



“Start Small, Take it Easy”

*Results from the
ANKORS Harm Reduction Survey
at the 2013 Shambhala Music Festival*

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Executive Summary

February 2015

For many years ANKORS has provided harm reduction and pill and powder testing services at the Shambhala Music Festival, a large multi-day electronic music festival attended by over 12,000 people in a rural region of south-eastern British Columbia. ANKORS has a desire for continuous improvement and to better inform the development of best practices. As a result, we commissioned a survey to assess the use of the various components of our harm reduction programming at the 2013 festival. The survey aimed to answer a number of key questions about who uses our services, what services they use, what are the patterns of their use of alcohol, cannabis and other substances at the festival, and what gaps in services might exist.

We obtained 182 completed questionnaires from ANKORS service users—or “guests”—over a period of 5 days and nights during the festival. Our guests were mostly in their 20s and 30s, well educated, and called British Columbia and Alberta home. Almost half of our guests were festival first-timers although both festival first-timers and veterans used our services extensively. Pill and powder testing, which we describe in detail in this report, was our most popular service, and guests also used many other harm reduction services ANKORS and other providers offer at the festival.

Similar to what other research at recreational venues attended by young people shows, use of alcohol, cannabis and other substances was very prevalent. For a large majority, the use of multiple substances at the same time or within a short period of time was the norm. The other substances most commonly reported included ecstasy, ketamine, mushrooms, cocaine powder, LSD/Acid and a surprisingly wide variety of other illegal drugs and currently legal “research chemicals” and psychoactive herbs.

Our guests demonstrated a high level of awareness of practices for mitigating potentially negative consequences of their substances use and for maximizing the benefits of their festival experiences. The data show that the harm reduction messages ANKORS has been promoting over the years have been heard and incorporated into our guests’ festival plans. There is also evidence of how the values of caring and sharing are widely held and underpin prosocial behaviour and mutual responsibility.

With this report we want to share with you what we learned about our services and our service users, and what we learned about conducting a survey in the challenging environment of a large, multi-day music festival. We hope this document will share some interesting insights, engender optimism about the pragmatic and helpful ways that festival organizers, the community and festival participants have responded to substance use, provide some resources, and inspire others who may also be interested in developing harm reduction responses or surveys at music festivals in their areas.

Respectfully,

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Acknowledgements

A survey such as this one involves numerous people contributing in many different ways. We would like to extend our thanks to and acknowledge the generous contributions of:

- (alphabetically): Dr. Jane Buxton, *BC Centre for Disease Control*; Heather Cooke, *Interior Health Authority*; Dr. Trevor Corneil, *Interior Health Authority*; Dr. Christopher Richardson, *The University of British Columbia*; Dr. Eric Roth, *Centre for Addictions Research of BC*; Jeff Walsh, *Interior Health Authority*
- Interior Health Authority provided funds for professional data entry services for transcribing data from paper questionnaires to electronic format
- Our wonderful research assistants Alex Sherstobitoff, Jordan Mountaneer, Mary Ann Morris and Wren Crandall did an excellent job fielding the survey and collecting the data
- ANKORS staff: Alex Sherstobitoff, Chloe Sage, H. Kori Doty & Jordan Kiat
- All the participants who generously gave of their time to participate in the survey
- The enlightened organizers of the Shambhala Music Festival, especially Corrine Zawaduk, Jimmy Bundschuh and Stacey Lock, who walk their talk when it comes to setting policies and making services happen that help reduce harm and maximize benefits for guests, performers, staff and volunteers at the festival.

Abbreviations Used

df	Degrees of Freedom
EDM	Electronic Dance Music
HR	Harm Reduction
IHA	Interior Health Authority
IQR	Interquartile Range
PGoF	Pearson's Goodness of Fit test
PSU	Polysubstance Use
RA	Research Assistant / Interviewer
REB	Research Ethics Board
SD	Standard Deviation
SMF	Shambhala Music Festival
SPSU	Simultaneous Polysubstance Use
UBC	The University of British Columbia

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Copies of this report can be obtained from the authors and from information@ankors.bc.ca.

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Harm Reduction at Music Festivals

The association between the use of psychoactive substances and music festivals has been documented in popular culture since the mid-1960s countercultural revolution and the “hippie” youth movement. What started at events such as the “acid tests” organized by Ken Kesey and the “be-ins” in San Francisco, New York and West Coast areas developed further with the advent of electronic dance music (EDM) culture at raves and festivals in the United Kingdom, Europe and into North and South America.¹

From the early days of EDM, rave and festival organizers began to develop essential risk reduction services and messaging aimed at promoting responsible substance use and reducing potential for associated risks and harms. In 1992, the Netherlands took the lead in developing the Drug Information and Monitoring System (DIMS), which did pill and powder testing² and information provision. The pill and powder testing conducted was typically laboratory-quality purity testing using various chromatography techniques conducted both on-site at venues and in offsite laboratories.

In the next decade a number of organizations arose from within the EDM communities across Europe that followed the aims of and promoted harm reduction (HR) to party-goers, as well as providing pill and powder testing and other services at events. In 2001, the European Monitoring Centre for Drugs and Drug Addiction conducted a comprehensive [inventory of on-site pill-testing interventions in the European Union](#) available on the [EMCDDA](#) website that lists 13 projects.

In contrast to the pragmatic approach that European authorities took, in North America a much harsher, prohibition-oriented approach made it more difficult to provide similar harm reduction information and services at EDM events. Nevertheless, in the 2000s, a number of community organizations such as [DanceSafe](#), [TRIP! Project](#), MindBodyLove, Island Kids, [ANKORS](#), [Calgary PartySafe](#) and other groups formed and implemented harm reduction for party and festival-goers across North America.

The types of harm reduction provided for people who attend parties, raves, clubs and music festivals is aimed mostly at substance use, but also addresses sexual health and general health as well. Examples of the latter include providing condoms, lube, information about sexually transmitted infections and healthy sexuality, as well as information on hepatitis C and tattooing. Harm reduction around substance use ranges from information booths offering information cards and pamphlets about substances (including alcohol and tobacco) to the provision of safer injection and inhalation kits and reagent-based presence-oriented pill and powder testing. Some groups have also set up and run safe and healthy spaces at events for those feeling overwhelmed or too intoxicated.

¹ See comprehensive descriptions in the Wikipedia entries for [Hippie](#), [Electronic dance music](#), and [Rave](#).

² The term “pill and powder testing” describes the testing of pills (pressed tablets and capsules) and powders for psychoactive substances. This includes both reagent testing that detects mere presence, as well as laboratory-quality purity testing using chromatography techniques such as [High Performance Liquid Chromatography](#) (HPLC), [Thin Layer Chromatography](#) (TLC) and [Gas Chromatography/Mass Spectroscopy](#) (GC/MS).

Harm Reduction at the Shambhala Music Festival

The [Shambhala Music Festival \(SMF\)](#) is internationally recognised as a world class event and is one of the largest and longest-established electronic music festivals in Canada. The festival takes place over five days in early August each year on a farm in a valley in rural south-eastern British Columbia. Typical attendance ranges from 10,000 to 12,000 guests with a contingent of volunteers and paid staff exceeding 2,000 in number. The people who attend SMF can be characterized as a mostly sophisticated crowd. Those who use drugs in this group are looking for in-depth knowledge and are interested in harm reduction services.

Being in an altered state of mind is strongly associated with raves and music festivals, and the associated substance use is extremely difficult to prevent. Rather than turn a blind eye towards such substance use, the SMF organizers have consciously adopted a pragmatic harm reduction approach and have facilitated an array of services and policies to prevent and mitigate any associated harms as much as possible.

In order to reduce the rowdiness, violence and other problems associated with drunkenness that are common at many festivals, the SMF organizers have promoted it as an alcohol-free event. Festival attendees arriving by car must consent to a possible search of their vehicles and contents; such searches are frequent and all alcohol found is confiscated. Even so, a lot of alcohol is smuggled in and is widely used at the festival (see substance use results). While the official alcohol-free policy causes alcohol use to be discreet, it may also lead to alcohol-related problems occurring out of sight of support services.

Starting in 2001 and growing over the subsequent decade, the festival allied itself with a number of community-based organisations and groups and instituted new departments to bring a range of harm reduction services and supplies to the festival. See [Appendix 1](#) for a detailed timeline.

SMF organizers also focussed on addressing the impacts the festival had on local communities. An important change that was phased in from 2009 to 2011 was to implement a strict adults-only 19+ age restriction for festival participants.

Services available at the Shambhala Music Festival:

- **ANKORS Harm Reduction:** pill and powder testing, harm reduction supplies and information (see next page for details)
- **First Aid:** staffed by physicians, nurses and emergency medical technicians
- **Sanctuary:** safe and healthy space for those feeling overwhelmed due to substance use or psychological distress
- **Women's Space:** safe space for women only; providing counselling and support, offering safe sleeping space
- **Outreach Team:** outreach for Sanctuary/First Aid/ANKORS providing condoms, harm reduction information, and early detection for health or medical problems in campsite areas
- **Options for Sexual Health:** condoms

ANKORS Harm Reduction Activities at the Festival



Figure 1: The ANKORS tent with information table in the front and pill testing area in the back

The ANKORS Harm Reduction and Information Tent (the “ANKORS tent”) is prominently located in the central services area at the heart of the festival grounds, facing onto the main access road and adjacent to the large First Aid area.

The ANKORS tent is open approximately 12 or more hours each day of the festival and is run by ANKORS staff and a large group of dedicated volunteers who work in two or three shifts during operating hours.

People accessing ANKORS services are referred to as “guests” in this report.

Services ANKORS Provides at the Festival:

- Pill and powder testing ([Appendix 2](#)) for festival attendees and First Aid patients
- Non-judgemental “Party Safe” conversations with trained volunteers
- Condoms and lube
- Earplugs (by donation)
- Safer Smoking Kits
- Safer Injecting Kits
- DanceSafe drug-specific info cards
- Other harm reduction and sex-positive pamphlets and cards
- Large board for warnings about “bad trips” and descriptions of “bad pills”
- TripSit drug combination matrix on display ([Appendix 3](#))

Table 1: Number of ANKORS encounters and pill tests at SMF by year

Year	Encounters	Pill Tests
2002	<i>no data</i>	<i>no data</i>
2003	<i>no data</i>	221
2004	3,417	387
2005	2,815	558
2006	<i>no data</i>	<i>no data</i>
2007	3,994	832
2008	7,047	1,589
2009	5,078	1,389
2010	<i>no data</i>	914
2011	5,637	1,258
2012	5,357	1,686
2013	<i>no data</i>	2,254
2014	5,099	2,786

Survey Motivation

There has been a heightened interest in public health to look for best practices for harm reduction outreach and pill and powder testing at festivals. ANKORS has received numerous inquiries and requests in this regard and has also been asked to bring pill and powder testing and harm reduction information to other festivals in the East Kootenays.

For our own understanding and desire for continuous improvement, and to better inform the development of best practices drawn from our work, ANKORS wanted to assess the use of the various components of our harm reduction programming at the festival and get a better sense of how well they address the needs.

