Stick this in your pipe and smoke it.

Tobacco, Alcohol, and Illicit Substances in Music Videos

A Public Health project undertaken by students at the Wellington School of Medicine, October 2005.

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ABSTRACT

Music videos are a form of media that may influence adolescent behaviour. A review of the current literature found that visual media had a potent effect on the perceptions of and participation in risk behaviours (tobacco, alcohol, and illicit substance use). A content analysis of visual references to these behaviours was carried out on 564 music videos played on free-to-air and subscriber television in New Zealand. 21% contained references to tobacco (6%), alcohol (16%), or illicit substances (<1%). New Zealand videos were significantly less likely to contain risk behaviours than those from overseas. ‘Hip-hop’ videos were significantly more likely to contain risk behaviours, while ‘Pop’ videos contained significantly fewer references. Videos broadcast on subscriber television were twice as likely to contain reference to tobacco than free-to-air channels. These results represent a lower prevalence of risk behaviours than previous research has indicated. The results are discussed with respect to the New Zealand youth population. Recommendations include a review of current broadcasting standards, inclusion of anti-smoking and responsible alcohol messages during adolescent viewing times, and preferential funding of New Zealand music videos that do not contain risk behaviours.
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INTRODUCTION

Youth Smoking in New Zealand

Few debate that smoking is a problem. Smoking kills an estimated 4,700 New Zealanders every year, reducing the life expectancy of those it kills by about 10 years (ASH 2002; MOH 2002). Smoking in young people is an important contributor to the overall morbidity and social cost of tobacco. While gains have been made in motivating adults to quit smoking, a steady uptake of the habit by youth is maintaining a relatively stable adult smoking population as they grow up. Most youth state that they intend to stop before they get addicted; however smoking taken up in the teens is actually relatively irreversible (Fergusson and Horwood 1995). The first symptoms of dependence pre-date daily smoking, and can appear in a matter of days to weeks after the initiation of occasional smoking. Adult rates of smoking are reached by age 18. By the time smokers are in their mid-twenties, the majority want - and are attempting - to cut down.

Youth smoking rates have been of interest to health professionals (and the tobacco companies, in a different way) for a long time. In 1960, a study of fourth formers (Year 10) revealed that 50% smoked at least occasionally. Over the next 40 years increasing awareness of the health consequences of smoking started to leak down through government policy and the media. In 1990 most tobacco advertising was banned, and in the mid 1990’s the Health Sponsorship Council (HSC) started sponsoring youth events under the ‘Smokefree’ brand. In 1996 the Ministry of Health started to seriously enforce the age restriction on tobacco retailing, using volunteers to help identify retailers selling tobacco to anyone under age, and the next year the legal age to buy cigarettes was raised from 16 to 18. ‘Why Start’, an advertising campaign designed to discourage young adolescents from taking up smoking, ran for three years at this time. Smoking rates fluctuated during this decade. In 1991, 19% of 14-15 year olds were smoking. This number increased to 28.5% by 1997. Over-represented in this rise in smoking were Māori, and particularly Māori females. Since then the prevalence of youth smoking appears to have decreased; in 2002 a survey of Year 10 students undertaken for the Ministry of Health found 15% and 21% of male and female students respectively to be at least weekly smokers. Young Māori women are still grossly over-represented among the smokers, 42% smoking weekly or more. It is extremely important to investigate and target the factors that are motivating and maintaining smoking behaviour in young people.
Major gains have been made in helping adults to quit and some gains made in reducing youth rates; however young people are still taking up the habit in significant numbers. Any strategy that could reduce uptake by adolescents could potentially save society a great deal of money and suffering. To that aim, research is ongoing into the factors that contribute to a culture of nonchalance and acceptance of tobacco by youth.

The culture of drinking in New Zealand

New Zealand is a society in which many people are tolerant of drunkenness. A recent survey commissioned by the Alcohol Advisory Council (ALAC) of New Zealand found that people view alcohol as a ‘social lubricant’, with 10% of adult drinkers acknowledging they drink in order to get drunk (de Bonnaire 2004). Many adults are ‘risky’ drinkers. While adult Māori drink less regularly than non-Māori New Zealanders, they were shown to engage in more risky drinking behaviours. One-fifth of the population 18 years and over are current non-drinkers.

Adolescents commonly engage in unsafe drinking practice. Despite the legal age of supply being 18 years, 70% of 12-17 year-olds surveyed reported no difficulty in accessing alcohol. 60% agreed that it was “ok to get drunk as long as it’s not every day”. Regular and risky drinking is common in this age group. 42% reported that they had a drink at least once every two weeks, and nearly 60% reported having binge-drunk on at least one occasion. 1 in 3 made no attempt to limit their drinking. Drinking patterns amongst Māori youth matched those of Māori adults. 50% of 12-17 year-olds are current non-drinkers.

Cannabis and other illicit substances

Marijuana is a commonly used drug in New Zealand, third only to alcohol and tobacco (Ministry of Health 2001). Over 20% of 15-17 year-olds report having tried marijuana at least once, and over 40% of 18-24 year old males. 20% of those who had ever tried marijuana had done so by age 14, rising to 80% by the age of 18.

The use of other illicit substances, such as opiates and hallucinogens, is considerably less common than that of cannabis (Ministry of Health 2001), although party drug use amongst the youth population is common. The apparent rise in “pure” methamphetamine (“P”) use has been given extensive coverage in the New Zealand media.
Music videos on New Zealand television

Music videos are freely accessible on New Zealand television. A dedicated free-to-air music channel, “C4”, is available to the majority of New Zealand households. Television New Zealand broadcasts music video content on its “TV2” network. Subscription television services offer 24 music videos on the “Juice” and “J2” channels.

The current study

This study comes riding on a large body of knowledge about the impact on community behaviour of risky behaviour shown in the media, and aims to add a little. We were commissioned by the Health Sponsorship Council to examine the prevalence of smoking, alcohol and illicit drug use in the music videos watched by NZ youth.

Issues to address

1. Do young people in New Zealand watch music videos?
2. What sort of influence do music videos have on risk-taking behaviour?
3. How prevalent are images of
   a. Smoking;
   b. Alcohol; and
   c. Illicit drugs in music videos?
4. Is there a difference in prevalence between free-to-air and pay TV?
5. Are New Zealand made videos any different?
6. Are music videos an important target for public health intervention? And if so, what recommendations can be made?

This project was commissioned by the Health Sponsorship Council

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**LITERATURE REVIEW**

**Media influence on youth behaviour**

Smoking, drinking, and drug use are popular and dangerous behaviours among teenagers. Film and television have been identified as potential influences on teens' attitudes toward, and initiation of substance use, and despite bans on television tobacco advertising smoking on television remains widespread. This has led to the suggestion that television may serve as an indirect method of smoking advertising (Gidwani 2002). While our study focused on smoking and alcohol use in music videos, it is important to look at the literature concerning the effects of general media on adolescent behaviour, as many of the indications for our study stem from this work.

A 1993 study investigated the relationship between adolescents’ use of mass media (including television, radio and magazines) and their risky or unhealthy behaviours, such as sexual intercourse, drinking, smoking cigarettes, smoking marijuana, cheating, stealing, cutting class and driving a car without permission (Klein 1993). They found that adolescents who had engaged in more risky behaviours listened to radio and watched music videos and movies on television more frequently than those who had engaged in fewer risky behaviours, regardless of race, gender or parents’ education. In a 10-year review of research literature regarding the impact of media on children and adolescents, it was found that the primary effects of media exposure are: increased violent and aggressive behaviour, increased high-risk behaviours, including alcohol and tobacco use, and accelerated onset of sexual activity (Villani 2001).

The potential for mass media to influence youth culture has become a growing health concern and many studies to date have focused on exposure to advertising and fictional portrayals of tobacco and alcohol consumption in television and movies.

**Risk Behaviours in Visual Media**

**Smoking**

A study looking at trends in tobacco use in a sample of top grossing films in the USA in each year from 1960 to 1990 found that while smoking among major characters had decreased, it was still three times as prevalent as their comparable population in society and smoking involving young people had almost doubled (Hazan 1994). Smoking had become more social and had a high association with stress relief. The study found films reinforced misleading images and overstated the normalcy of smoking, which may
encourage children and adolescents, the major audience, to smoke. Given the high level of exposure to films, the typical adolescent could see more smoking in films than in the real world.

