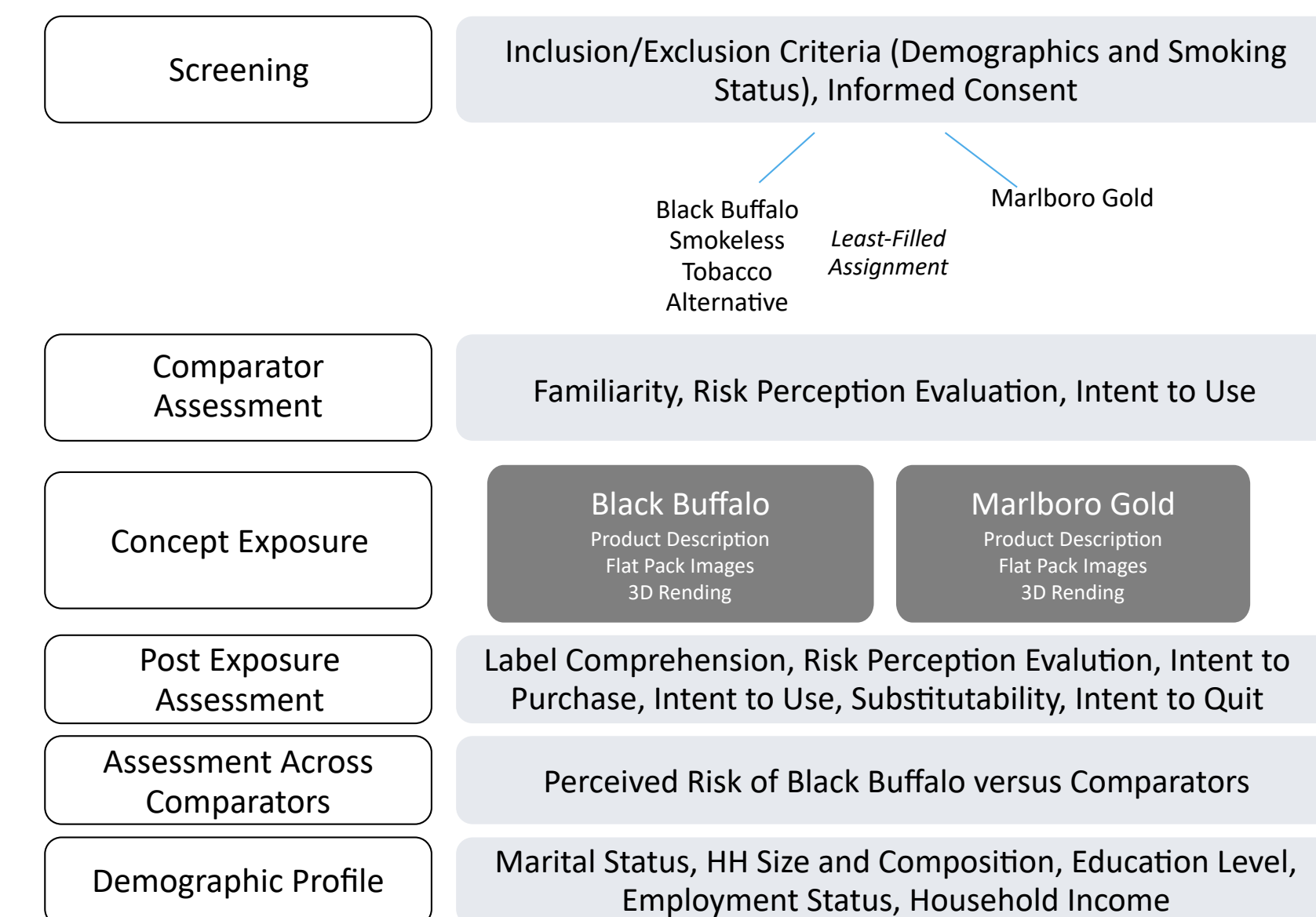
**Black Buffalo** is also available in the following varieties:

**Long Cut:**  
Wintergreen  
Mint  
Straight  
Peach  
Blood Orange

**Pouches:**  
Wintergreen  
Mint  
Straight

## METHODS

### Study Design



## RESPONDENT DESIGNATIONS

1. Current Smokers: Adults who have smoked at least 100 cigarettes in their entire life and currently smoke every day or some days.
2. Former Smokers: Adults who have smoked at least 100 cigarettes in their entire life and currently smoke not at all.
3. Never Users: Adults who have never smoked at all, adults who have never been regular smokers and have smoked less than 100 cigarettes in their lives, adults who have never used smokeless tobacco products.
4. Smokeless Tobacco Users: Adults who have used chewing tobacco, snus, snuff, or dip at least 20 times in their entire life and are currently using the product every or some days.

## RESULTS

### Familiarity with Tobacco and Nicotine Products

There was a low level of familiarity with smokeless tobacco/nicotine products among Former Smokers and Never Users. Smokeless Tobacco Users were the most familiar with smokeless tobacco/nicotine products (Figure 1). Understanding of Black Buffalo Labeling/Concept Respondents understood that Black Buffalo contains nicotine, which is addictive (data not shown). Regardless of user group, most indicated Black Buffalo is for those who want to quit using tobacco products but continue using nicotine. Most Current Smokers said that completely switching to Black Buffalo could reduce their risk of harm ((data not shown).

### Perceptions of Critical Health Risks

Overall, the perception of the risk of developing or having any of the four critical health risks (lung cancer, mouth or throat cancer, heart disease or emphysema) was highest for CCs and Marlboro Gold in total and across all respondent groups followed by e-cigarettes/vapor products and smokeless tobacco/nicotine products (Figure 3). The perceived risk of developing critical health conditions from using Black Buffalo was lower than these products in all respondent groups except Never Users Gen Pop. Never Users Gen Pop perceived the same level of critical disease risk for Black Buffalo and smokeless tobacco/nicotine products. Respondents perceived that the Black Buffalo Product use would be associated with oral diseases (Figure 4).

### Perceptions of Addiction Risks

Overall addiction risks were highest for CCs and Marlboro Gold across all respondent groups. Current Smokers, Former Smokers and Never Users perceived the same level of addiction risk for Black Buffalo as smokeless tobacco/nicotine products and e-cigarettes/vapor products. Smokeless Tobacco Users perceive Black Buffalo, smokeless tobacco/nicotine products and e-cigarettes/vapor products at the same level of risk of addiction (Figure 5).

### Likelihood of Initiation/Reinitiating

It is unlikely that Never Users or Former Smokers will initiate/reinitiate nicotine use if Black Buffalo products are available for purchase (7% or less expressed interest in buying or using Black Buffalo). Their interest in buying or using Marlboro Gold was at the same low level as Black Buffalo (Figure 6).

### Flavor Appeal Among Vulnerable Populations

Among Former Smokers, Never Users Gen Pop and Never Users 21-24 (vulnerable populations), interest in purchasing any of the available flavors was similar to their likelihood to purchase Black Buffalo (ranging from 5%-9%) (Table 1).

### Likelihood of Use

The most likely buyers of Black Buffalo are Smokeless Tobacco Users (52% definitely/probably would) followed by Current Smokers (27%). Current Smokers who intend to quit in the next 12 months are more likely to buy Black Buffalo (32%) compared to those who do not intend to quit (22%) (Figure 6).