While the number of guest encounters at the ANKORS tent seems to have stabilized, the use of pill and powder testing continues to grow ([Table 1](#)). We wanted a survey to help inform the direction for evolving our services and the strategies we use to reduce harms related to substance use.

ANKORS has been particularly interested in the fact that in 2012 more pill disposal happened on-site at the ANKORS tent than in any previous year. We were wondering whether guests who disposed of unwanted substances at the festival were taking advantage of the protocol developed specifically for ANKORS to provide this service.

Our Research Questions

There was much discussion among ANKORS staff and members of our informal advisory group about what questions we should ask. We realized that for pragmatic reasons any survey we conducted needed to be short and quick to administer, thus we decided to focus on a carefully selected set of research questions that would best respond to the needs articulated above.

We wanted to follow established scientific practice to make our results acceptable and useful to public health, including obtaining formal ethics approval from the appropriate research ethics boards. This proved to be more involved than we initially anticipated.

Lessons Learned:

- Designing a good survey is hard. Get advice from experienced researchers.
- Questions are expensive in space and time; each one has to be indispensable.
- Getting ethics approval takes much longer than you expect—especially if more than one institution is involved.

We ended up focussing on the following 7 questions:

- **Who uses the harm reduction tent and our various services?**
- **What services are they using, and are they using them for themselves, for others, or both?**
- **Are first time festival-goers using our services, or are we attracting mostly festival veterans.**
- **Are our guests also using other harm reduction services at the festival?**
- **What kinds of substances are our guests using and is this different for first-timers compared to festival veterans?**
- **How do our guests keep themselves safe and healthy when using substances at the festival?**
- **What other health or harm reduction services would our guests like to see at the festival?**

As part of one author's (WM) PhD research, a comprehensive survey was conducted in 2009 at SMF to obtain detailed patterns of substance use. ANKORS was able to build on his work to conduct a follow-up survey in 2013 and to address the research questions above. We were also keen to see if patterns of substance use at SMF had changed in recent years, or if they had been relatively stable since 2009.

Some additional benefits that we saw could be realized from the survey include:

- The pill and powder testing disposal questions offered an opportunity to remind our guests that unwanted substances can be disposed of safely and confidentially on site at the ANKORS tent.
- The proportion of substances disposed of when the test result was not what the guest thought they had or perhaps wanted offers a metric for assessing the effectiveness of pill and powder testing as a tool to reduce harm.
- Open-ended questions on how festival attendees took care of their own health and safety might elucidate harm reduction practices that we may not have considered and which we could share with others. The question about what additional services may be desired could provide potentially helpful feedback on areas and services that we could add or improve upon.

Survey Methods

The survey was conducted as an additional phase in an existing program of research into polysubstance use (PSU)³ by one of the authors (WM) who had surveyed the festival in 2009. The research protocol was submitted to the Behavioural Research Ethics Boards (REBs) at The University of British Columbia (UBC) and the Interior Health Authority (IHA). The primary ethics approval was issued by UBC and formally accepted by IHA (see [Appendix 4](#)). Of note, in order to minimize barriers to participation, an REB-approved verbal consent process was used instead of obtaining signed consent forms.

The anonymous, interviewer-administered questionnaire consisted of a short, 6-page (single-sided) instrument ([Appendix 5](#)) with a cover letter for subjects to keep ([Appendix 6](#)). The cover letter described the study in more detail and included consent information, inclusion and exclusion criteria, and contact information for the research team and UBC Research Subject Information Line. Participants did not receive any remuneration for completing the survey.

Participants were recruited through convenience sampling around the ANKORS service tent and line-ups as the research site was not conducive to true random sampling. Persons who appeared to be intoxicated through their behavior, who verbally indicated they were intoxicated, or who displayed other signs of intoxication were excluded as potentially not competent to provide informed consent.



Figure 2: ANKORS pill and powder testing at the 2014 Shambhala Music Festival

Survey Administration

Surveying was conducted daily from Wednesday 7 August to Sunday 11 August 2013 during the hours that the ANKORS tent was open. Surveying activities would begin at 3pm when ANKORS opened and continued until approximately midnight; ANKORS would close around 3-4 am. The surveying hours were chosen from experience of previous years at the festival.

Typically there was a steady stream of traffic through the ANKORS tent from opening time at 3pm, and by midnight the proportion of people who were too intoxicated to pass the screening was a large enough concern to close surveying for the night. In general, participants responded very positively to the survey, and the lack of an honorarium or other concrete remuneration did not negatively impact recruitment.

³ The term polysubstance use refers to the use of more than one substance in a given time period.

Survey Team

The survey was administered by a team of four research assistants (**RAs**): three community volunteers and an ANKORS staff member who also coordinated activities at the research site. The RAs mostly worked in pairs or as a group over two shifts each evening. The survey team consisted of two female-identified and two male-identified RAs whose ages ranged from 20s to 50s. Field reports indicate that the diversity of the team was an asset in recruitment as their range of ages and physical presentation was consistent with the diversity of festival-goers.

Location and Physical Setup

[Figure 3](#) is a map of the festival site showing the central area where the services were located, with a star giving a rough indication of where the ANKORS tent was in this zone. The recruitment and screening took place in and around the line-ups and service area of the ANKORS tent; the interviews took place in a dedicated private area behind the ANKORS tent.

Recruitment

The ANKORS area was very busy with long line-ups. Many people accessed ANKORS services multiple times, with some people accessing services there each day. In many cases a group of people were waiting in line of which only one or two intended to use the services themselves at that time, but of which many had accessed ANKORS services previously during the festival. The group would be intentionally staying together and would be reluctant to separate or disperse in order for one or two of them to do the survey.

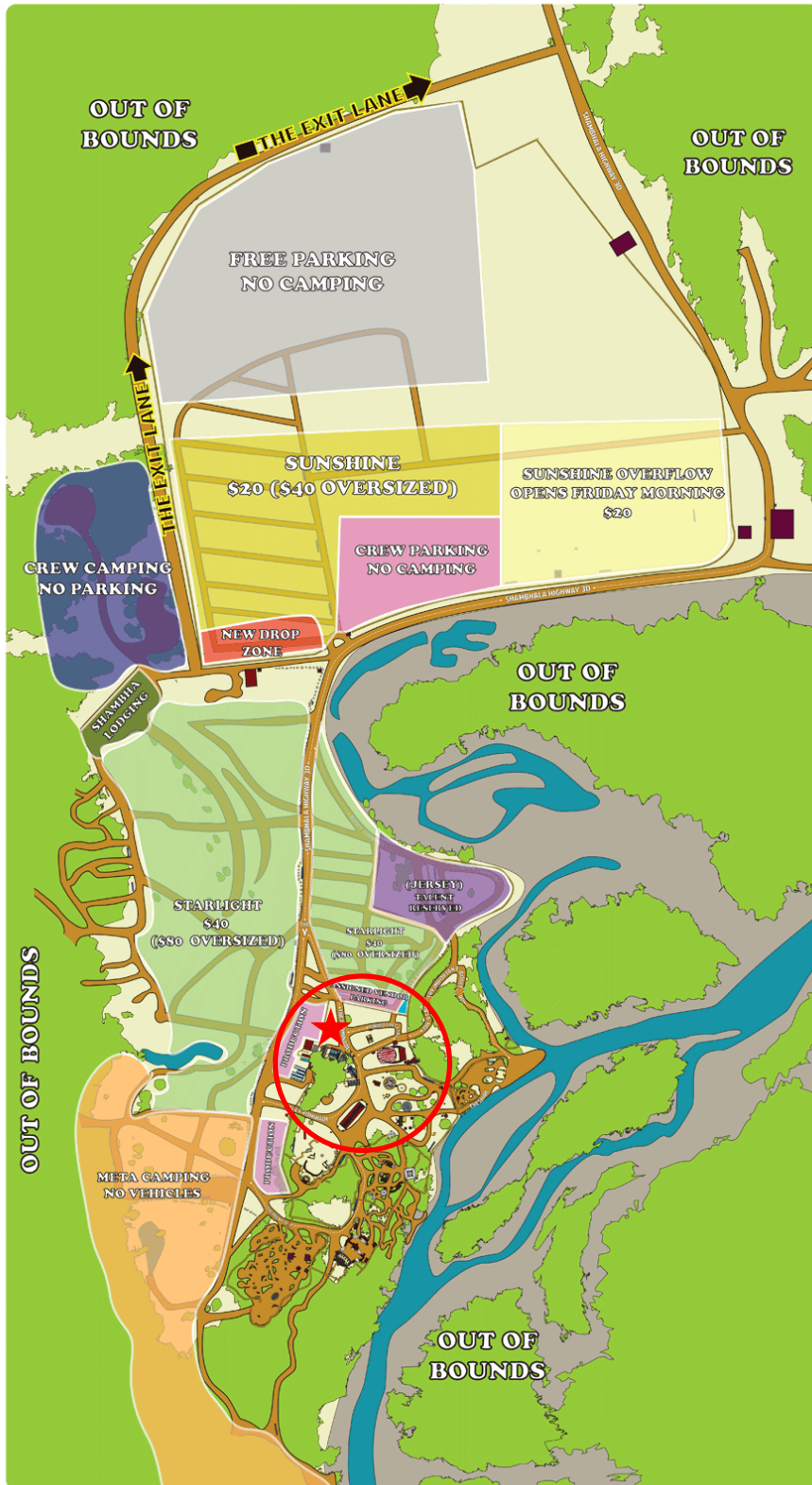
There was a keen general interest in participating in the survey, contributing to research and potentially helping improve safety and services at the festival. One RA reported that people seemed to respond well to the “professional but fun too” manner of the survey team and were also interested in their work and involvement in research outside the festival.

RAs reported that it worked well to be doing the surveying in the ANKORS area when issues came up that people needed further help with. The RAs were often asked questions about harm reduction and were also able to refer people to the Sanctuary and to specific staff or services at ANKORS.

Lessons Learned:

- Having a **verbal consent process** that did not require recording a name or getting a signature on a paper form removed a major barrier to participation.
- People get concerned about participating in a survey on potentially illegal activity if they have to give their name.
- Verbal consent greatly simplified recruitment logistics in a challenging environment.

Figure 3: Map of the Shambhala Music Festival site



The red circle marks the Centre Camp area.

The red star marks the approximate location of the ANKORS Harm Reduction Tent.

Logistical Notes for Next Time

There were not enough water stations for festival-goers in general and no bottled water available on site. Some RAs were well-prepared due to prior knowledge of the environment, but others were not. RAs recommended that next time ANKORS should bring 18 gallon containers with pump dispensers to provide on-premises water for ANKORS personnel, and include water bottles/personal containers on the list of gear for personnel to bring.

The line-ups for SMF volunteer/staff meals were so long that RAs could not access the meal service as the time involved interfered with surveying activities. According to SMF policy, meal ticket eligibility was one meal per 8-hour work shift so one 5-hour survey shift per day was not enough to qualify for a staff meal. RAs thus ended up providing their own food for on-duty meals. An option for future surveys would be to provide RAs with a meal allowance (one per shift) to spend at the nearby food vendors—approximately \$12 per meal would be sufficient.

Effective surveying requires a high level of attention, concentration, diligence and social energy. Five hours was an appropriate shift length, especially given the noisy and crowded environment. Longer shifts would likely lead to excessive fatigue and reduced effectiveness of RAs, both near the end of each shift and cumulatively over successive days of surveying.