Everett (1998) found that in top-grossing American films from 1985 to 1995, 98% of films had references that supported tobacco use and 96% had references that supported alcohol use, while only one third of films had any references that discouraged the use of tobacco or alcohol. Hence, the hazards of smoking and drinking are not reflected in the behaviours of film characters, who are potential role models for youth facing the decision to smoke or drink (Everett 1998).

In an analysis of teen characters in top grossing films from 1999-2001, two-fifths of teen characters drank alcohol, one-sixth smoked cigarettes, and one-seventh used illicit drugs (Stern 2005). Drinkers and drug users were unlikely to be shown suffering any short or long-term negative consequences. Characters were rarely shown refusing offers of alcohol or drugs, or regretting their substance use. The study authors suggested that teen viewers could be more likely to learn from teen models that they perceive as similar, desirable, and attractive.

A further study examining how smokers were depicted in 100 popular films spanning 5 decades found that smokers were depicted as more romantically and sexually active than non-smokers. When Hollywood’s depiction of smokers was compared to real-world demographics on smoking, Hollywood’s depiction of smoking were found to ignore the negative consequences and correlates (e.g., ill health, low socioeconomic status, aggressive behaviour) of smoking (McIntosh 1998).

While the amount of smoking in films has fluctuated since the 1960s it is currently increasing and smoking has once again become more prominent in female lead roles (Stockwell 1997). In 2004, Glantz found that in a selection of films made between 1950 and 2002, the portrayal of smoking in movies had risen to levels observed in 1950 when smoking in the general population was nearly twice as common as it is in 2002, despite declining tobacco use and increasing public awareness of the dangers of smoking in society (Glantz 2004).

**Alcohol**

Alcohol use is frequently seen in television and film, and several studies have addressed concerns surrounding media viewing as a risk factor for alcohol use. Increased television
and music video viewing have been found to be independent risk factors for onset of alcohol use in adolescents (Robinson 1998), while another study of 1648 first and fourth year secondary school children in Belgium found that overall television viewing per day and music television viewing specifically, significantly predicted the amount of alcoholic beverages adolescents consumed when going out (Van den Bulck 2005).

An earlier study looked at alcohol messages embedded in prime-time television and found that alcoholic beverages were the most frequently portrayed food or drink (Mathios 1998). Adolescent characters were more likely to be shown consuming alcohol than adults were. A significant finding in this study was that adolescents portraying alcohol use were shown to have significantly more negative personality characteristics than did characters in older age groups. However as with other studies, potential role models such as adults and high-income earning characters involved with alcohol, were often shown with positive personality characteristics (Mathios 1998).

**Violence and Sexuality**

The effect of mass media on adolescent behaviour is more widespread than just smoking and alcohol use, and includes the portrayal of violence and sexuality. Although these were not areas that we specifically investigated in our study, we have included a brief overview of sexuality and violence, as we identified these as other risk behaviours which adolescents may be exposed to in music videos.

Sexuality and sexualised behaviour is rife in modern visual media. Of concern is the impact this may have on adolescent sexual behaviour. In a longitudinal study of 1792 adolescents (12-17 years), adolescents who viewed more sexual content at baseline were more likely to initiate intercourse and progress to more advanced non-coital sexual activities during the subsequent year (Collins 2004). The authors also found that watching sex on television predicts and hastens adolescent sexual initiation. In a sample of 12-15 year olds, irrespective of their pubertal status, gender, or level of sexual experience, television viewing was related to higher expectations of peers’ sexual activities (Eggermont 2005). Overall, there is scant research in this area, which deserves further investigation (Escobar-Chaves 2005).

The potential effect of violent imagery in the media on adolescent behaviour is also a concern. A recent large review found that there was consistent evidence of violent imagery in television, film, computer games, and more recently music videos. This had a substantial short-term effect on arousal, thought, and emotion. This increased the
likelihood of aggressive and fearful behaviour in younger children, especially in younger boys (Browne 2005). However, the evidence is much more inconsistent in older children, teenagers, and long-term outcomes across all ages, indicating that more research needs to be conducted in this area. In an assessment of 28 reports on children and adolescents exposed to media violence, it was found that exposure to media violence increased aggressive interactions with strangers, classmates, and friends (Wood 1991). In a meta-analysis of 217 studies carried out between 1957 and 1990, a positive and significant correlation was found between television violence and aggressive behaviour, regardless of age (Paik 1994).

**How youth perceive smoking in the media**

There are few studies quantifying the effect of exposure to smoking on TV on New Zealand young people. However, in one study, an interesting series of interviews asked adolescents about their perceptions of smoking in film (McCool, Cameron et al. 2001) They reported that smoking in films was seen to be both prevalent and memorable. Younger teens (12-13 year-olds) felt that the portrayal of smoking reflected reality, and related characters lighting up to the way a family member would in a similar situation; cigarettes were felt to be an integral part of painting a character. The researchers felt that responses reflected the normalization of smoking in society; indeed, when asked to estimate smoking prevalence among their peers and in the adult population, the groups tended to overestimate grossly. A parallel study among Australian high school students reported similar attitudes (Watson 2003). Young people perceived smoking to be a way of relieving stress, identified with the sociability of smoking and saw it as a part of their environment, despite being aware of its health consequences.

The study of Australian high school students did find that the young people seemed to recognise the contradiction between what they saw in the image of smoking and what they knew about the effects of tobacco (Watson 2003). It was often apparent that there was a lack of visible detrimental effects of smoking, health-related or otherwise and this was often interpreted as the media portraying smoking as a good thing. Older teenagers were more cynical and generally showed an awareness or suspicion of intent behind incidental portrayal of smoking in the media.

Older Kiwi teenagers (16-17 year olds) were also more likely to suspect that tobacco images in films were partly product placement (McCool, Cameron et al. 2003). However, in general the tone was one of nonchalance. The adolescents reacted negatively to any
implication that tobacco images might influence their own smoking behaviour, but suggested that it might have influence over ‘other’, younger or less savvy youth.

| informal survey – conversation between a 14 and 17-year old in Auckland |
| M “the sort of people that are going to be influenced by that are the sort of people who shop at Supre” |
| E “yeah, I hate Supre” |
| M “same” |

McCool et al made a comment that the responses they found differed markedly from those gleaned in a similar study in California, and postulated that there may be a cultural difference in the way New Zealand adolescents receive smoking images. The Californian study found that their 14 and 15-year olds responded positively to all images of cigarettes in film, not differentiating between ‘positive’ and ‘negative’ portrayals (Pechmann 1999). In contrast, the adolescents interviewed in the McCool et al study were almost carefully nonchalant about smoking in film, and denied any personal response to the images. Authors of both Australian and New Zealand studies state the concern that the frequent, memorable images encountered by youth in the media may be desensitizing them to the negative effects of tobacco, encouraging more neutral or tolerant attitudes toward smoking, and thus counteracting other health promotion efforts to decrease teenage uptake of smoking.

**Does Smoking In Visual Media Influence Adolescents?**

Social cognitive theory suggests that children develop intentions and positive expectations about smoking prior to initiation. These attitudes and values result, in part, from observing others modelling the behaviour. Several studies have provided evidence that exposure to substance use by celebrities and product placement may encourage adolescents to observe, acquire positive attitudes about and later emulate the substance use of their mass media models (Distefan 1999; Tickle 2001).

Research has shown that the media often overestimates smoking rates and tends to associate smoking with favourable attributes. The media perpetuate the perception that cigarette smoking and alcohol use is a socially acceptable, normative behaviour, and that their use is associated with acquiring desirable outcomes such as popularity and attractiveness.