Figure 1. Product Familiarity

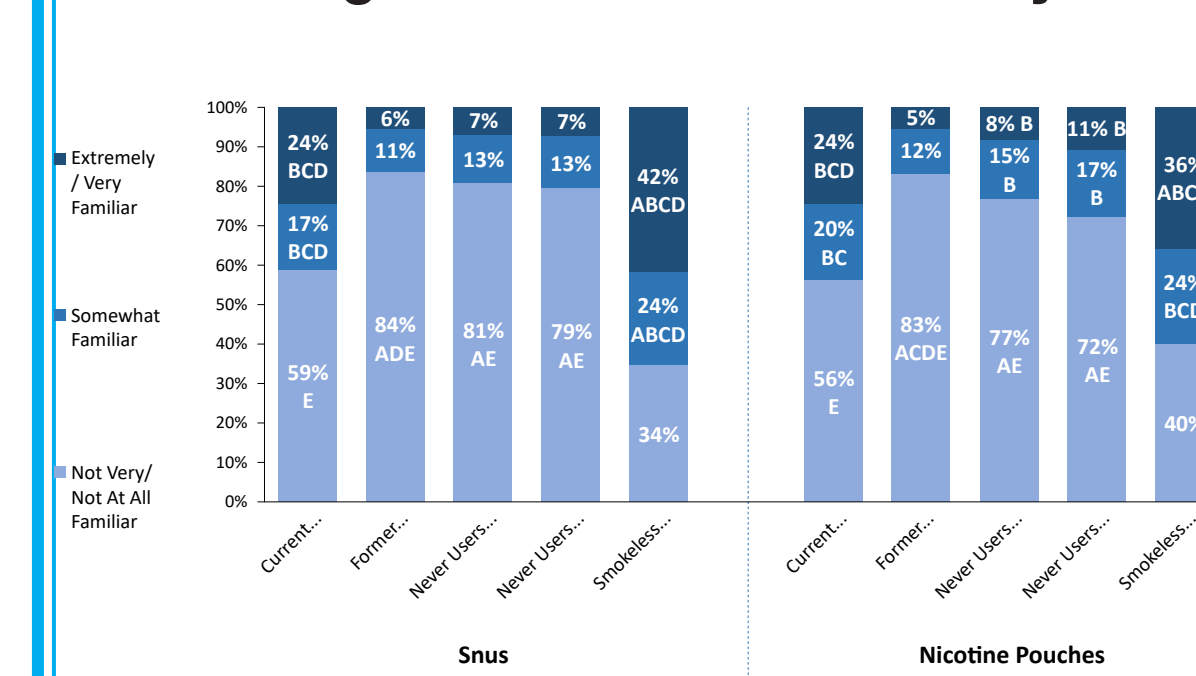


Figure 2. Response to Chemicals in Black Buffalo Question.