Only one RA received any training in advance of the festival, which she shared in brief with some of the other RAs. The absence of a formal training of the whole team led to problems with consistent recording of refusals and those screened out as ineligible. Nevertheless the RAs as a team did a remarkably effective and high quality job under the circumstances. In any case, the logistical challenges and the team's adaptations to them by role specialisation had not been anticipated, and the team's on-the-spot response was very effective. For the future we should ensure that every RA has formal training, ideally before arriving on the festival site, and we could include training on role specialisation, handling potential safety issues and other lessons learned from the 2013 survey.

Lessons Learned:

- For future surveys we might want to add more research assistants to the team because having only 4 was the key limiting factor in how many questionnaires we completed.
- It takes about 30 minutes overall to recruit and screen a participant and complete a 6-page questionnaire.
- Surveying is exhausting when done well. Five hours is the maximum time you can ask an interviewer to work in a shift and remain effective. They will need at least one break in a shift.
- One person can do a maximum of about 8 or 9 surveys effectively during a five-hour shift.
- Consider dedicating people to do only recruiting, screening and escorting participants to the space where dedicated interviewers will administer questionnaires.

Survey Results and Discussion

Responses

Over the 5 days of surveying, **182 questionnaires were collected** (Figure 4). Collection rates were steady across the times of day in the survey period (Figure 5). About twice as many questionnaires were completed during the 7pm hour, which was when all the RAs were working simultaneously. This strongly suggests that the number of completed questionnaires was constrained primarily by the number of RAs available rather than by limited interest among guests.

Figure 4: Count of questionnaires by survey day in 2013

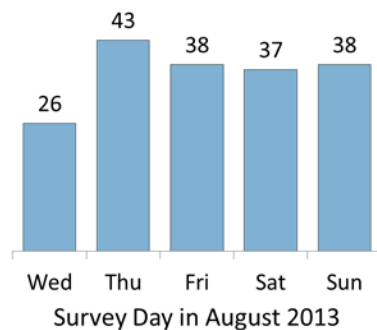
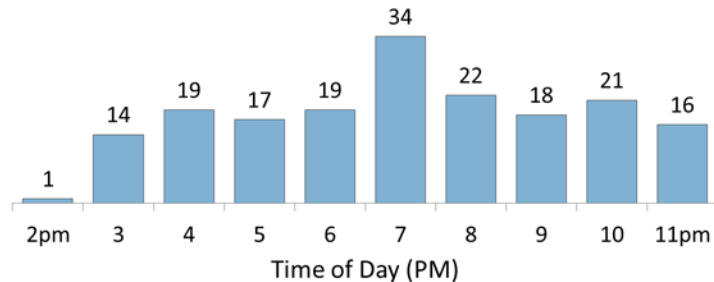


Figure 5: Count of questionnaires by hour of survey day (PM)



The response rate was problematic to determine due to the way recruitment was conducted in the line-ups for ANKORS services. RAs tracked refusals comprising the numerator of a response rate, but the denominator could not be established with confidence because screening people in the crowded line-up area of the ANKORS tent unavoidably involved numerous people listening in on the screening presentation.

Overall, a low number of refusals were recorded and these were primarily related to timing. RAs reported that most of the people who were interested but declined to immediately participate did return later to complete a questionnaire.

Lessons Learned

- Significant challenges exist for calculating an accurate response rate in crowded recruitment environments.
- For a survey aiming to gain insight into service usage and needs rather than generalise to a larger population, calculating a conventional response rate matters less than obtaining a large number of accurately completed questionnaires and observing a high level of interest in participation.

Demographics of Participants

[Table 2](#) lists key demographics for our sample of survey participants. Festival-goers tend to be younger in age although a wide age range is in attendance. Average age of survey participants was 25.4 years (median=24 years, interquartile range [IQR]=21-27 years, range=19-58 years). The festival limits attendance strictly to adults aged 19 years and older, which also facilitated obtaining Research Ethics Board permission for a verbal-only consent process.

The majority of participants (69.2%) had more than a high school education, with only 4 participants (2.2%) not having completed high school.

Almost three-quarters of the sample were from Alberta and British Columbia, with a small contingent from outside of Canada—mostly from USA (n=13) and Europe.

The sample has more male-identified (58.8%) than female-identified (41.2%) participants, which is consistent with anecdotal reports by RAs of their impressions of a slightly male-dominated crowd in attendance. No-one chose either the 'Transgender' or 'Intersex' response options offered.

Table 2: Demographics of survey participants

Demographic (N=182)		Count	%
Gender	Female	75	41.2
	Male	107	58.8
Age Group	19 – 21	46	25.3
	22 – 24	49	26.9
	25 – 27	42	23.1
	28 and older	45	24.7
Education	High school or less	56	30.8
	Doing undergrad.	54	29.7
	Completed undergrad.	61	33.5
	Graduate	9	4.9
	Other	2	1.1
Home	British Columbia	65	35.7
	Alberta	67	36.8
	Rest of Canada	31	17.0
	Outside Canada	19	10.4

Using a Pearson's Chi-square goodness-of-fit test (**PGoF**) to compare the gender distribution observed in the sample against a theoretical population with equal numbers of females and males, the sample is different at a 95% confidence level ($X^2=5.63$, Degrees of Freedom [**df**]=1, $p=0.01$) suggesting the gender disparity in the sample is real.

ANKORS staff has wondered whether the slight predominance of male guests resulted from differential usage of their services. Comparing the gender distribution of this sample against the sample from the 2009 survey as a reference, the PGoF shows no significant difference ($X^2=0.21$, $df=1$, $p=0.65$).⁴ Considering that the 2009 survey was a general sample of the broader population of festival attendees, these results suggest that it is not unreasonable to regard the gender makeup of our sample of ANKORS

⁴ Making no distributional assumptions about the underlying population and comparing the 2009 and 2013 samples using PGoF, we obtain $X^2=0.14$, $df=1$, $p=0.71$ and similarly conclude the two samples are likely from the same underlying population.

guests as consistent with the general gender distribution among festival attendees. This further suggests there is **likely not a substantially different overall use of ANKORS services by gender.**

The majority of participants in the sample (72.5%) identified as ‘Heterosexual/Straight’, with 14.3% identifying as ‘Bisexual’. Except for n=2 who chose ‘Prefer not to disclose’, the remainder of participants (12.1%) identified as ‘Queer’ (n=1), ‘Homosexual/Gay or Lesbian’ (n=8), ‘Unsure/Questioning’ (n=8) or “Pansexual” (n=5). “Pansexual” was not a response option printed on the questionnaire, but was written in by participants and obtained more responses than ‘Queer’. This speaks for the inclusion of a pansexual response option in questions about sexual orientation in future surveys with this population. Again, comparing this sample against the 2009 sample and assuming they were both drawn from the same underlying population, we find no significant difference in sexual orientation between the samples at the 95% confidence level ($\chi^2=5.94$, $df=4$, $p=0.08$).

In terms of festival experience, slightly less than half the sample (n=84, 46.2%) indicated this was their first time at the festival, and it is gratifying to see that ANKORS services are known to and used by first-timers. Among 98 participants who had been to the festival previously, 71.4% of veterans had used ANKORS services previously to the visit in which they were surveyed, which speaks to the perceived ongoing attraction and utility of ANKORS services at the festival.

- ✓ **Survey participants had to have used ANKORS services to be eligible, and almost half of them were festival first-timers.**
- ✓ **Over 70% of festival veterans were repeat visitors to ANKORS.**

Festival veterans reported attending between 2 and 12 SMFs, with an average of 3.6 festivals (standard deviation [SD]=2.0) and median of 3 SMFs, including the one at which they were surveyed. Festival veterans had made between 1 and 52 visits to ANKORS (median=2), with an average of 3.5 visits (SD=5.5), including the visit at which they were surveyed.

Use of ANKORS Pill and Powder Testing

Pill and powder testing is the main harm reduction service provided by ANKORS at the festival. It is extremely popular among festival attendees and becoming more regularly used by First Aid for testing of samples obtained from their patients. The nature of the testing is rudimentary in that it provides presence testing for a range of substances, but is not able to quantify dosages or purity of the samples provided. See [Appendix 2](#) for details of the reagents and testing methods used.

In many European settings, fully quantitative testing using various laboratory quality chromatographic methods is available from publicly funded fixed and mobile laboratories—the latter being stationed at large party and festival venues. Results are posted onsite and online along with photographs of pills as a public service—**ANKORS strongly advocates for making quantitative testing of psychoactive substances available here** too. (See Wikipedia articles on [HPLC](#), [TLC](#) and [gas chromatography](#) for more information.)

Pill and powder testing was the ANKORS service most widely used by survey participants, with 81% reporting ever having used it and 77% having used it at this year’s festival ([Figure 6](#)).

Figure 6: Proportion (%) of participants reporting use of various ANKORS services

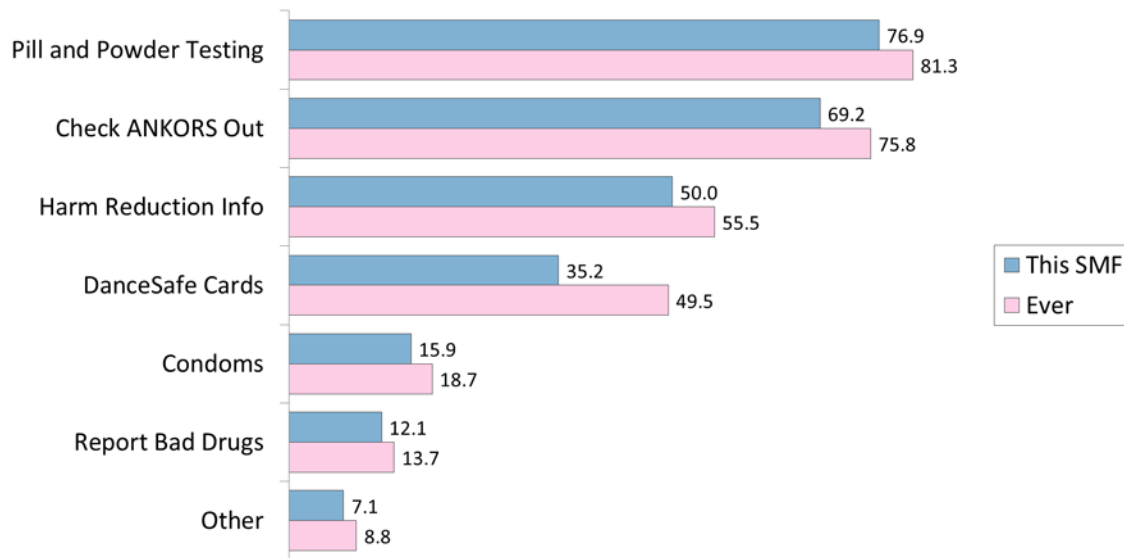
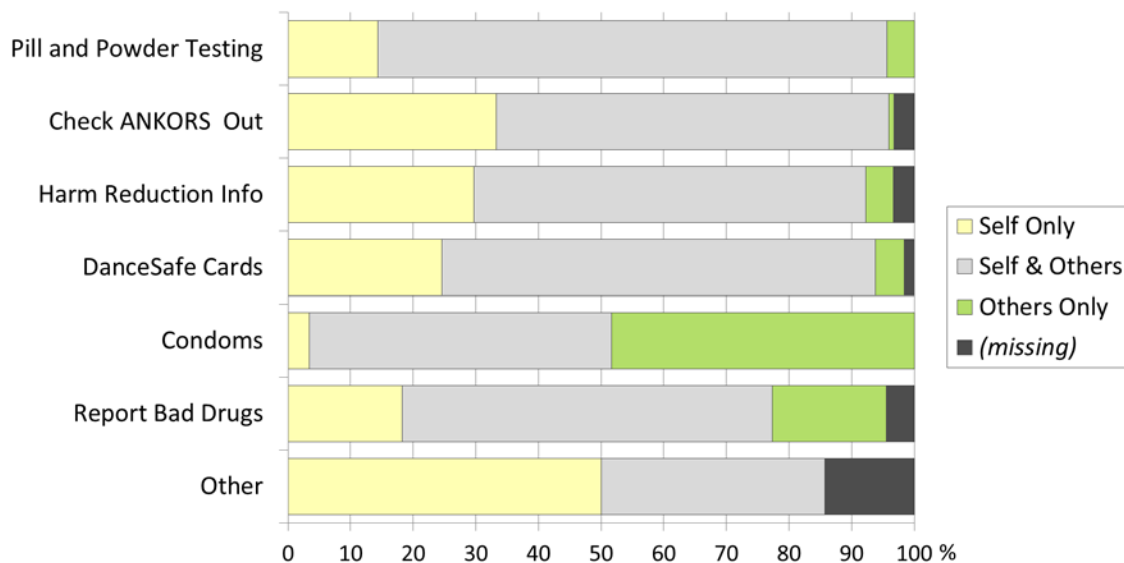