A Californian study asked 6,252 adolescents about their favourite stars, smoking history, exposure to smokers, rebelliousness, knowledge and attitudes regarding smoking, and
cigarette advertising and promotion (Distefan 1999). The study found that adolescent smokers differed from non-smokers in their choice of favourite stars, and that many of the stars selected by adolescent smokers were either a smoker in real life or portrayed characters that smoked. In addition, adolescent non-smokers who chose a star favoured by smokers were almost 1.5 times more likely to be susceptible to smoking. Another later study showed that smoking by stars in movies particularly, increased future smoking among adolescent girls who had never smoked (Distefan 2004). A New England study of 632 students (age 10-19 years) found that adolescents that choose movie stars who smoke on-screen were significantly more likely to have an advanced smoking status and more favourable attitudes toward smoking than adolescents who choose non-smoking stars (Tickle 2001). This supports the idea that the portrayal of smoking in movies, particularly by stars admired by adolescents, contributes to adolescent smoking. The association between stars smoking and attitudes that predict smoking susceptibility were even stronger among never smokers (Distefan 1999; Tickle 2001).

One study assessed exposure to smoking in movies in 3547 non-smoking adolescents, aged 10-14 years (Dalton 2003). When followed up 13-26 months later, 10% of students had initiated smoking and in the highest quartile of exposure to movie smoking, 17% of students had initiated smoking, compared with only 3% in the lowest quartile. After controlling for baseline characteristics, adolescents in the highest quartile of exposure to movie smoking were 2.71 times more likely to initiate smoking compared with those in the lowest quartile. In this study, 52.2% of smoking initiation could be attributed to exposure to smoking in movies, providing strong evidence that viewing smoking in movies promotes smoking initiation among adolescents. It was estimated that by eliminating smoking from film, smoking initiation over the follow-up period could be reduced from 10% to 4.8%. As in the study by Tickle et al. (2001), adolescents with non-smoking parents were especially susceptible and the risk of smoking initiation increased substantially with greater exposure to movie smoking (Tickle 2001; Dalton 2003).

Higher exposure to tobacco use in films was also found to have a strong, direct, and independent association with smoking, in a study of 4919 adolescents aged 9-15 years (Sargent 2001). Similarly, higher exposure to tobacco use in movies significantly increased the number of positive expectations endorsed by the adolescent and the perception that most adults smoke (Sargent 2001). These studies add to the growing body of evidence
that viewing movie depictions of tobacco use is associated with higher receptivity to smoking prior to trying the behaviour, and that smoking uptake increases with exposure.

Television viewing has also been indicated as having a strong association with higher rates of smoking initiation among youth. In a longitudinal study looking at the association of television viewing in 1990 with the smoking initiation of adolescents (10-15 years) in the subsequent two years, smoking increased from 4.8% in 1990 to 12.3% in 1992 (Gidwani 2002). After controlling for baseline characteristics such as demographic, maternal or child factors, youths who watched 5 or more hours of TV per day were almost 6 times more likely to initiate smoking behaviours than those youth who watched less than 2 hours. The pattern of results suggests that the frequent positive portrayals of smoking on television may be an effective, indirect method of tobacco promotion. While this particular study found that television viewing is associated with a dose-response relationship in the initiation of youth smoking (Gidwani, 2002), another study found that television viewing appears to be an indicator or predictor of smoking volume (Gutschoven 2004). Smokers who watched more television smoked more cigarettes and the relationship became stronger for higher levels of viewing.

**The New Zealand Picture**

Studies elsewhere have been replicated in a New Zealand context. One did attempt to quantify the effect of media exposure and behavioural outcomes. Hancox et al. (2004) assessed 1000 individuals born in Dunedin in 1972-73 at regular intervals up to age 26 years, examining childhood television viewing and its link to adverse health effects in adults, including smoking. Even after adjustment for potential confounding factors, average weeknight viewing between ages 5 and 15 years was associated with increased cigarette smoking. In 26-year-olds, 17% of smoking could be attributed to watching television for more than 2 hours a day during childhood and adolescence. Adjustment for parental smoking made no difference to this association, suggesting that television has an effect that is independent of family health practices (Hancox 2004). Although television advertising of tobacco was banned in New Zealand before study members were born, programmes have continued to show frequent images of smoking during children's viewing time (Thomson and Wilson 1998).

**Do Music Videos influence behaviour?**

Music plays an important role in teenagers’ identity, helps them portray an “image” to the outside world and contributes to satisfying their emotional needs. Studies have shown
that the majority of adolescents between 13 and 14 years of age engaged in musical activities such as instrumental tuition, and listened to music for an average of almost 3 hours per day (North, Hargreaves et al. 2000). Older adolescents listen to radio or watch television for an average of 40 hours per week. Most teenagers have access to channels that broadcast music videos and watch half an hour to 2 hours of music videos per day (Sun S-W 1986; Sun and Lull 1986).

The mass entertainment media has often been accused of promoting risky adolescent behaviour by depicting tobacco smoking, alcohol and substance abuse.

In an analysis of the survey carried out in USA described above, 30.9% reported having smoked cigarettes, 64.7% reported having drunk alcohol and 19% reported having smoked marijuana. Boys reported having engaged in more risky behaviours than girls. Overall, the study showed that adolescents who had engaged in more risky behaviours watched music videos and movies on television more frequently than those who had engaged in fewer risky behaviours (Klein 1993).

With special reference to music videos, a study showed that the illustration of music lyrics in music videos magnified their potential impact (Greenfield P 1988). In addition to that, music videos are self-augmenting; if a viewer hears a song after having seen it in a music video, they immediately remember the visual image in the video (Took KJ 1994).

Role modelling and imitation are important factors in shaping young people’s behaviour, and musicians are without doubt influential in this respect. The depiction of favourite artists or musicians undertaking risk behaviours has the potential for a negative impact on youth behaviour, and music videos are a potential medium for prominent depiction of risk behaviour. Durant et al. (1997) found that in music videos that portrayed smoking and alcohol use, the lead singer was twice as likely to be smoking and three times as likely to be drinking as a background singer or a musician.

**Previous studies of content in music videos**

To date, there has been little analysis of substance use in music videos. Two studies have specifically considered this issue. In an analysis of 518 music videos recorded from 5 different television networks, videos that portrayed smoking and alcohol appeared in as many as 25.7% and 26.9% of videos, respectively (Durant, Rome et al. 1997). A more recent content analysis found a similar prevalence of alcohol portrayal (30%), but a significantly lower prevalence of tobacco (10%) (Gruber, Thau et al. 2005).
The prevalence of tobacco, alcohol, or illicit substance use in music videos varied according to the genre of the artist. Rap and hip-hop music was found to contain significantly more substance use than other genres (Durant, Rome et al. 1997; Gruber, Thau et al. 2005). The Gruber et al. study found that 66% of all rap and hip-hop videos contained substance references, and alcohol and illicit substances were significantly more likely to occur in these videos compared with other genres. Smoking was significantly more likely in rap/hip-hop videos compared with others in those seen by Durant et al.
**METHOD**

**Sample**
During the period September 20 – October 2 2005, videotaped samples of broadcasts from two free-to-air broadcasters (C4 and TV2), and one subscriber channel (Juice) were obtained. Another subscriber channel, “J2”, was excluded from the sample as its viewers were not representative of the target audience in this study. On weekdays (Monday – Friday), videos were recorded from music channels “C4” and “Juice” for a continuous three-hour period commencing between 4:00pm and 8:30pm Monday – Friday. Weekend recordings from “C4” and “Juice” were for a continuous 3-hour period commencing between 9:00am and 2:00pm. Weekend recordings from “TV2” were taken between 10am-12pm, when programmes containing music videos were broadcast.

Recording times were chosen according to survey data indicating peak viewing times for adolescents. Young adolescents were defined as 8 - 17 year olds. This was based on the “Graham Strategic” survey of viewer number (Appendix 2).

**Data collection tool**
Prior to data collection, a form was created so that each video could be assessed accurately and simply. The form measured the occurrence of alcohol, cigarette and illicit drug content and was the tool used to quantify and qualify the presence of each of these parameters.

The form was tested on a pre-sample of 10 music videos in order to evaluate its ease-of-use and effectiveness. The form was then refined prior to use with the collected data sample.

**Content analysis**
Each recorded video-cassette was viewed by an individual assessor. Video clips on each tape were viewed sequentially and coded according to their content of tobacco, alcohol, or illicit substances.