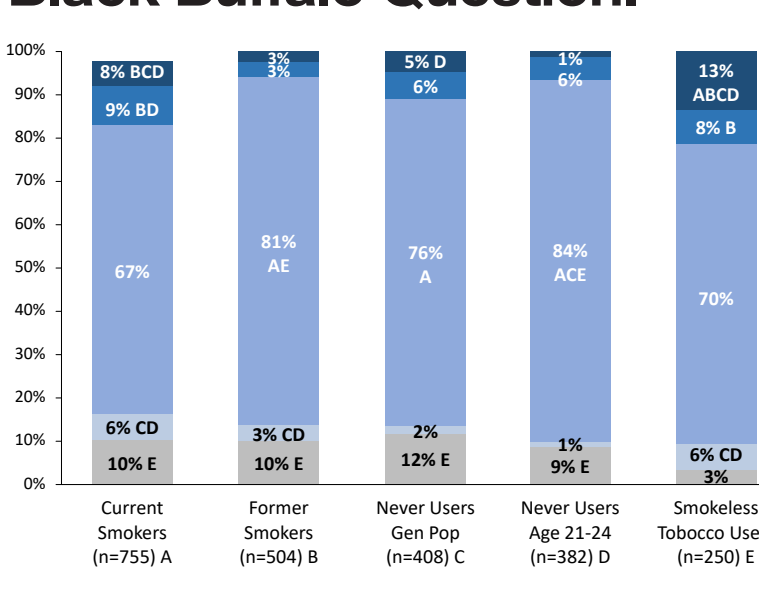


Figure 3. Perceptions of Critical Health Risks

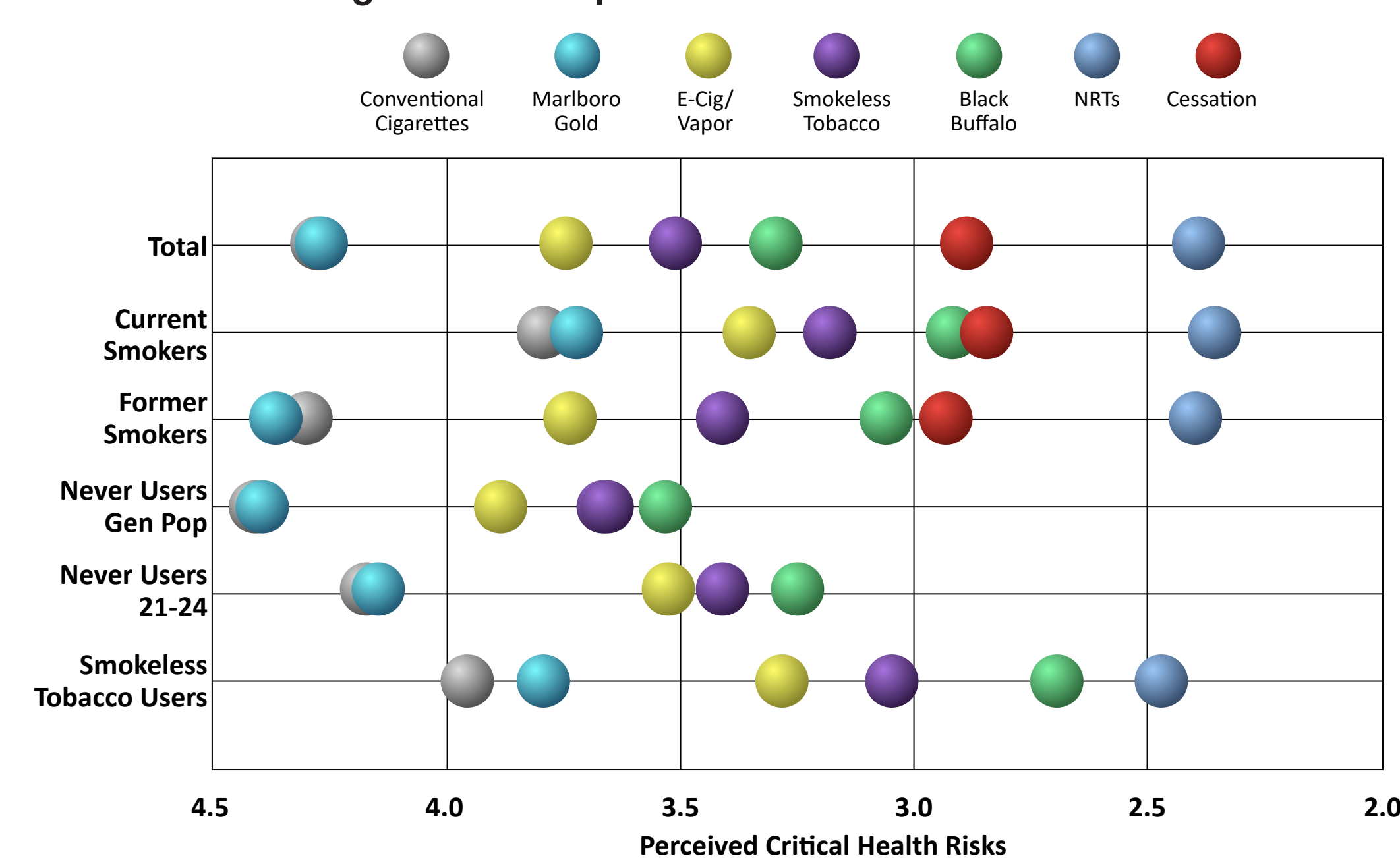


Figure 4. Perceptions of Developing Specific Diseases

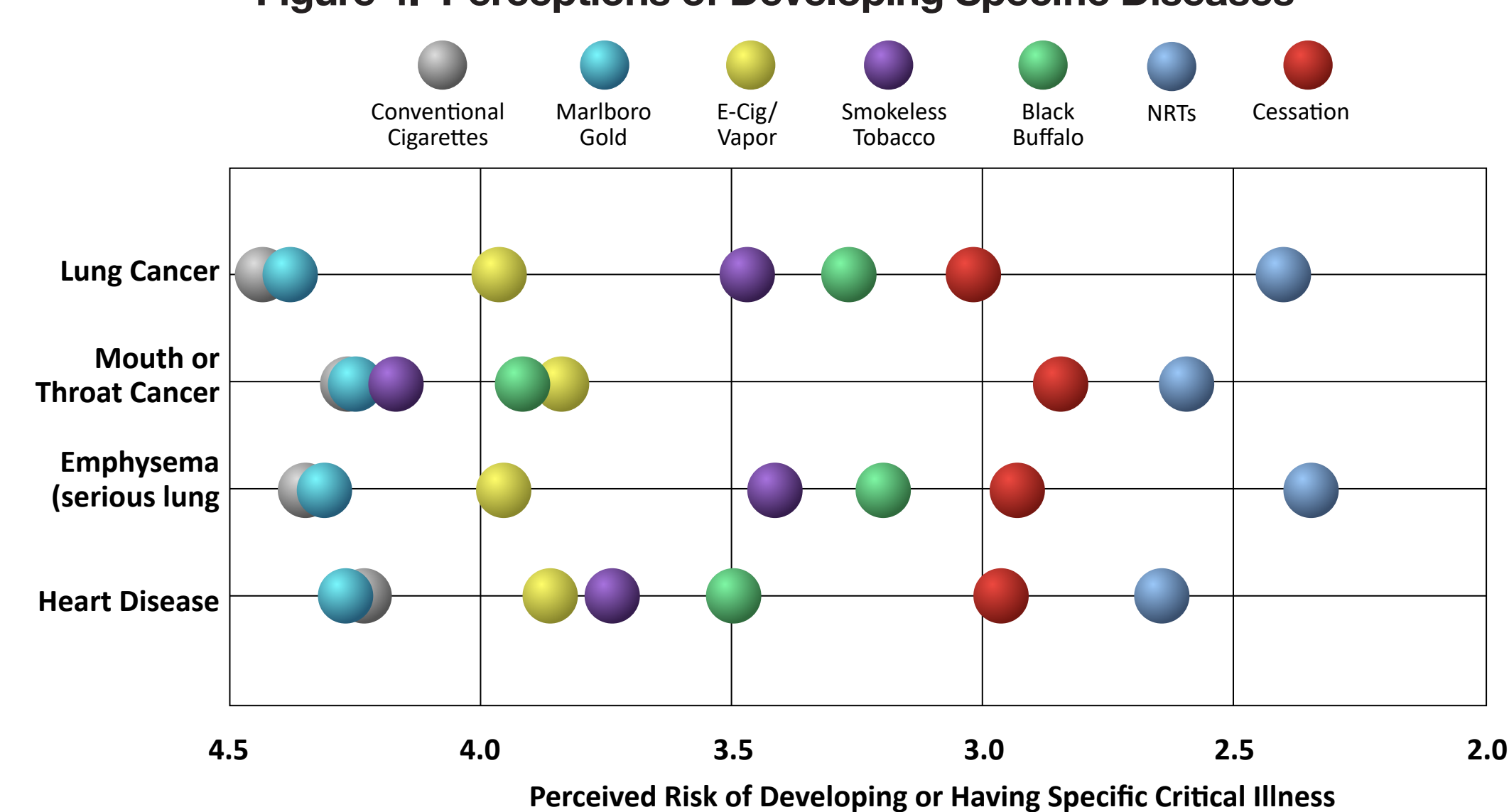


Figure 5. Addiction Risk Perceptions

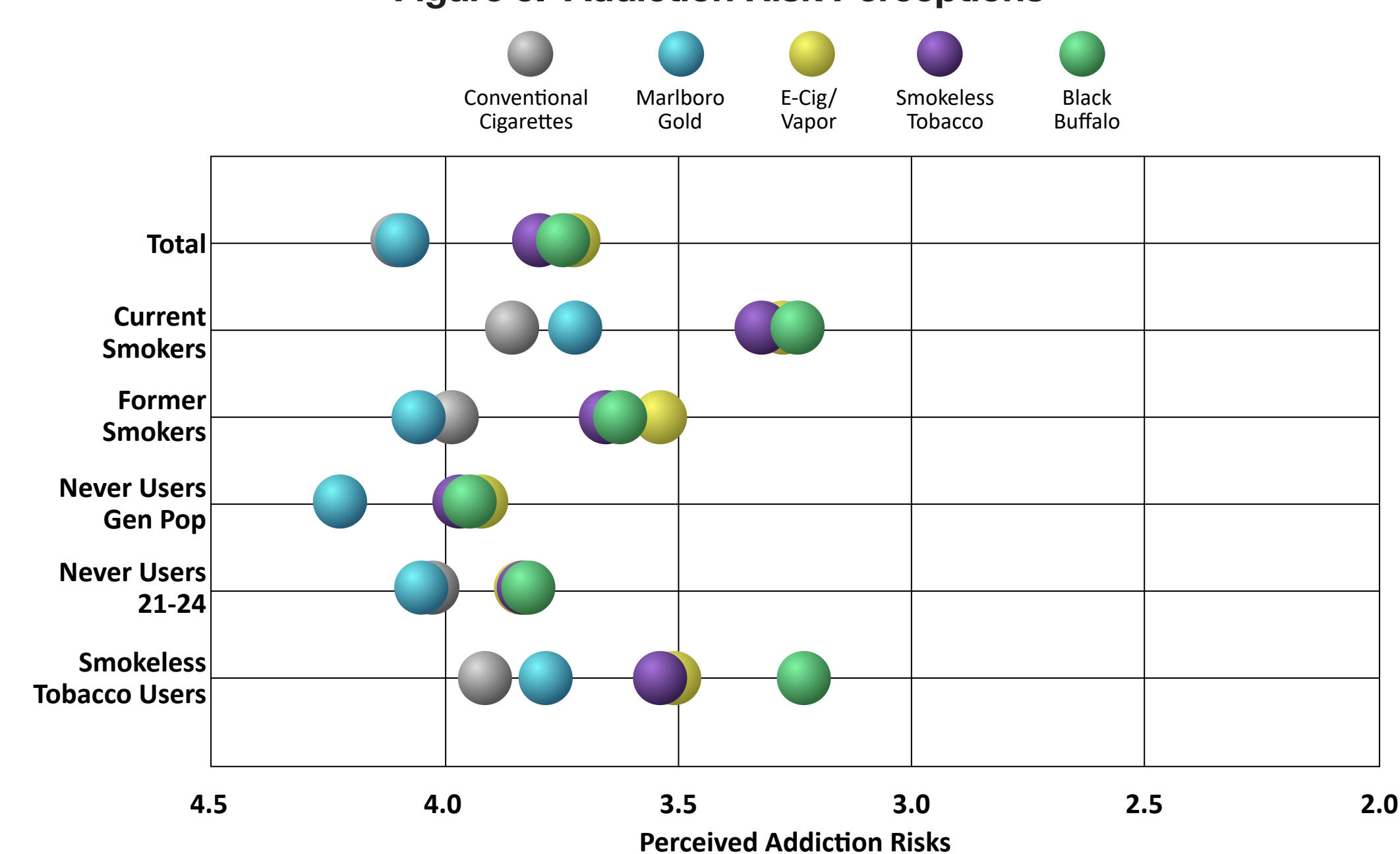
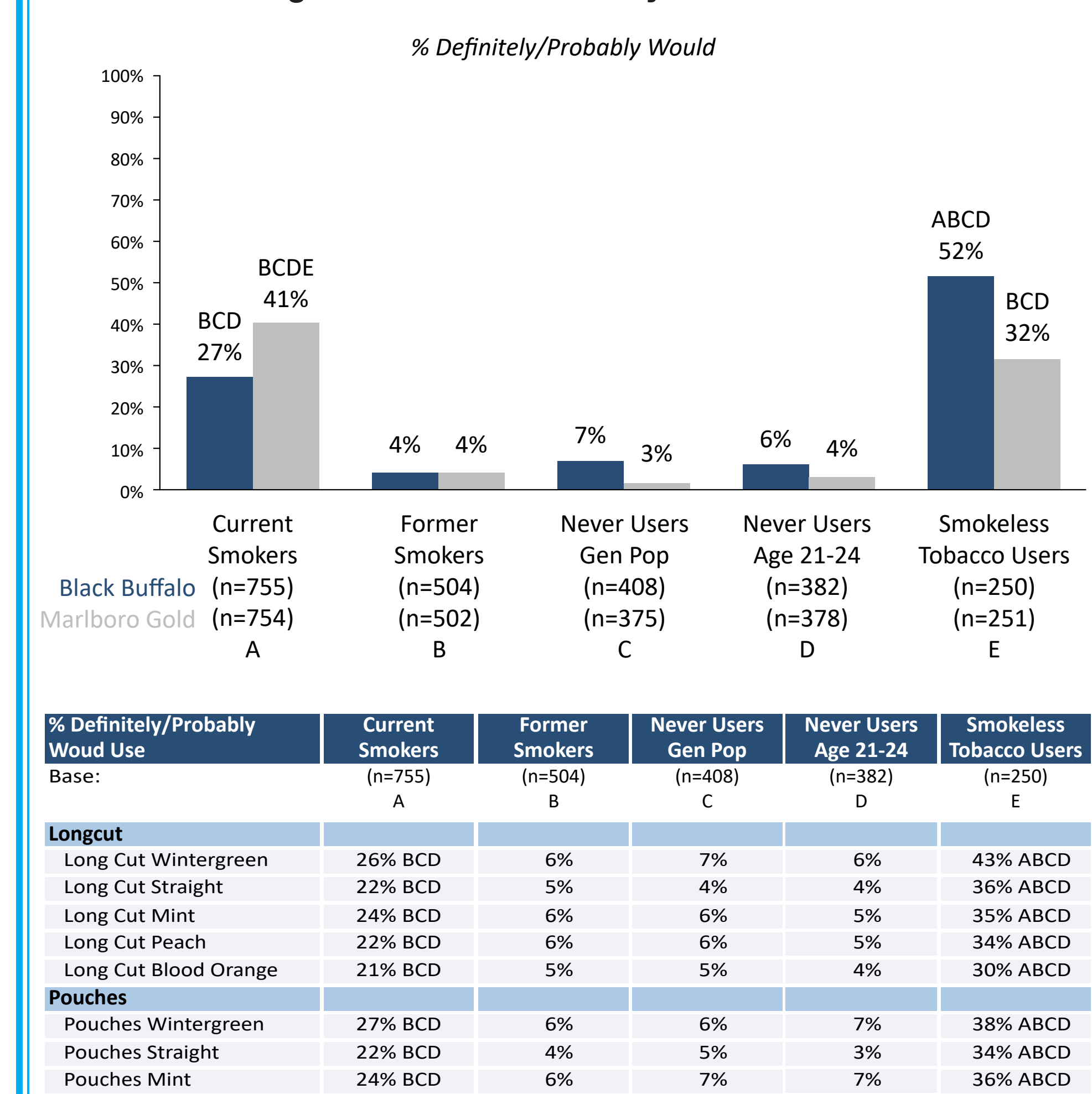


Figure 6. Likelihood to Buy Black Buffalo



## CONCLUSIONS

- ✓ Consumers can read and understand the Black Buffalo Products label following "at-shelf" modelling exposure design.
- ✓ Consumers are not misled into underestimating the health and addiction risks of Black Buffalo Products. Respondents understand the risk and product in context of traditional tobacco/nicotine forms.
- ✓ Consumers perceive the health and addiction risks to be similar to smokeless tobacco, which given the product form and presentation aligns with expectations.
- ✓ Former Smokers and Never Users are not interested in the products indicating the product is positioned in appropriate context.
- ✓ Only Smokers and Smokeless Tobacco Users are interested in the product indicating the product is positioned in appropriate context.
- ✓ There was no preference for a particular form (pouches vs. long cut) among Smokeless Tobacco Users, the primary target given the adjacency/ alignment of product to this category of use.
- ✓ Wintergreen was preferred slightly more than the other flavors by Smokeless Tobacco Users, although flavor overall does not appear to drive appeal in any specific way and those respondents pre-disposed to use (current Smokeless Users) make up the bulk of the population interest.

CHEMULAR

For more information and a copy of the poster please go to [www.Chemular.com](http://www.Chemular.com)