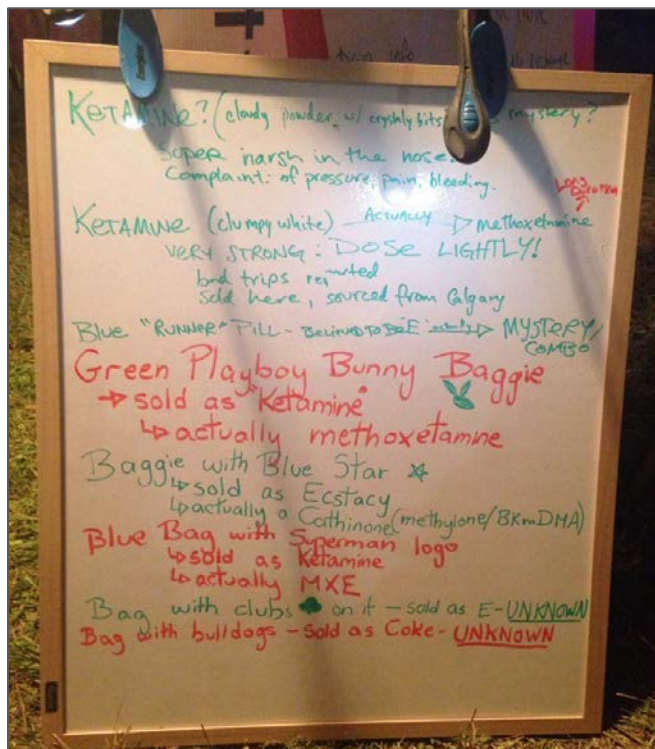
Figure 7: Proportion (%) of beneficiaries for participants using ANKORS services



As [Figure 7](#) shows, only 14.3% of people who used pill and powder testing reported using it for ‘self only’, which underlines the linkage between personal harm reduction practices and being part of a

community where “unity”⁵ is a major social value and “take care of yourself, take care of each other” is a widely promoted message. The figure shows further how this *caring-for-each-other* value appears in results for use of most of the other services ANKORS provides and speaks to how ANKORS’ reach extends beyond just the people coming to the ANKORS tent.

Figure 8: Information board displayed at ANKORS tent



The board shown to the left in [Figure 8](#) displays harm reduction information about results from reagent tests on substances brought in by guests or First Aid.

ANKORS uses this board to disseminate notable results—particularly those indicating presence of potentially more harmful substances.

The board is used by guests, Security, First Aid, Outreach and the Sanctuary to keep up to date with what is going around, and information from this board is posted on blogs, Facebook pages and Twitter feeds.

Disposal of Unwanted Substances

Survey participants who used ANKORS pill and powder testing were asked what substance they were hoping the test would reveal to be present or absent—up to two write-in spaces were provided for responses.

Responses were overwhelming for the presence of MDMA, ecstasy or ecstasy-like substances alone or in combination with other substances including LSD/Acid, ketamine and cocaine. Responses regarding absence

In 2013, 670 of the 2,254 samples that were tested were positive for a substance not anticipated or were negative for all testable substances.

⁵ While it may seem clichéd to outsiders, the values of PLUR—peace, love, unity & respect—are still highly valued and deeply enculturated among people who attend electronic music festivals and participate in the “dance scene”.

focused mainly on substances known to be risky, harmful or undesirable, such as PMA, PMMA, heroin, speed and crystal meth.

Quantitative results are not presented for the presence/absence responses due to the inherent ambiguity of framing such a question. Two people with the same aim of discovering if their pill contains MDMA may see the question as either hoping to find presence of MDMA, or hoping not to find absence of MDMA.

A more interesting question was what people would do with their substance given the test result they got. The way the question was asked turned out to be a little ambiguous, which might have been uncovered had we had enough time to pilot the questionnaire in advance.

In [Figure 9](#) we look only at the 42 responses *other* than ‘Take it, or keep it for later’ (n=107, 71.8%)—the latter assumed to follow from having received an agreeable test result. [Figure 10](#) shows where those who answered ‘Get rid of it’ would dispose of the substance—these responses may be skewed a bit towards ANKORS, possibly due to social desirability bias, or because guests were at the ANKORS tent when they were surveyed.

Nevertheless the large proportion choosing ANKORS as their preferred disposal location does validate the value of the protocol that ANKORS has developed in conjunction with festival security and the RCMP to handle these disposals appropriately. It also underlines the idea that **a place for safe disposal of unwanted substances would be an excellent service for other festivals to provide.**

Lessons Learned:

- Pretest your questionnaire!
- Every question must count.
- Potentially ambiguous wording—or potentially ambiguous meaning arising from how questions flow in sequence—can make responses at best less useful and at worst meaningless.
- Seriously! Ensure you pretest your questionnaire.

Figure 9: Proportion (%) of actions taken when pill and powder testing result was not as desired

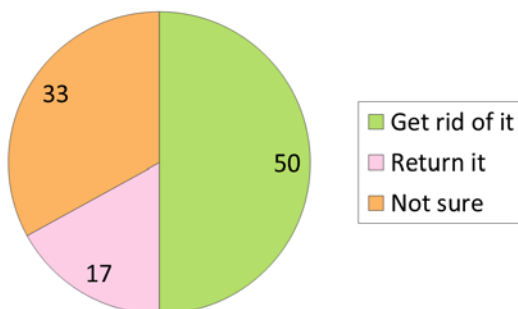
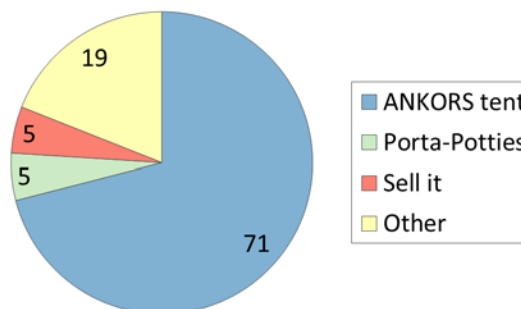


Figure 10: Proportion (%) choosing each disposal option when action is to get rid of substance



Use of Other ANKORS Harm Reduction Services

As listed earlier in this report, ANKORS provides a range of harm reduction information and services to festival attendees. [Figure 6](#) shows the proportion of survey participants reporting ever having used some of ANKORS services and having used these services at this SMF. Not all the services queried are shown in the figure, as described below.

Only one participant reported ever having obtained an injection kit and not at this SMF, which is consistent with the almost non-existent use of injecting as a mode of administration reported in the 2009 survey. Three participants reported ever having obtained a safer smoking kit and none reported doing so for this SMF. While about one in seven participants (12.7%) indicated they had reported “bad drugs” to ANKORS, with 12.1% having done so at this SMF, less than 3% had ever reported a “bad trip” to ANKORS, perhaps because the Sanctuary would be seen as a more appropriate place to report this.

“Because I trust you guys!”

- female, 26, AB

Several descriptions given in the ‘Other’ category described wanting to volunteer for ANKORS, wanting to learn more about working in the harm reduction field, or to open a harm reduction site in the participant’s area. Other reasons given were to visit friends, for earplugs, and for “lady products”.

A question of specific interest was whether festival first-timers were using the harm reduction services, or whether they were mainly being used by festival veterans. Fortunately we have already found that festival first-timers make up nearly half the survey sample (n=84, 46.4%) so it is feasible to test this question statistically. There are four ANKORS services that are reported used at this SMF frequently enough by survey participants that we can ask this question of them; they are: pill and powder testing, checking the ANKORS tent out, harm reduction info and DanceSafe drug info cards.

For each test we conduct a Fisher’s Exact Test for independence between the two factors of having used the service (or not) at this SMF and being a festival first-timer (or veteran) to see if there is an association between them. Essentially we test the hypothesis that there is no association between the factors; i.e., knowing the value of one factor does not help predict the value of the other.

If the test returns a probability (or p-value) of less than 0.05 then we say the two factors appear to somehow be related at the 95% confidence level.⁶ Since we are interested in whether first-timers make *less* use of ANKORS services than veterans, we are conducting a stricter one-sided test; i.e., testing that being a first-timer is not associated with *less* use of a service.

⁶ For the statistically curious, $p=0.05$ is equivalent to 5%, thus the confidence level of $1-p$ is 95%. Also, in a statistically more rigorous sense, we are rejecting the null hypothesis that the two factors are independent (or have no relationship). Double-negatives are less pleasant to read hence more colloquial phrasing is used above.

Table 3 shows that, for each service, the percentage of participants using it is very similar regardless of first-timer status, with festival first-timers perhaps being *more* inclined than veterans to check the ANKORS tent out or take DanceSafe drug info cards. It is thus not surprising that the statistical tests of independence return non-significant p-values greater than 0.05, therefore we can be confident at the 95% level that **there does not seem to be a difference in use of the four main ANKORS services at this SMF when comparing festival first-timers with festival veterans.**

Table 3: Test whether festival first-timers make less use of key ANKORS services than festival veterans

ANKORS Service	Festival First-Timers Using Service (N=84)		Festival Veterans Using Service (N=98)		One-sided p-Value †
	n	% *	n	% *	
Pill and Powder Testing	64	76 %	76	78 %	0.65
Checking the ANKORS Tent Out	56	71 %	70	67 %	0.80
Harm Reduction Info	42	50 %	49	50 %	0.56
DanceSafe Drug Info Cards	29	48 %	35 ‡	36 %	0.65

* Percent is for service usage within first-timer/veteran status; column header shows total N for status group.