**Quantitative**
It was necessary to use careful definitions of each parameter in order to encompass the broad range of situations in which they could appear, and to minimise inter-observer variation. The parameters were defined according to those used in a similar study by Gruber et. al.:
Parameters

- *Alcohol Present* – Any form of alcohol depicted, including containers used for alcohol e.g. empty wine glass;
- *Alcohol Consumed* – Alcohol not only present but also being consumed in some manner i.e. glass/bottle actually touching lips;
- *Alcohol Logo Present* – Any logo (i.e. pictures, words, or imprint on clothing or objects other than containers) seen even if alcohol or container not present;
- *Tobacco Present* – Some form of tobacco depicted including unlit cigarette behind ear, cigarette packet visible in a pocket, chewing tobacco, rolling papers, or ashtray with smouldering cigarette;
- *Tobacco Consumed or Used* – Tobacco not only present but also consumed in some manner;
- *Tobacco Logo Present* – Any logo (i.e. picture, words or imprint on clothing or objects other than tobacco packaging) seen, even if tobacco not present, including cigarette vending machine;
- *Other Illicit Substance Present* – Any other abusable substance present including household items e.g. glue, spray canisters, or any illicit drug (i.e. presence of syringe in hand, pills identifiable or not, or related paraphernalia);
- *Other Illicit Substances Abused/Consumed* – Any other substance not only present but also consumed in some manner.

Qualitative

**Tobacco/alcohol/illicit substance use coded by person**

Where tobacco, alcohol or illicit substances use was present in a video, it was coded as being used/consumed either by the main artist (i.e. lead singer/guitarist), or by a member of the background set.
Negative portrayal of tobacco/alcohol/illicit substances
Where tobacco or alcohol use was present, it was coded “Tone explicitly negative” if there was explicit reference to the negative consequences of tobacco or alcohol use, e.g. a drink-and-drive motor vehicle accident.

Prominence of tobacco/alcohol/illicit substance use
Where tobacco, alcohol or illicit substance use was present, it was coded as major or minor according to the prominence of these features:

- Major:
  1. Repeated presence of alcohol, cigarettes or illegal substances even if not depicted dangerously; e.g. set in a bar, items seen repeatedly, OR;
  2. Where alcohol was consumed irresponsibly, or in conjunction with dangerous behaviour, e.g. vomiting, obvious intoxication, excessive drinking in one sitting (‘skulling’), drinking while driving, OR;
  3. Cigarettes/alcohol a prominent feature, e.g. focus in on activity related to smoking/drinking (close up) like rolling a cigarette, pouring a drink, buying alcohol/cigarettes. This category was used if the main focus of the shot was to capture alcohol/cigarette/drug related behaviour.

- Minor:
  1. Any depiction of alcohol/cigarettes that does not classify as ‘major’, e.g. background person seen with a cigarette in their hand.

Genre, artist, and country of origin
Videos were coded according to artist, country of origin, and genre. “Country of Origin” referred to origin of the artist, rather than the company that produced the video. Following data collection, genre for each clip was coded using the categories: “Rock”, “Pop”, “R&B”, “Hip-Hop”, “Electronic”, or “Other”, using the online resource “Yahoo! Entertainment Directory” (http://dir.yahoo.com/Entertainment/Music/Artists/). Where this provided no information, “Google” (http://www.google.co.nz) was the alternative resource.

Country of origin was coded as “New Zealand” or “Other”. “Other” referred to any country other than New Zealand.
Ambiguous Videos
Videos that viewers found difficult to code were reviewed by all 11 group members. Parameters in these videos were coded according to group consensus.

Verbal references to alcohol, tobacco, and illicit substances
Lyrical references to tobacco, alcohol, and illicit substances were not coded. A previous attempt to code these parameters was abandoned after considerable inter-observer error was encountered. This error was largely due to heavy use of slang references and incomprehensible lyrics (Gruber et al.). In addition, as the current study was limited by a strict time period for content analysis it was decided to restrict the focus to visual references only.

Statistical analysis
Queries were written in Microsoft Access to find those music videos that contained visual references to tobacco and alcohol. The 3 main ‘classifications’ of each music video were also captured:

- Pay TV channel or Free-to-Air channel
- The genre of the music video – Pop, Rock, Hip-Hop, R&B, other.
- Whether the band featured was from New Zealand or overseas.

The queries were further modified to identify how many of the music videos with visual references to tobacco and alcohol had the following characteristics:

- Tobacco / alcohol consumed
- Tobacco / alcohol associated with the main artist
- Visual reference to tobacco / alcohol considered ‘Major’

The counts of each query output were captured on a Microsoft Excel spreadsheet. Each music video ‘classification’ was compared to see if there were statistically significant differences between them in the count and characteristics of their visual references to tobacco and alcohol. This comparison was made using ‘two-by-two’ tables on the website ‘openepi.com’:

- Where the count in any category was zero (0), the number 0.5 was placed in the two-by-two table, to enable valid comparisons to be made.
Where the rate ratio 95% confidence intervals did not include 1, these were considered to be significant findings.

**Kappa/Inter-observational error.** (Carpenter, 2005)

There were 40 music videos that had been captured twice in the music video database. These duplicates were compared to each other in order to provide a brief assessment of the concordance between observers of the music videos.

For tobacco references, the observed agreement was 95% - 45% beyond chance. This gave a Kappa score of 0.9 (almost perfect). For alcohol references, the observed agreement was 100%, giving a Kappa score of 1.0 (almost perfect).

The 40 duplicated videos comprised 14% of all the datasets captured, and just over 10% of all the music videos if they were only counted once from the dataset. This was deemed to be an adequate sample number for comparison of inter-observer error.
**RESULTS**

A total sample of 564 videos was coded, consisting of 297 individual videos, with the remaining 267 being ‘repeats’. 99 videos were coded more than once in the sample (refer Appendix 4).

There was visual representation of tobacco, alcohol, or illicit substances in 21% of the sample. Tobacco was present in 6% (34/564) of all the videos, with 4.4% (25/564) showing consumption of tobacco. Alcohol was present in 16.5% (93/564) of all videos, with 6.9% (39/564) showing consumption of alcohol. Illicit substances were present in less than 1% (4/564) of all videos, and with no consumption depicted.

![Bar chart showing percentage of videos containing risk behaviours](image)

*Figure 1* Percentage of videos containing any occurrence of tobacco, alcohol, or illicit substances.

When comparing television providers, overall risk-behaviours were seen equally on free-to-air and pay TV channels (refer Appendix 5).

When comparing with all other genres combined, the presence of any risk behaviour was significantly less likely in “pop” music videos, and significantly more likely in “hip-hop” videos (refer Appendix 6).

When comparing the nationality of the artists, New Zealand music videos were significantly less likely to contain any risk behaviours (Table 1 and Appendix 7).
Table 1 Occurrence of risk behaviours by TV provider, genre, and nationality of artist. Asterisks (*) indicate significant differences (p < 0.05).

Compared to alcohol, where tobacco was referenced in music videos, it was significantly more likely to be consumed (Table 2).

Table 2 Tobacco, alcohol, and illicit substances – present or used in videos. Tobacco was significantly more likely to be used when present in a video, compared with alcohol (RR 1.75, p < 0.05).

When comparing with all other genres combined, the presence of tobacco was significantly less likely in “pop” music videos, and significantly more likely in “hip-hop” videos (Figure 2).

In comparing tobacco portrayal between genres, R&B was significantly more likely to contain tobacco use rather than presence alone (Figure 2).
Figure 2. Tobacco Presence and Use in Music Videos Classified by Genre

Among videos classified as New Zealand, 45% were Hip Hop (50/111). This compared with 17% of the “Other” nationality sample (79/453).
Figure 3 Relative contribution of genre to the presence of tobacco and alcohol references in music videos. “Hip hop” videos accounted for 23% of the total sample but 41% of those videos containing tobacco references; “pop” videos accounted for 26% of the sample but 6% of those containing tobacco references.

**Tobacco References**

Comparing television providers, pay TV was 2.11 times more likely to show visual references to tobacco than free to air television.
Figure 4  Percentage of videos containing any tobacco reference, by TV provider. Pay TV contained 2.11 times more tobacco references than free to air television channels (p<0.05).

By genres, “Pop” was 0.18 times as likely to show tobacco references. ‘Hip-Hop” was 2.36 times more likely to show a visual reference to tobacco (refer Appendix 8).

‘Other’ music videos were 4 times more likely to contain a visual reference to tobacco than New Zealand music videos (Table 3 and Appendix 9). This result, however, fell short (just) of being statistically significant.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category (n)</th>
<th>Total videos</th>
<th>Any Visual Reference (n=34)</th>
<th>Rate Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV Provider</td>
<td>Free to air</td>
<td>283</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pay TV</td>
<td>281</td>
<td>23</td>
<td>2.11*</td>
<td>1.05-4.22</td>
</tr>
<tr>
<td>Genre (vs. all others combined)</td>
<td>Rock</td>
<td>187</td>
<td>9</td>
<td>0.73</td>
<td>0.35-1.52</td>
</tr>
<tr>
<td></td>
<td>Pop</td>
<td>148</td>
<td>2</td>
<td>0.18*</td>
<td>0.04-0.72</td>
</tr>
<tr>
<td></td>
<td>Hip-Hop</td>
<td>129</td>
<td>14</td>
<td>2.36*</td>
<td>1.23-4.54</td>
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<tr>
<td></td>
<td>R&amp;B</td>
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<td>6</td>
<td>1.91</td>
<td>0.82-4.41</td>
</tr>
<tr>
<td></td>
<td>Other (incl. Electronic)</td>
<td>43</td>
<td>3</td>
<td>1.73</td>
<td>0.37-3.68</td>
</tr>
<tr>
<td>Nationality of Artist</td>
<td>NZ</td>
<td>111</td>
<td>2</td>
<td>0.25</td>
<td>0.06-1.02</td>
</tr>
<tr>
<td></td>
<td>Other (USA/UK/Other)</td>
<td>453</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 Visual references to tobacco. Asterisks (*) indicate significant differences (p < 0.05).
**Tobacco presence, use, and logos**

Of the 34 videos containing any visual reference, 9 (26%) were coded as “present only”, and 25 (74%) were coded as “tobacco used” (Figure 5). Tobacco logos were present in 2 of the 34 videos (6%).

**Major references**

9 of the 34 videos (26%) that contained tobacco references were considered ‘major’.

**Tone explicitly negative**

5 of the 34 videos (15%) that contained tobacco were considered ‘explicitly negative’.

**Main character and background artists**

In the 34 videos containing tobacco references, 12 references (35%) involved the main artist, 21 (62%) involved background characters, and 6 videos (18%) involved both.

---

Figure 5: Presence of visual representations of alcohol and tobacco in music videos. Alcohol was present and used in 42% of videos containing alcohol. Tobacco was present and used in 74% of videos containing tobacco.

**Alcohol references**

There were no significant differences found between television providers and genres with respect to visual references to alcohol (refer Appendices 10 and 11).
New Zealand videos are half as likely to contain visual references to alcohol (refer Appendix 12).

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category (n)</th>
<th>Total videos</th>
<th>Any Visual Reference (n=93)</th>
<th>Rate Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
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<td>TV Provider</td>
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<td>283</td>
<td>49</td>
<td>0.90</td>
<td>0.62-1.31</td>
</tr>
<tr>
<td></td>
<td>Pay TV</td>
<td>281</td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genre</td>
<td>Rock</td>
<td>187</td>
<td>32</td>
<td>1.06</td>
<td>0.72-1.56</td>
</tr>
<tr>
<td></td>
<td>Pop</td>
<td>148</td>
<td>20</td>
<td>0.77</td>
<td>0.49-1.22</td>
</tr>
<tr>
<td></td>
<td>Hip-Hop</td>
<td>129</td>
<td>28</td>
<td>1.45</td>
<td>0.98-2.16</td>
</tr>
<tr>
<td></td>
<td>R&amp;B</td>
<td>57</td>
<td>7</td>
<td>0.72</td>
<td>0.35-1.49</td>
</tr>
<tr>
<td></td>
<td>Other (incl.</td>
<td>43</td>
<td>6</td>
<td>0.84</td>
<td>0.39-1.80</td>
</tr>
<tr>
<td></td>
<td>Electronic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nationality of Artist</td>
<td>NZ</td>
<td>111</td>
<td>10</td>
<td>0.49*</td>
<td>0.26-0.92</td>
</tr>
<tr>
<td></td>
<td>Other (USA/UK/Other)</td>
<td>453</td>
<td>83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 Visual references to alcohol. Asterisks (*) indicate significant differences (p < 0.05).

Alcohol presence, use, and logos

Of the 93 videos containing any visual reference, 54 (58%) were coded as “present only”, and 39 (42%) were coded as “alcohol used” (Figure 5). Alcohol logos were present in 5 of the 93 videos (5%).

Major references

33 of the 93 videos (35%) were considered “major”.

Tone explicitly negative

Two references (2%) to alcohol were considered ‘explicitly negative’.

Main character and background artists

In the 93 videos containing alcohol references, 38 references (41%) involved the main artist, 69 (74%) involved background characters, and 23 videos (25%) involved both.

Illicit Substances

The 4 music videos that referenced illicit substances were too few to support comparison.
**DISCUSSION**

Film and television have been identified as potent influences on adolescents' attitudes toward, and initiation of, substance use. Media increasingly normalise and glamorise the use of tobacco, alcohol, and illicit drugs. A 2002 Ministry of Health survey of Year 10 students found 15% of males and 21% of female students to be at least weekly smokers. Studies into youth perceptions of smoking have found that adolescents tended to grossly overestimate smoking prevalence among their peers and in the adult population. The frequent images of smoking encountered by youth in the media may be desensitizing adolescents to the negative effects of tobacco, fostering a culture of tolerance and uncritical acceptance of smoking, and thus counteracting health promotion efforts. Movie depictions of tobacco use have been found to be associated with higher receptivity to smoking. The association is dose-dependent that is, the risk of smoking initiation increases substantially with greater exposure to movie smoking. Adolescents with non-smoking parents were particularly susceptible to media influences.

A subset of recent studies have focussed on smoking, alcohol and illicit drug use in music videos. For decades argument has centred around the impact popular music can have on the attitudes of a generation. The presentation of songs as music videos is thought to magnify the impact of their lyrics. Music videos have been called 'self-augmenting'; when an individual hears a song, after having seen it in a music video, they immediately recall the visual image associated with it.

In our analysis of 564 music videos, approximately one in five contained visual references to tobacco, alcohol or illicit drugs. Alcohol was present in 17% of music videos, tobacco in 6% and illicit drugs in only 4 of the 564 videos. These figures are lower than those reported in overseas studies. Gruber et al identified these risk behaviours in 43% of music videos: alcohol in 35% and tobacco in 10%. At least some of this difference may be attributable to the inclusion of verbal references by these researchers.

The fact that almost 20% of the music videos watched were NZ music videos may be another factor. Only 10% of NZ videos contained risk behaviours, compared with 23% of videos from overseas. References to alcohol were twice as likely to be seen in an overseas music video than by videos from NZ bands. While there was no statistically significant difference found in smoking between NZ and overseas videos, smoking was seen in only 1.8% of NZ videos compared with 7% of overseas videos. It is probable
that a larger sample would find a difference, and that increasing the proportion of New Zealand made music videos on television would decrease exposure to all risk behaviours.

The finding by Gruber et al. that evidence of illicit substances was seen in 13% of music videos was not replicated in our study, which identified only 0.7%. However, Gruber did note that only ~1% of the videos in his study showed consumption of illicit substances; the majority of references were verbal, which were again excluded from our study.

Considering the actual consumption or use of a substance, 7% of videos showed alcohol consumption and 4% exhibited tobacco being smoked. Again, these figures are lower than previous studies conducted outside of New Zealand (Gruber et al.). When alcohol featured in music videos, its presence was considered major in more than a third of these. A similar figure was obtained for major references to tobacco.

Several studies have found that the portrayal of smoking in movies by stars admired by adolescents contributes to their uptake of smoking. The distinction between film and music videos is becoming less clear. Increasingly DVDs and CDs of movie soundtracks are being released, and music videos portray movie scenes. As this distinction is blurred, consideration needs to be given to the possibility of an increase in the portrayal of risk behaviours in music videos as they become more closely aligned to film. The smaller New Zealand film industry makes this a less probable outcome when considering New Zealand music videos. Music videos in which the lead singer or artist is involved in risk behaviours may have more influence on adolescents. Durant et al. (1997) reported that in implicated music videos the lead singer was twice as likely to be smoking and three times as likely to be drinking as the background singer or musician. In our study, 41% of the risky videos showed the main artist involved in the reference to alcohol, while the main character was implicated in 35% of tobacco references.