† Fisher’s Exact Test that first-timers make *less* use of ANKORS services than festival veterans.

‡ One festival veteran had no response recorded for use of DanceSafe Drug Info Cards.

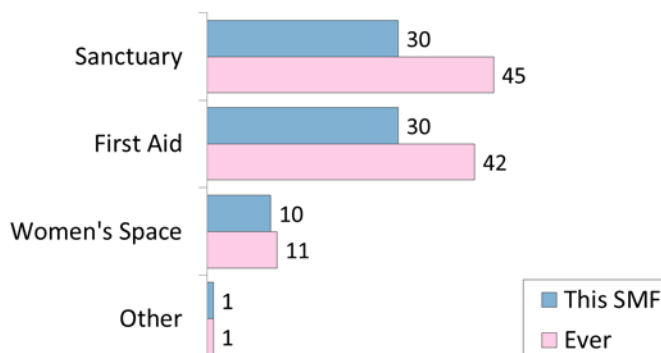
Use of Other Harm Reduction Services at the Festival

Participants were asked about their use of harm reduction services at the festival other than those provided by ANKORS.

Around a third (n=62, 34.1%) indicated they had used non-ANKORS services, and Figure 11 shows the breakdown of counts by the services listed.

Only one participant mentioned using an ‘Other’ service, which was described as “Outreach”.

Figure 11: Counts of use of other (non-ANKORS) harm reduction services



Substance Use Anytime at the Festival

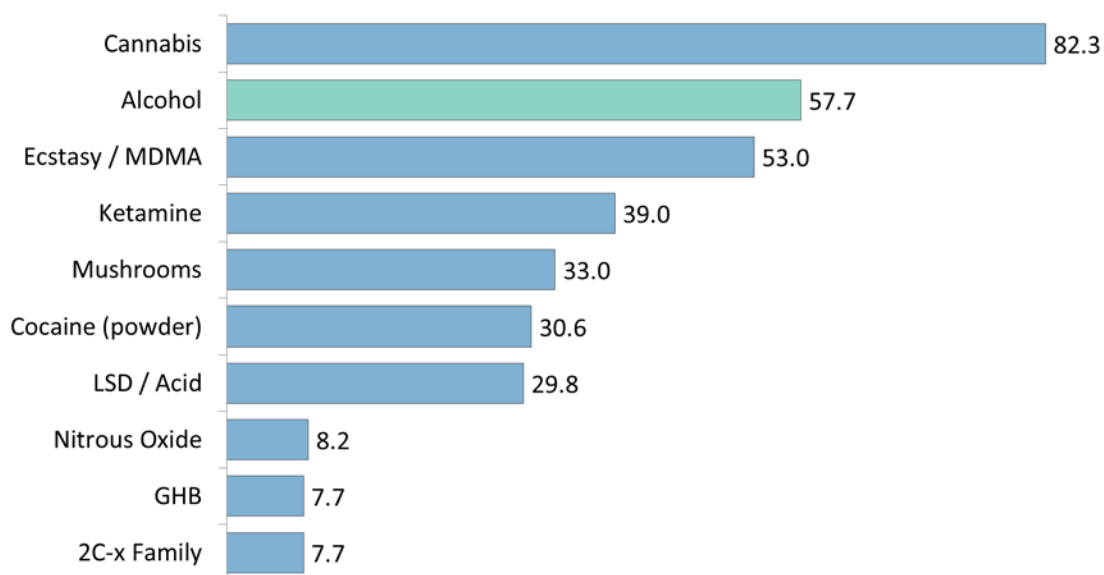
Participants were asked about use of alcohol, tobacco, cannabis, and 26 other named substances over time periods of ever, in the 12 months before the festival, anytime at the festival and in the past 24 hours (see questionnaire pages in [Appendix 5](#)). Substances were listed in alphabetical order to avoid any unintended priming. Space was provided at the end of the list for recording use of up to three additional substances. For cannabis, use of marijuana and hash/oil was asked separately, but are reported together here. The use of Dexedrine® was asked separately from use of amphetamines/speed and was analyzed separately too.

In order to minimize potential for recall bias and to focus on a plausible period when physiological interaction was most likely to occur, substance use at the festival and usage during the last 24 hours prior to interview are used respectively to report overall usage patterns and polysubstance use.

[Figure 12](#) shows a list of the substances most commonly reported used at the festival with a prevalence of 5.0% or more. **Cannabis use is ubiquitous** and both marijuana and hash products were widely used. Interestingly, **alcohol use is highly prevalent** despite SMF’s alcohol-free policy and random searches of vehicles at the festival gate to prevent alcohol being brought onsite.

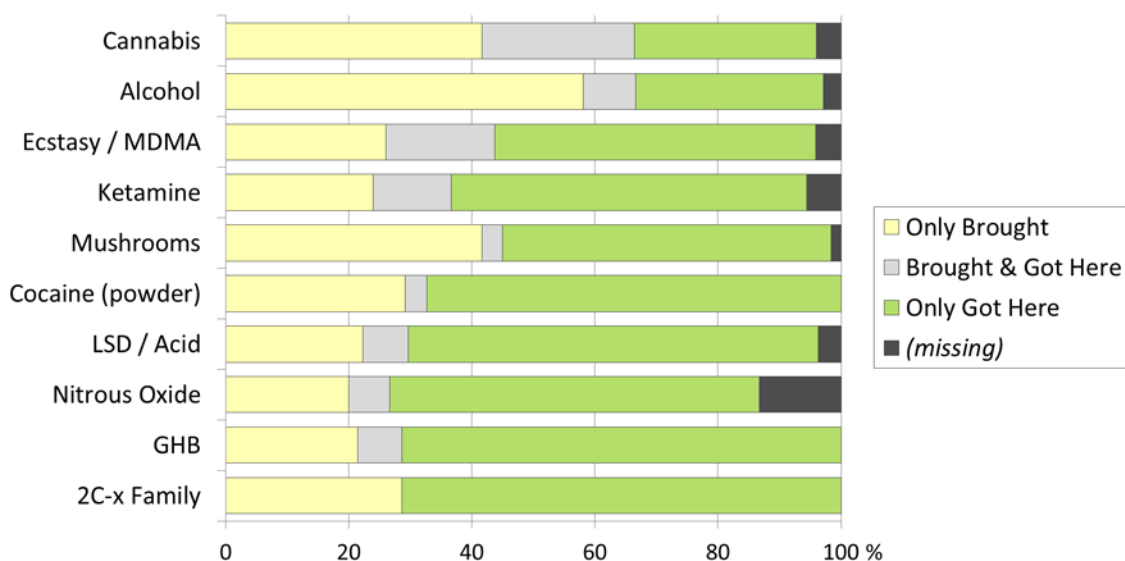
In total, 35 substances were reported used anytime at the festival: 23 listed on the questionnaire and 12 others written in, including “designer drugs”, pharmaceuticals used without prescription, and psychoactive herbal products. The 2C-x family contains a number of these “designer drugs”.

Figure 12: Proportion (%) of participants reporting use of specific substances anytime at the festival



We asked participants who reported use of a substance at the festival whether they brought the substance with them and/or whether they obtained some at SMF. For participants who reported using them, [Figure 13](#) shows how participants sourced the top ten most used substances—each row in this figure shows the proportions for only the participants who reported using that substance at SMF.

Figure 13: Proportion (%) of source types for substances reported used anytime at the festival



‘Research chemicals’ or ‘designer drugs’ are created by skilled chemists and can be new substances with psychoactive properties, as well as variants of currently illegal substances designed to be just different enough in chemical structure to no longer be considered the same as the prohibited one.

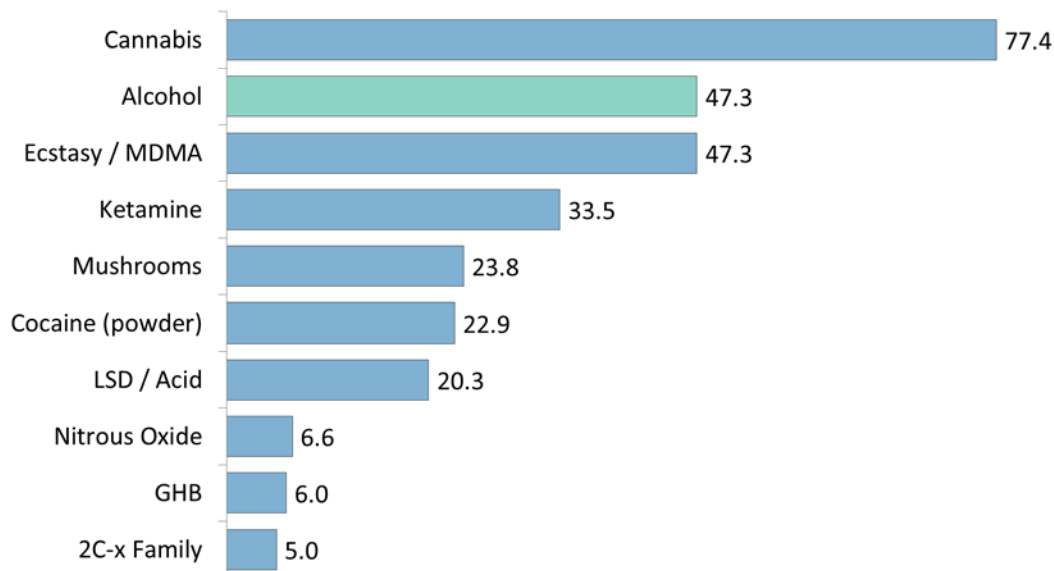
While many offer similar psychoactive experiences to more conventional party drugs, the highs they provide can be stronger and longer in duration than a user might expect, sometimes with unforeseen negative results. As these substances are commonly sold as “ecstasy”, unwitting buyers can find themselves having experiences they are not prepared for leading to additional demands on Security, First Aid and Sanctuary resources.

Although some of the more common designer drugs are analogous to popular drugs, they are different enough that currently available drug screening tests often do not detect them. Additionally, some deaths have been associated with use of some of these substances (e.g., 2C-T-7, 2C-C-NBOMe), and the potential risks associated with using them in combination with alcohol and other drugs are not well understood.

Substance Use in the Past 24 Hours

The list of the most widely used substances in the past 24 hours at a prevalence of 5% or more ([Figure 14](#)) is very similar to the list for overall use at SMF. For cannabis, everyone who reported using hash at SMF also reported using marijuana, and only one of the hash users in the past 24 hours did not also report marijuana use in that period.

Figure 14: Proportion (%) of participants reporting use of specific substances in the past 24 hours



It is interesting to note that **the list of most commonly used substances reported here for the 2013 survey is very similar in content, order and prevalence to results from the survey conducted at SMF in 2009.** The notable difference is that amphetamines/speed was slightly less prevalent in 2013 than in 2009, whereas in 2013 the 2C-x family was more prevalent. This **high level of substance use is typical of music festivals.**

Only 7 participants out of 182 (3.8%) reported no substance use anytime at SMF, with only 10 (5.5%) reporting no substance use in the past 24 hours.

Among the participants who reported using only one substance in the past 24 hours, 21 (11.5%) used cannabis, 5 (2.7%) used alcohol, 4 (2.2%) used ketamine and one used cocaine powder.

Comparing substance use in the past 24 hours with prevalence of 20% or more (cannabis, alcohol, ecstasy/MDMA, ketamine, mushrooms, cocaine and LSD/Acid) we find **no differences in substance use between first-timers and festival veterans.** Similarly, we find no differences in polysubstance use or the number of substances used together.

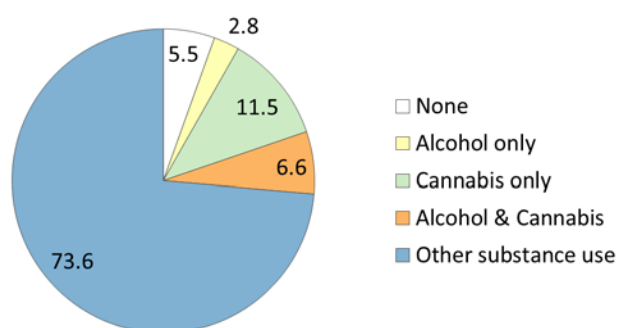
- ✓ Less than 1 in 25 participants reported no substance use anytime at the festival.
- ✓ Less than 6% reported no substance use in the past 24 hours.

Alcohol and Cannabis

An issue to consider is how to regard use of alcohol and/or cannabis with respect to use of other substances, and whether alcohol and cannabis should be treated differently.

Alcohol is not regarded as a drug by many even though it has significant physiologic and psychoactive effects, perhaps due to its legal status or ubiquitous availability. Cannabis use is common and legal for medical purposes in Canada. In addition to cannabis becoming increasingly socially acceptable, it seems to be becoming at least *de facto* “decriminalised” for personal use, especially in western Canada.

Figure 15: Proportion (%) of participants exclusively using alcohol and cannabis alone or together in the past 24 hours



Examining the role alcohol and cannabis play in substance use at the festival is a bit complex, because these are the most prevalent substances and are used alone and in combination with other substances.

[Figure 15](#) breaks out exclusive alcohol and/or cannabis use from all other substance use in the past 24 hours. We see that a mere 20.9% of participants used only either or both

alcohol and cannabis, whereas more than three quarters of participants reported using cannabis and almost half reported using alcohol. This result shows that the majority of alcohol and cannabis use occurred in combination with other substances.

From the perspective of reducing potential harms related to the physiological and mental impacts on a person from using substances, alcohol and cannabis use obviously matters. This is even more so given that the usage patterns described here for the past 24 hours typically go on for a number of consecutive days at SMF and other multi-day music festivals.

Polysubstance Use in the Past 24 Hours

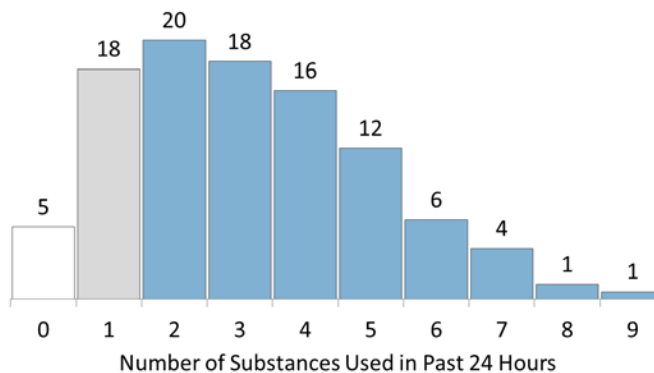
Another way to look at substance use that has harm reduction implications is to step back from focussing on the effects of individual substances to consider polysubstance use over a short enough period that the substances consumed may be metabolically active in the body at the same time. This is called “simultaneous polysubstance use” (SPSU) and our data for substances used in the past 24 hours offers a window into its prevalence and patterns at SMF.

Simultaneous polysubstance use matters because many substances when used together can interact and produce effects greater than the sum of their individual effects. Combinations can enhance the desired effects of individual substances (e.g., alcohol and ketamine, or combinations of psychedelics), produce new effects (e.g., alcohol and cocaine producing psychoactive cocaethylene in the liver),

counteract less desirable effects allowing prolonged usage or higher dosing (e.g., alternating “bumps” of cocaine and ketamine, or mixing stimulants and alcohol), and exacerbate harmful side effects (e.g., adverse effects on the heart from mixing cocaine, ecstasy or amphetamines/speed, or increasing anxiety and paranoia from combining stimulants and psychedelics).

Taking all psychoactive substances into consideration except for tobacco, [Figure 16](#) shows how **simultaneous polysubstance use is the norm** among survey participants.

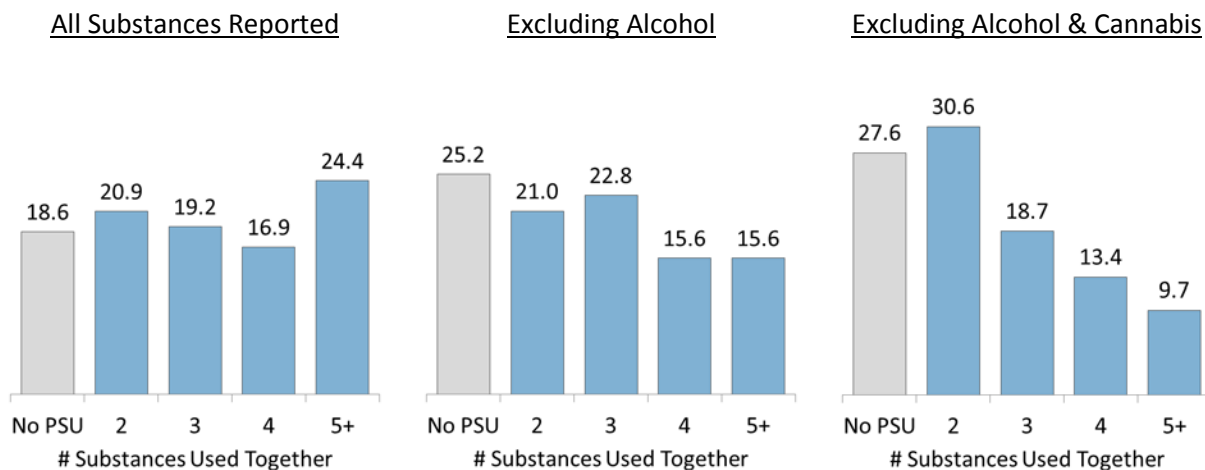
Figure 16: Proportion (%) of participants by number of substances used in the past 24 hours



Focussing on the 172 (94.5%) participants who reported any substance use in the past 24 hours, [Figure 17](#) shows that only a small minority (18.6%) of substance use was not SPSU. These participants used an average of 3.3 substances (SD=1.8, median=3, IQR=2) in the 24 hours prior to being surveyed.

It is concerning to see that SPSU involving 3 or more substances remains at high levels even after discounting use of alcohol and/or cannabis, underlining the need for research and harm reduction protocols addressing use of many substances simultaneously.

Figure 17: Proportion (%) of substance use in the past 24 hours that was simultaneous polysubstance use by number of substances used together



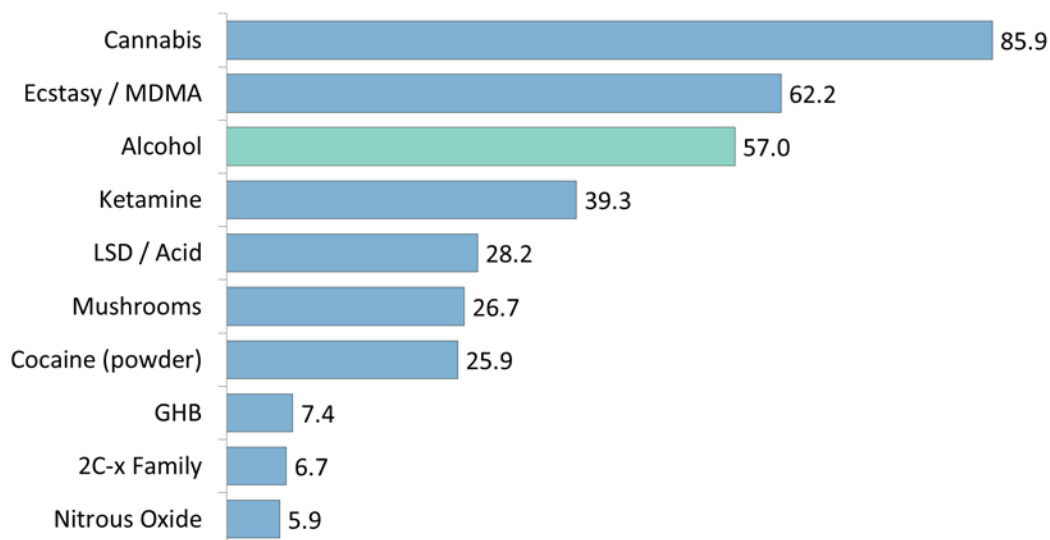
Eighty-six unique SPSU combinations occurred in the data for the 140 (75.7%) participants who reported multiple substances used in the past 24 hours. [Figure 18](#) shows which substances were the most common constituents of the reported combinations.

Twelve participants used only alcohol and cannabis in the past 24 hours, suggesting that the majority of SPSU involved at least one psychedelic, stimulant, or dissociative party drug.

It should be noted that the high level of polysubstance use is further exacerbated by the multiple psychoactive constituents and adulterants typically making up what is sold as “ecstasy” or “MDMA”, which was recorded here as a single substance.

- ✓ A high degree of poly-substance use is the norm.
- ✓ Almost a quarter of participants reported using five or more substances in the 24 hours before they were interviewed.

Figure 18: Prevalence (%) of constituent substances in combinations reported used in the past 24 hours



As might be expected, almost all combinations consisted of the most commonly reported substances. Additional substances used in combinations reported by more than one participant were: amphetamines/speed (6), Dexedrine® (4) and DMT (3).

No particular combination stood out at a much higher prevalence than others, which suggests that simultaneous polysubstance use may be driven more by happenstance or availability rather than by widely held consumer preferences for specific combinations.

The absence of widely favoured combinations also suggests that **an effective harm reduction approach to polysubstance use would better focus on the effects of mixing substances *per se*, rather than on use of any specific combinations of specific substances.**

Nevertheless, learning more and getting the word out about combinations already known to be problematic or potentially adverse would be valuable.

- ✓ Cannabis is the backbone of most drug combinations.
- ✓ Ecstasy / MDMA and alcohol also play large roles.

Looking in more detail at the most commonly reported combinations, [Table 4](#) shows the composition of the most prevalent 2-, 3- and 4-drug combinations and the count of participants reporting each. We see that cannabis was the backbone of almost all of these combinations, with ecstasy/MDMA and alcohol playing large roles in the 3- and 4-drug combinations.