When comparing music videos played on free-to-air television and those on pay television, a similar proportion contained references to any risk behaviour (21.2% and 21.0% respectively). There were no statistical difference between the two television modes with respect to the presence of alcohol in their videos, however tobacco was twice as likely to appear in a music video on Juice TV than on TV2 or C4. These extra references to tobacco on pay television were generally made up by minor references and background cameos.
Investigation into the broadcasting standards of the various TV channels was not enlightening. All television channels that broadcast in New Zealand are subject to the Broadcasting Standards Act 1989. Under this act, the Broadcasting Standards Authority and Television broadcasters have agreed to codes of practice for free-to-air and pay television. Neither codes of practice make specific reference to the portrayal of smoking, nor the hours of viewing in which these portrayals may be made. The free-to-air Code of Practice requires ‘socially responsible’ liquor promotion. The Codes of Practice that apply to pay TV are less prescriptive than those of free-to-air TV.

The more relaxed Codes of Practice for pay TV may account for the significantly higher rates of tobacco portrayals in pay TV compared to free-to-air TV. While not statistically significant, pay TV also had higher rates of alcohol portrayals compared to free-to-air TV. If it were agreed that any exposure to risk-taking behaviour for adolescents was bad exposure, the Codes of Practice for free-to-air and pay TV could be adapted to eliminate portrayals of tobacco and alcohol in music videos during prime adolescent viewing hours.

Each TV production company has its own group of censors who are responsible for editing music videos for their respective TV stations. While there is collaboration between the censors at free-to-air TV companies (TV2 and C4 have a shared censor), Juice TV claims not to censor videos at all, but to merely abide by the Codes of Practice for Pay TV. The lack of communication between censors at pay TV and free-to-air TV may also be contributing to the differences in alcohol and tobacco portrayals. Censorship at a national level would ensure greater consistency between free to air and pay TV channels, although this approach may not ensure that the prevalence of risk-taking behaviours overall remains as low as it appears to be today.

The difference between genres of music video has been described before, and is replicated partially in our study. Gruber et al. found that substance use was significantly more likely in rap/hip-hop, while Durant et al. noted that rap music videos had the highest percentage of smoking behaviour. Of the videos in our sample, Hip-Hop music videos contained more references to risk behaviours than any other genre, followed by R&B and Rock music videos. Of note, Pop videos contained significantly fewer references to tobacco, alcohol and illicit drugs, and less than half as many risk behaviours as Hip-Hop. We can speculate that this may be because ‘Pop’ artists are more likely to be young, underage performers themselves. There were no differences between any of
the genres for the presence of alcohol, consistent with the findings of previous studies (Gruber et al.).

Every R&B video featuring tobacco showed it being used. The potential contribution of R&B videos to risky behaviour may be lessened, however, because of the relatively small proportion of R&B videos viewed overall (10% of the total).

The number of videos including the presence of a tobacco or alcohol logo was so small it could not be analysed, as was the number of music videos with an explicitly negative tone. Of interest is the fact that, while logos did not appear in the music videos, a large proportion of videos were part of sets sponsored by alcohol companies, for example ‘The Bacardi Hour’, and ‘The Jim Beam 120’. In one instance a presenter was observed drinking from a hip flask. Having an alcoholic beverage company sponsoring music programmes played during adolescent viewing hours negates screening videos with low prevalence of risk behaviours. Programme sponsorship and the role model status of presenters should be a key consideration when selecting viewing times.

Given the surprisingly high proportion of New Zealand music videos (111/564) represented in our sample, we were pleased to note the finding that NZ videos contain fewer references to risk behaviours than those from overseas. Thus it is sensible to have as much NZ music playing on our airwaves as possible. We have taken the opportunity to consider some of the reasons for this. First it is important to note that the Labour government of the last 6 years has made a significant increase to arts funding, both generally, and specifically to Creative NZ and the Arts Council, both of whom provide funding for local musicians. This increased funding has created greater opportunities within the music industry for local artists to perform and record their work. There has also been more funding put into NZ on Air to broadcast this music and we have seen a steady rise in the amount of airtime local musicians get on radio and TV over this period.

We have identified a number of potential influences that may explain why NZ videos contain fewer references to risk behaviours. One heartening factor relates to the culture surrounding music contests in New Zealand over the past decade. During this time ‘Smokefree’ has sponsored the annual high school music competition “Rockquest”, typically as the chief sponsor. Advertising material, but also young people themselves usually refer to the event as the “Smokefree Rockquest”. Many of New Zealand’s recording artists of today went through high school during this time, and were no doubt exposed to this event and to the non-smoking policies that a band must adhere to in
order to participate in the competition. Given that it is arguably New Zealand’s largest and most important youth music competition, the influence of such a sponsor at this key time in the development of many future recording artists may now be affecting the way in which risk behaviours and tobacco, in particular, are portrayed in NZ music and music videos.

Images of a risky behaviour are more potent when an individual identifies with the character or situation portrayed. Young people from suburban Auckland identified with the harsh ‘reality’ of characters in movies like ‘Trainspotting’, ‘Pulp Fiction’ and ‘Boys in the Hood’. Economic disadvantage, boredom and restlessness were themes they recognized; despite wide geographical and cultural gaps between the two cultures, the link lent credibility to both the images and to their own experiences. (McCool et al 2003)

The African American rap/hip-hop culture has been adopted as a role model for Māori and Pacific Island youth in parts of New Zealand. It is suggested that this style of music, with its African American protagonists, strikes a chord with the experience of life and the aspirations of many young Māori and Pacific Islanders. It would be preferable to satisfy this cultural need by replacing the vice-laden and typically American hip-hop music videos that we analysed in this study with their New Zealand counterparts.

Considering the high proportion of smoking and alcohol use portrayed in this genre and high rates of smoking among Māori adolescents, it is a positive move that the New Zealand hip-hop scene is growing and differentiating itself. Our observation that New Zealand videos typically contain fewer references to risk behaviours (and hip-hop in particular contained no references to tobacco) confirms that with increasing coverage and celebration New Zealand artists are now in a position to provide positive role models for their own young people. It is therefore advisable to advocate an increased percentage of New Zealand videos in the overall hip-hop genre played on TV in this country. The funding that would be required to achieve this would not only have the benefit of helping local musicians but would also assist health promotion by facilitating the reduction of exposure to risk behaviours among at risk youth in New Zealand. There is already a precedent for New Zealand hip-hop artists to use their image to promote health in the community, with Nesian Mystik recently throwing their weight behind the MeNZB immunisation campaign.

While New Zealand videos may contain fewer references to risk behaviours, further monitoring may be necessary in order to ensure current reference levels do not increase
over time. As identified earlier, a new, younger generation of Hip-Hop artists are emerging in New Zealand. Future studies may wish to investigate not only the prevalence of risk behaviours in past music videos compared with contemporary videos, but the trends in proportions of New Zealand music according to genre. Our findings with regard to low exposure to risk behaviour in New Zealand videos may well be less positive if future analysis shows trends towards increasing tobacco, alcohol and illicit substance references in New Zealand music videos.

We did not assess the sexual content of music videos as part of our study, but there was a striking degree of it about. Hyper-sexuality in the media is an issue in itself, but the interaction between alcohol, cigarettes and sexuality is also interesting and concerning. Young teenagers in the Australian study associated cigarettes with the stereotypical ‘sexy lady’ (McCool 2001). Durant et al. found that the use of alcohol was always associated with a high degree of sexuality in their sample. Sexuality in music videos, while often very overt, is difficult to measure, and is likely to be intimately enmeshed in the presentation and glamorization of the smoking and drinking image.