Table 4: Composition of most prevalent 2-, 3- and 4-drug combinations and count of participants reporting each

	2-Drug Combos						3-Drug Combos						4-Drug Combos								
Cannabis	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	Cannabis	
Ecstasy / MDMA		X				X	X	X	X	X				X	X	X	X	X		X	Ecstasy / MDMA
Alcohol	X					X	X				X	X	X	X	X	X		X	X	Alcohol	
Ketamine				X				X			X			X			X		Ketamine		
LSD / Acid			X						X			X					X		LSD / Acid		
Cocaine (powder)															X			X	X	Cocaine (powder)	
Mushrooms					X					X		X	X	X					X	X	Mushrooms
2C-x Family																X			2C-x Family		
Count of Reports	12	6	4	3	2	2	5	5	2	2	2	2	6	3	2	2	2	2	2	Count of Reports	

On a more positive note, while the 2009 survey obtained very similar results in terms of the number and variety of different substances used simultaneously, that survey also collected dose information which this 2013 survey did not attempt to do. The 2009 dosage data showed that overall quantities of each substance used were quite small, perhaps reflecting a secular change from larger doses to greater variety in the way substances are used to get high.

The takeaway message from these data may be that **the large number of substances being used simultaneously does not necessarily mean people are engaging in high risk behaviour—it may be more a sign of supply diversification, easier access and more sophisticated management of the intoxication experience.**

High Levels of Tobacco Use

An unexpected finding was the **very high prevalence of tobacco use**. To provide context, the most recent Canadian national survey of tobacco use (CTUDS 2013) found the overall prevalence of smoking in Canada in 2013 was 15%, the lowest national rate ever recorded; 11% reported smoking daily while 4% reported smoking occasionally. In our survey, 64.1% of participants reported tobacco use at SMF and 59.7% reported use in the past 24 hours, several times higher than general Canadian rates.

- ✓ Almost 2/3rds of participants used tobacco at the festival, with almost 60% having used tobacco in the past 24 hours.
- ✓ In the context of high levels of cannabis use, it may be that tobacco is used a lot in “spliffs” and hash joints.
- ✓ There is clearly an opportunity for tobacco-related harm reduction at the festival, even if cigarette use *per se* is similar to levels in the general population.

Anecdotally, members of our research group have heard many stories of people smoking only when they drink alcohol or only on the weekends when they party, but the results from SMF were surprising!

Of the participants who reported any tobacco use at the festival, 78.8% brought tobacco with them and 41.6% reported obtaining tobacco at the festival. Even the most generous interpretation of contingency planning would still fall short of explaining such a high prevalence of planning for or seeking tobacco for use.

Note that the questionnaire asked generally about *tobacco* use and did not specifically refer to cigarettes. Given the near ubiquitous use of cannabis, it is plausible that the practices of mixing loose tobacco with marijuana to roll “spliffs”, or for making hash joints, might be widespread and might explain some of the high prevalence of tobacco use observed.

This question of tobacco use in party and festival settings clearly needs further investigation.

Lesson Learned:

- To date, ANKORS has not focussed on tobacco-related harm reduction, however the survey results suggest this might be an area worth addressing.

Responses to Textual Questions

To the question: **“Please tell us about one main thing you do to keep yourself safe and healthy when using alcohol or other drugs at this festival?”**, all but one participant (99%) responded, each listing several examples that illustrated how well harm reduction strategies appropriate to the festival environment are known by this population.

At the personal level, responses strongly reflected themes of:

- ✓ **pacing and moderation**
- ✓ **knowing the source of one’s drugs**
- ✓ **hydration and eating well**
- ✓ **the buddy system**

Over half (52%) of participants described a harm reduction strategy related to how substances were used. Over a third (37%) listed moderation, pacing themselves, knowing their own limits, taking small doses or resisting peer pressure.

Almost a quarter (23%) of participants referenced the buddy system or the support of friends. The “buddy system” refers to the tactic whereby groups of friends keep an eye out for each other, are aware of the substances each other are using, and take care of each other if help is needed.

Service usage themes focussed on pill and powder testing and getting informed; 19% specifically referenced using ANKORS pill and powder testing. Having a reliable or trusted source was mentioned by 13%, including avoiding taking “ground scores”; i.e., unknown substances found on the ground or other places at the festival. Other tactics listed included using sunscreen, taking vitamins, using recovery supplements such as 5-HTP, using the Sanctuary, and being conscious of the role of set and setting in having a good experience using substances.

*“Start small, take it easy,
not to go too hard.”*

- female, 26, AB

Finally, participants were asked whether there were **“any other health or harm reduction services that you wish were available here at this festival?”** and almost a third (57/183, 31%) of participants responded. A quarter of responses (15/57, 26%) related to pill and powder testing including comments about improving the testing environment, having better isolation of consecutive tests, having more accurate tests available, and having more definitive testing for detecting PMMA. Expanding harm reduction services and pill and powder testing to more festivals was also suggested.

Linked to the numerous references to staying hydrated, the next most widely requested improvement mentioned by 7/57 (12%) was for SMF organizers to increase the availability of drinking water by improving access, reducing line-ups for water and increasing the number of places where drinking water can be obtained. Almost a third (13/57, 23%) requested more harm reduction outreach especially to the campsite areas, more visible signs, and upgrades to existing services such as the Sanctuary.

Summary of Findings & Implications

We now reflect on the survey results and their implications in terms of our research questions, and conclude with lessons learned from the surveying activity itself.

Findings for ANKORS

1) ANKORS services appeal to a wide range of festival-goers.

- Taking the sample obtained in the survey as indicative of who accesses ANKORS services, it seems ANKORS' guests are representative of the general population attending the festival and demographically indistinguishable from the sample obtained by a previous survey in 2009 that used a very different sampling approach.
- The gender imbalance towards males observed in the sample and anecdotally by ANKORS staff and volunteers is most likely a reflection of the gender structure of the festival population rather than a sign that ANKORS' venue or services are less appealing or accessible to female festival-goers.

2) ANKORS services are well-used with pill and powder testing being the most popular.

- Harm reduction information is provided in a variety of forms (cards, pamphlets, conversations, "bad drugs" reports) and is also well used.
- ANKORS gives out thousands of condoms although this is reported as a less used service, perhaps because condoms are also widely available from several other sources at the festival.
- Safer smoking and injecting kits are not widely accessed, which is consistent with the extremely low use of injection drugs, crack cocaine and crystal meth reported by survey participants.
- ANKORS reach is also extended beyond the ANKORS service tent through the community-oriented value of *taking care of each other*, which is reflected in the high proportion of guests who told us they were accessing services for others as well as themselves.

Lessons Learned:

The themes that arise from these responses illustrate clearly that the key messages ANKORS harm reduction staff have focused on over the years have been adopted by and integrated into people's harm reduction plans for their festival experience.

These messages include:

- test your substances
- test-drive your substances
- use the buddy system
- make sure you hydrate, eat and get enough sleep
- be aware of your limits
- don't take drugs from an unknown or not trusted source

3) **ANKORS is succeeding in reaching out to festival first-timers as well as continuing to be relevant to festival veterans.**

- Nearly half of the survey participants were festival first-timers, and festival veterans had visited ANKORS an average of 3 to 4 times.
- Statistical tests comparing festival first-timers against veterans on their use of pill and powder testing, DanceSafe cards, harm reduction info and 'checking the place out' found no statistically significant differences in usage of these more frequently accessed ANKORS services.

4) **ANKORS services complement other services at the festival to provide a continuum of harm reduction supports for the well-being of festival attendees.**

- ANKORS guests are using other harm reduction services at the festival, with about a third of survey participants reporting having accessed First Aid and the Sanctuary.
- The prevention-oriented information and harm reduction services provided by ANKORS integrate well with and complement the psychological support provided at the Sanctuary and medical support at First Aid.

5) **Polysubstance use continues to be the normal mode of using psychoactive substances with a wide variety of substances used in combination.**

- In the 24 hours prior to being interviewed, the majority of survey participants had engaged in simultaneous polysubstance use, where there is significant opportunity for physiological interactions between the different substances consumed over a short time period.
- The substances most widely used (prevalence \geq 20%) in 2013 are very similar to 2009, and ANKORS is well equipped to provide informed and useful harm reduction information to people who use them. These substances (in decreasing order of prevalence) were: cannabis, alcohol, ecstasy/MDMA, ketamine, mushrooms, cocaine powder and LSD/Acid.
- There were no differences between festival veterans and first-timers in use of substances reported at 20% or higher prevalence (cannabis, alcohol, ecstasy/MDMA, ketamine, mushrooms, cocaine, LSD/Acid), and also no differences in simultaneous polysubstance use.
- While the prevalence of using "designer drugs" and more obscure "research chemicals" is low, it is creeping up in comparison to the 2009 survey, particularly for the 2C-x family.
- There was a gratifyingly high awareness of concerns such as potential contamination of ecstasy with known-to-be-harmful PMA or PMMA.

"I think you guys are doing a really great job. You basically saved my Shambhala by the test I just got."

- male, 25, BC

- 6) **Participants displayed high levels of awareness of some pragmatic harm reduction strategies that are consistent with ANKORS' harm reduction messaging.**
- The two narrative questions asking participants about their harm reduction strategies and what else they would like to see at the festival elicited some detailed and interesting responses.
- 7) **ANKORS pill and powder testing services need to evolve to include more accurate purity tests and tests focussed on substances of major concern (e.g., PMA or PMMA).**
- This is a sophisticated crowd and more information is desired and needed in order to make informed choices.
 - There is a high level of awareness of substances known to have high risk and safety problems.
- 8) **ANKORS pill and powder testing users dispose of substances that did not obtain the test results expected and do so at the ANKORS tent.**
- These data reinforce the value of having developed a safe disposal service to prevent unwanted substances potentially becoming "ground scores" that may be picked up by others, or creating environmental concerns from disposal in garbage or other waste streams.
- "It is a credit to the RCMP and festival security staff that ANKORS has been able to make acceptable arrangements for safe and secure disposal of unwanted substances, and we hope these arrangements could be replicated at other festivals."*

- ANKORS staff member
- 9) **There may be a need for tobacco-specific harm reduction information.**
- The prevalence of tobacco use at the festival was way higher than expected and is several times higher than use in the general Canadian population.
 - This tobacco use may be intertwined with cannabis use in the form of "spliffs" and hash joints, but more investigation is necessary.

Findings for the Shambhala Music Festival Organizers

- 1) **The harm reduction services available at the festival are well used by both festival first-timers and festival veterans.**
- 2) **The lack of adequate availability of and ready access to drinking water is a major concern to festival-goers.**
- Improving access to drinking water is the main improvement wished for by survey participants.

Findings Related to Designing and Fielding the Survey

With respect to the survey itself, there are a number of lessons learned that would be helpful for ANKORS or anyone else contemplating surveying in this environment.

1) The field environment at a music festival is challenging for a number of reasons that are either structural (not much one could do) or procedural (one could improve things here).

- There is a potential for challenges to the security of survey staff or survey equipment, thus plans are needed for prevention and for a contingent response in case an incident occurs.
- Logistical challenges of the festival environment (crowding, people hanging out in groups, line-ups for services, etc.) necessitate adapting conventional approaches to eliciting interest, determining eligibility and managing consent when privacy may be impossible.
- Have a way for someone who is interested but the timing is not immediately suitable, to come back and participate at a more convenient time.