Overall, the amount of smoking in music videos on New Zealand television was lower than expected. The finding that 20% of music videos played were NZ videos was a positive one, especially since risk behaviours were less likely to be encountered in NZ videos compared to those made overseas. Alcohol was seen in almost 20% of music videos, and the fallout from this exposure may be a significant contributor to youth drinking culture. While the proportion of music videos that contained smoking was, pleasingly, lower than expected, one could take the viewpoint that any exposure is contributing to the acceptance and thus uptake of tobacco by young people.
**RECOMMENDATIONS**

It is possible to suggest a number of policy changes or strategies that could help to reduce the exposure of young adolescents to risk behaviours in music videos. This approach would require the support of music video production companies and/or the Television Broadcaster’s Council to implement.

- Adapting the Free-to-Air Television Code of Broadcasting Practice to limit the screening of videos containing references to tobacco, alcohol and illegal drugs on Free-to-Air television.

- Reviewing guidelines for television sponsorship. It was observed during our study that some music programmes actively promoted risk behaviours, such as “Jim Beam 120” and “The Bacardi Hour.” There was even one instance noted in which the presenter of the music video programme took a swig from a hip flask while announcing songs!

- Adapting the Standard and Advanced Codes of Broadcasting Practice for Pay Television to limit the screening of videos containing references to tobacco, alcohol and illegal drugs on subscriber television – this may be of more significance, as the prevalence of tobacco references on Pay TV was approximately twice that of Free-to-Air Television.

- Reducing the airing of music videos containing risk behaviours during peak young adolescent viewing hours.

- Developing and televising anti-smoking, anti-alcohol and anti-drug advertisements to be played during peak young adolescent viewing hours.

- Developing and televising warnings about the portrayal of risk behaviours in a proportion of programming – with specific reference to alcohol.

- “New Zealand on Air” funding protocols could be adapted so funding is preferentially allocated to those performers whose music videos do not feature tobacco, alcohol or illicit drugs.

- Increase the proportion of New Zealand music videos played on television, since they contain fewer risk behaviours than those from overseas (assuming current rates of risk behaviours remain static).
• Reduce the proportion of non-New Zealand Hip-Hop and R&B music videos played on television, as they have higher rates of references to tobacco and alcohol than other music genres (again, assuming that rates of reference to risk behaviours in New Zealand Hip-Hop and R&B stays constant).

• Implementation of media education at secondary school, to help ensure young adolescents are aware of the influence of media such as music videos, and their particular vulnerability to targeted product placement.
REFERENCES


**APPENDIX 1**

Censorship of Music Videos in New Zealand

*Censors Office*

The Office of Film and Literature Classification (The Censors’ Office) classifies films, videos and computer games that may need to be restricted or banned prior to public release. They can also ‘classify’ any other ‘publication’ that is submitted to them e.g. books, magazines, computer files.

The Censors’ Office has no jurisdiction over radio or television broadcasting. They do classify music videos if they are released on DVD for general purchase. Any such DVD’s are classified under Section 3 of the Films, Videos, and Publications Classifications Act 1993. There is no reference in this law to tobacco or alcohol use, although it does refer to the promotion or encouraging of criminal acts, and material from which harm may result if imitated.

Source: E-mail response to query with respect to censorship of music videos September 22, 2005: Information Unit: The Office of Film and Literature Classification.

*The Broadcasting Standards Authority*

In 1989, the Broadcasting Act was passed, making every broadcaster responsible for maintaining standards that are consistent with:

1. The observance of good taste and decency;
2. The Maintenance of Law and order;
3. The privacy of the individual;
4. The principle that when controversial issues of public importance are discussed, reasonable efforts are made, or reasonable opportunities are given, to present significant points of view, either in the same programme or in other programmes within the period of current interest.

The Act also established a Broadcasting Standards Authority – responsible for administering the standards regime.

Three codes of Broadcasting were developed, covering Free to Air, Pay television and Election Programmes.
The Television Broadcasters’ Council on behalf of TV One, TV2, TV3, C4, Prime, Māori Television and other free-to-air services prepared the Free-to-Air Television Code of Broadcasting Practice. Standard 2 of the Free to Air code of practice covers Law and Order, Standard 9 includes guidelines for the content of programming and promotional items during hours normally viewed by children (Under 14 years of age). Standard 11 requires socially responsible liquor promotion – the definition of which includes reference to the ‘advocacy’ of liquor consumption. This standard has replaced the old Promotion of Liquor Code, which was abolished in December 2004.

There is no specific reference to tobacco use in the Free-to-Air Television Code of Broadcasting Practice.

Due to a different relationship between subscribers and Pay television subscribers, two different codes for pay television were developed:

1. The Standard Code of Broadcasting Practice for Pay television, which applies to all subscription television broadcasting that does not meet the Advanced Code of Broadcasting Practice for Pay Television

2. The Advanced Code of Broadcasting Practice for Pay Television is applicable where subscribers can access programming through technological barriers that prevent access by children.

The Standard Code contains references to children, violence, programme classifications and the promotion of liquor. There is no reference in either code to tobacco use.

Source: Broadcasting Standards Authority Website: www.bsa.govt.nz

**Television New Zealand (TVNZ)**

TVNZ use the Free to Air Code of Broadcasting Practice as their main frame of reference in the editing of music videos. They also rely on Broadcasting Standards Authority rulings in the event that TVNZ have failed to give a satisfactory response to any viewer that makes a complaint.

TVNZ have four censors who examine music videos. They advise that censor cuts are not uncommon due to the fact they attract a younger audience, and that they are played when younger viewers are likely to be watching. Most cuts are to the lyrics for coarse language or graphic descriptions of sex and/or violence. ‘Sometimes’ the images are regarded as too adult.
TVNZ also advise that: “While we do not have any written procedures, there is regular discussion between the censor involved and the producer about how a particular music video is to be shown within the weekly "chart shows". A major difficulty is that, however explicit or downright unpleasant some of the lyrics may be, TVNZ can hardly ignore a musical item that is at No 1 on the Hit Parade! It has been known for a decision to be made just to play a short extract from the video rather than the whole thing.”

The Censors at TVNZ are in regular contact with the TV3 / C4 censors on the subject of music videos, and similar / identical edits are not uncommon. However, TVNZ advise that C4 play videos later into the night, and thus have more leeway in terms of video content.

Source: E-mail response to query with respect to censorship of music videos September 26 to October 1, 2005: D Edmunds, Television New Zealand.

*Juice TV*

Juice TV advised that they applied no internal policies or procedures to the editing of music videos and were thus reliant on the Standard Code of Broadcasting Practice for Pay television.

Source: E-mail communications with respect to censorship of music videos September 20, 2005: J Rook, Juice Television
APPENDIX 2

Viewing numbers

Free to Air

Graham Strategic, an advertising and communications agency was able to provide some data on adolescent viewing of some free to air music programmes. Adolescents were defined as being between the ages of 8 and 17.

<table>
<thead>
<tr>
<th>Programme</th>
<th>Viewing Information</th>
<th>Weeks measured</th>
<th>Average estimated audience aged 8 - 17 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coke Countdown</td>
<td>Sunday 10.00 am –</td>
<td>24</td>
<td>17,340</td>
</tr>
<tr>
<td></td>
<td>TV2</td>
<td></td>
<td></td>
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<td>Coke New Releases</td>
<td>Saturday 11.00 am</td>
<td>34</td>
<td>12,120</td>
</tr>
<tr>
<td></td>
<td>– TV2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Official New Zealand Top 40</td>
<td>Saturday 10.30am</td>
<td>31</td>
<td>10,170</td>
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<tr>
<td></td>
<td>– TV3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C4 - ESTIMATIONS</td>
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<td></td>
<td>6,000 – 6,500</td>
</tr>
</tbody>
</table>

C4 data sets were less meaningful for two reasons:

1. The programming was not constant from one week to the next – i.e. the audience would not be tuning in to watch a specific programme at a given time on a given evening;

2. Data had only recently started to be collected, and would not be comparable with the programmes listed above.

However, Graham Strategic were able to provide a graph demonstrating adolescent
viewing behaviour of C4 over the course of an evening:

Average Audience % = % of target audience (in this case, all 8-17 years old in NZ) who were potentially actually watching the programme of interest (based on the sample). The potential audience is approximated, giving a floating variable: ages 5-12 are set at 475,000, and ages 13-19 are set at 428,000. But ages 8-17 are weighted between the two groups, giving a fluctuating population from week to week.

It can be seen from this graph that in the case of C4, the most popular viewing times for 8 – 17 year olds lie between 3.30 pm and 11.00pm. 1% of target audience represents between 6,000 and 6,500 viewers. It was this information that encouraged us to try and record material from C4 and Juice between the hours of 3.00pm and 11.00pm each evening.

Source: Graham Strategic, e-mail communications, late September 2005

Graham Strategic does not capture Pay Television data. Direct requests from Juice Television have so far not been fruitful! Efforts to gain further information are ongoing. However, it is the belief of Graham Strategic that Juice TV is less likely to be accessed by adolescents in the home than C4, given that C4 is Free to Air.
**APPENDIX 3**

(coding tool on following page)

<table>
<thead>
<tr>
<th>Group F Data Entry Form</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Set:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Film:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Actor:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Scene:</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Influence of tobacco content</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco use explicitly</td>
<td></td>
</tr>
<tr>
<td>Tobacco use implicitly</td>
<td></td>
</tr>
<tr>
<td>Tobacco background</td>
<td></td>
</tr>
<tr>
<td>Tobacco present</td>
<td></td>
</tr>
<tr>
<td>Tobacco present</td>
<td></td>
</tr>
<tr>
<td>Tobacco present</td>
<td></td>
</tr>
<tr>
<td>Tobacco present</td>
<td></td>
</tr>
</tbody>
</table>

| Alcohol use explicitly |  |
| Alcohol use implicitly |  |
| Alcohol background |  |
| Alcohol present |  |
| Alcohol present |  |
| Alcohol present |  |
| Alcohol present |  |

| Illicit substances use explicitly |  |
| Illicit substances background |  |
| Illicit substances present |  |
| Illicit substances present |  |
| Illicit substances present |  |
| Illicit substances present |  |

---

*"smoke til your eyes get crazed..." - Snoop Dogg*
<table>
<thead>
<tr>
<th>Date:</th>
<th>Time slot:</th>
<th>Channel:</th>
<th>Show:</th>
<th>Genre:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOBACCO</strong></td>
<td><strong>ALCOHOL</strong></td>
<td><strong>ILLICIT SUBSTANCES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco Present</td>
<td>Alcohol Present</td>
<td>Illicit Substance Present</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco Used</td>
<td>Alcohol Used</td>
<td>Illicit Substance Used</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logo</td>
<td>Logo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main person</td>
<td>Main person</td>
<td>Main person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Background</td>
<td>Background</td>
<td>Background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tone Explicitly Negative?</td>
<td>Tone Explicitly Negative?</td>
<td>Tone Explicitly Negative?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minor / Major</td>
<td>Minor / Major</td>
<td>Minor / Major</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOBACCO**

<table>
<thead>
<tr>
<th>Date:</th>
<th>Time slot:</th>
<th>Channel:</th>
<th>Show:</th>
<th>Genre:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOBACCO</strong></td>
<td><strong>ALCOHOL</strong></td>
<td><strong>ILLICIT SUBSTANCES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco Present</td>
<td>Alcohol Present</td>
<td>Illicit Substance Present</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco Used</td>
<td>Alcohol Used</td>
<td>Illicit Substance Used</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logo</td>
<td>Logo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main person</td>
<td>Main person</td>
<td>Main person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Background</td>
<td>Background</td>
<td>Background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tone Explicitly Negative?</td>
<td>Tone Explicitly Negative?</td>
<td>Tone Explicitly Negative?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minor / Major</td>
<td>Minor / Major</td>
<td>Minor / Major</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 4

Frequency of Video Repeats

Number of Videos Repeated

Number of Times Video Repeated

APPENDIX 5

Total Risk Behaviours Appearing in Music Videos
Classified by TV Provider

TV Provider

Free to Air  Pay Tv
APPENDIX 6

Total Risk Behaviours Appearing in Music Videos
Classified by Genre

<table>
<thead>
<tr>
<th>Genre</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pop</td>
<td></td>
</tr>
<tr>
<td>Rock</td>
<td></td>
</tr>
<tr>
<td>Hip Hop</td>
<td></td>
</tr>
<tr>
<td>R and B</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

APPENDIX 7

Total Risk Behaviours Appearing in Music Videos
Classified by Country of Origin

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
**APPENDIX 8**

Tobacco presence in music videos classified by Genre

<table>
<thead>
<tr>
<th>Genre</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pop</td>
<td>2</td>
</tr>
<tr>
<td>Rock</td>
<td>4</td>
</tr>
<tr>
<td>Hip Hop</td>
<td>10</td>
</tr>
<tr>
<td>R and B</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
</tr>
</tbody>
</table>

**APPENDIX 9**

Tobacco Presence in music videos classified by Country of Origin

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
</tr>
</tbody>
</table>
**APPENDIX 10**

Alcohol Presence in Music videos classified by TV Provider

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Free to Air</th>
<th>Pay Tv</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>18</td>
<td>16</td>
</tr>
</tbody>
</table>

**APPENDIX 11**

Alcohol Presence in Music Videos Classified by Genre

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Pop</th>
<th>Rock</th>
<th>Hip Hop</th>
<th>R and B</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>15</td>
<td>10</td>
<td>20</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

Genre

- Pop
- Rock
- Hip Hop
- R and B
- Other
APPENDIX 12

Alcohol Presence in music videos classified by Country of Origin

APPENDIX 13

(Presentation poster follows on next page)
‘Smoke ‘til Your Eyes Get Cataracts’

(Snoop Dogg)

Smoking, Alcohol and Illicit Drugs in Music Videos

5th Year Medical Students Invite You to Attend a Public Health Presentation

10.30 a.m., 21 October 2005

Public Health Seminar Room

Level J WSB
APPENDIX 14

Transcript of presentation rap, as performed by B-Bizzel and Rizzel Nizzel.

B Bizzel get over here
Lets lay down a line on these fine folks

Alright then Rizzel Nizzel
Drop me a beat

-Beat-  (nick)

Public health, group F, 2 double o 5
Come the end of the year, struggling to survive
Bustin in with no fear
We’re playin it by ear
Prodded by Irene we built a bee-hive
To revive
An thrive
And dance the music vive

-Beat-  (ben)

The clients comin in
Lets begin, stop the din
Kiri from the council
Bouncing in to announce all
Of the smokefree peoples wishlist
Yo lets go we got the gist
Lets get movin real quick
Exams loomin we gotta sit
So the machine gets movin
Its well oiled and grovin
Searchin vids without a hitch

-beat- (nick)

So sit and start long-time listening
To our dreadful hip-hop lisping
Telling you how these vids are risky
with the pops stars getting frisky
and the rockers suckin whiskey
ha ha

okok
Welcome to our show- “Risky Behaviours”

Smokin a leaf from snoop dogs reef -We present
“Smoke till your eyes get cataracts”

Stay tuned this morning
Coming to you we got some crazy cats
Who gonna fuel realization
With some new info-mation

You better pay attention
Cos you don’t want me to mention
Whats gonna happen to you
F’you vacate your pew
So without further ado
Lets introduce the first members of our crew

Startin up and letting you know
Bout aims, kids and their videos
Lets hear you shout a hello to
The lovely glowin Zo
Oh yea!
Movin on damn we’re slick
Introducing the next trick
Another chic
We gotta pick Nic

That was Nic doddi (doddi)
Closing like the sphincter of oddi

Don’t go nowhere
Cos this next big bear
Is Hassan Al-Mazouq
the Arabian Duke

Now we got Manda
And I don’t wanna hear no slanda
Cos shes gonna tell us how she planned our meander

Slick and sly
Light and fly
Now we got Jude
Telling us about how we been too crude.

Now we gotta special show-stopper
Fo’ all you Hip-hoppers
This northside B-bopper
Got guns gonna shock ya
Give it up For Irene
Our groups real queen
Joining her in front of the screen
We’ve got mix master Thom
Who’s helping her drop this bomb
Tellin us about what we found out
The beauty of these graphs gotta be felt

Now callin up Kirsten
Cos we know she’s burstin
To quench all your thirstin
About conclusions we made
Fo’ this aint no charade

Now miss robin Lesta
Thinks she knows what is besta
But not gonna let it festa
Cos she got censors to pester.

And that’s our show
Platitudes and gratitudes
Now perhaps you can collude
To exude some questions for us to elude.