2) It may be difficult to determine a conventional response rate in a crowded and busy recruitment environment.

- Conventional ways of counting who has been approached and who does not want to participate do not work when recruitment is done around large groups of people who are moving around.
- You can still obtain a representative sample and gain valuable insights about your clients, service utilization and demand if you elicit enough interest among potential participants and obtain a large enough sample.
- It helps to have data on another survey sample from the same or similar population available for comparison and reality checking.

3) Build your surveying team with reliable and self-reliant people who can think on their feet.

- The success of a survey depends critically on your surveying team members who field it.
- Make sure you have enough people and don't overwork them. Team size and capacity may end up being the primary factors limiting the number of quality questionnaires you can obtain.
- Consider role specialization and potentially separating to some degree the activities of recruitment, screening and questionnaire administration.
- It helps recruitment if your surveying team is diverse and members reflect the demographics of your target population.

4) Train your whole surveying team well and consistently.

- The absence of sufficient and consistent training of Research Assistants can lead to problems with data quality and tracking.
- Build flexibility into procedures so the team can adapt to unforeseen challenges in the field.

5) Allow enough time for potential challenges and delays in obtaining Research Ethics approval.

- Coordinating ethics approval from multiple boards can be logistically challenging and take a long time due to infrequent board meeting cycles, key staff absences in summer months, and absence of reciprocal recognition of approvals between boards.
- Do your homework so that your ethics application is complete and anticipates and addresses every concern that may be raised. As much as possible avoid having to resubmit an application multiple times or submit amendments, especially if more than one board is involved.
- A verbal consent process that does not require names and signatures from participants is acceptable when participants are adults, your screening process explicitly addresses assessing potential capacity to consent issues (e.g., intoxication), the questions are not too controversial, and your questionnaire, cover letter and consent process make it explicit when consent is deemed to have been obtained and how it can be withdrawn.

6) Pre-test your questionnaire.

- Questions are often developed in isolation and by people who are not necessarily embedded in the target population. It is very easy to inadvertently word a question in an ambiguous way, or have a perfectly well-formed question become ambiguous or problematic because of the questions that end up preceding it in the questionnaire.
- Use wording that makes sense to and would be consistently interpreted by your target population.
- Be aware of potential priming effects where the phrasing of the question or its placement in a sequence of questions may inadvertently suggest the desirability of a particular response or reflect negatively on other responses.
- Pretesting the questionnaire among the research team and then with people from your target population is the best way to see how long it will take to administer, whether any wording is problematic or ambiguous, and whether the series of questions flows smoothly as a neutral conversation with a participant.
- So much work goes into designing and fielding a good survey—you don't want to find problems with your questions once you have already started gathering your data or, worse, when you start analyzing it.

Concluding Remarks

Alcohol and drugs will inevitably make their way into music festivals. We need to take a realistic approach to mitigate harms related to substance use at these events. Partnerships and collaboration serve to provide a spectrum of complementary services that help to mitigate harmful consequences of the use of alcohol and other substances.

Knowledge is power: given relevant and accurate information most people will make healthier choices. ANKORS provides a broad spectrum of services from a holistic harm reduction perspective that addresses a wide range of needs. The results of this survey demonstrate the value and reach of ANKORS work at the festival, and also point to some new areas for further exploration.



Party Smart!

Appendix 1: History of Harm Reduction at the Shambhala Music Festival

- 2002** Shambhala allies with local non-profit **ANKORS** to begin providing free condoms, drug information for safer use, and drug testing services. This eventually grows to include needle exchange and crack pipe kits.
- 2003** Shambhala **First Aid** begins to staff social workers and counsellors after noting that a high percentage of First Aid encounters present in transient emotional distress or psychological crisis related to substance use.
- 2005** **MindBodyLove**, a group of BC coastal harm reduction activists from the rave and festival scene bring the “**CosmiKiva**” psychedelic crisis centre to the Shambhala Festival offering peer support to persons experiencing challenges related to substance use, or who are otherwise in need of a safe space. These volunteer community activists brought the CosmiKiva initiative to a number of music festivals around BC partially funded by a **Health Canada Drug Strategy Community Initiatives Fund** grant awarded to MindBodyLove. The CosmiKiva space was set up in a previously out-of-bounds grove of trees immediately behind the First Aid area.
- 2006** Due to the success of the CosmiKiva, a psychedelic crisis space was instituted as a separate department of the festival and changed its name to the “**Sanctuary**”. The area used for the CosmiKiva in 2005 was fenced in and protocols were developed to improve cooperation and coordination between the Sanctuary, Security and First Aid.
- 2008** As the event grows it places increased strain on local community services—particularly in Nelson. The festival organizers begin a series of community stakeholder meetings involving police, mental health, hospital staff, food banks, homeless shelters and non-profit groups. A number of recommendations are made that the festival organizers incorporate.
- 2009** The festival begins to softly institute an age limit policy. Persons 16 and under are not permitted in without a mature chaperone. The **Youth Outreach** team is created and tasked with seeking out and supporting youth at risk, as well as roaming the grounds and providing “guerrilla” harm reduction education to everyone. The festival also begins to make monetary donations to the local **Salvation Army** and soup kitchen; all surplus food is donated to these organizations and local food banks.
- 2010** The age limit policy is increased and persons aged 18 and under now require a legal guardian or a responsible mature person designated by a legal guardian. Supports for youth are increased. Local Ministry of Children and Family Development staff note that Shambhala-related youth encounters drop from 22 in 2008, to zero in 2010.
- 2011** The age limit is concretely fixed at 19 and above, and no minors are permitted on the festival site under any circumstances. A separate **Women's Safe Space** department is instituted to improve supports for women who feel unsafe or have experienced sexual assault.

Appendix 2: Pill and Powder Testing Process

To understand the process it helps to understand the tests that we used, as well as their strengths and weaknesses. A summary of the explanation below was offered as part of almost every testing encounter, skipped over only if the guest was familiar enough with the reagent test process that it proved redundant.

We use three tests—the **Mandelin**, **Mecke** and **Marquis** tests—that involve applying a few drops of the reagent to a sample. Each test with a different reagent requires a fresh sample. The reagents react differently to different target substances and test results are obtained by observing the colour changes in the chemical reaction. The expected colour changes for different target substances are shown on a laminated card at the testing booth (see [Figure 19](#)).

Testers would ask the guest what they believed their sample to be. The guest would be instructed to take a small amount of sample product and place it on the white ceramic test plate surface. **Testers would not handle the samples themselves to avoid potential legal ramifications.** Dividing the sample into three small piles allows for the progression of using the three reagents. The tester would then use the chart to outline the expected results and interpret the observed reactions.

The Mandelin test would usually be performed first. For substances to which only one reagent reacts (e.g., ketamine and cocaine), the Mandelin test would be the only one required if the result was positive. When a confusing or inconclusive result occurred, or if the sample was believed to be a different substance that reacts to the other reagents, then the Mecke and Marquis tests would follow.

The use of all three tests allowed us to keep guests engaged for a few minutes, and opened conversation about what was happening with each reaction. Some tests would react exactly as expected, which was an important time to remind the guest that such a result did not imply the drugs were “pure” or without adulterants—merely that the expected reaction dominated our reading. This was especially true with substances in the MDMA/MDA/MDE family, as the reagents would turn dark black in reaction to the MD* thus potentially masking other colours or reactions also present.

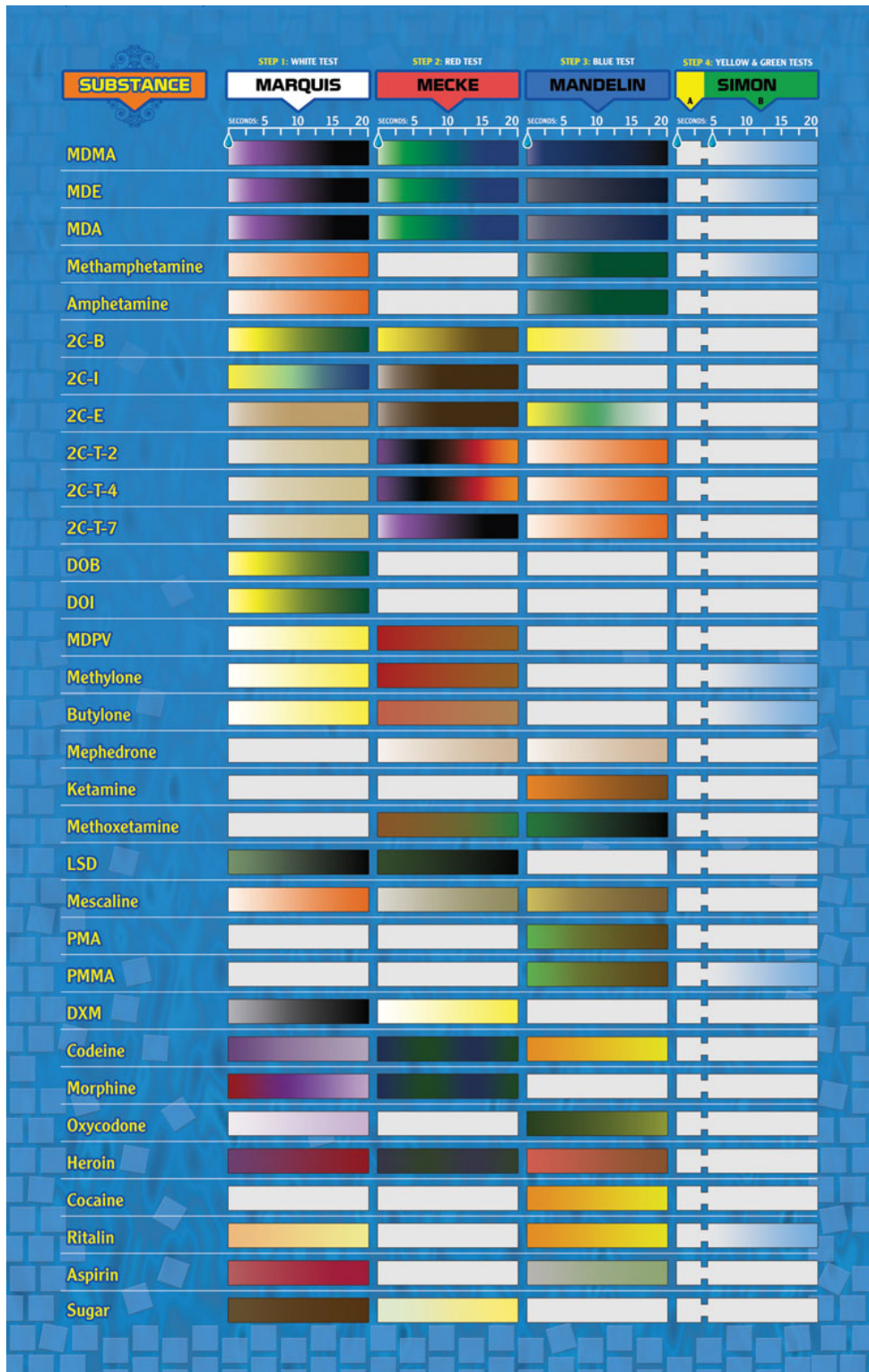
Another limitation of these tests is that they cannot provide dose information for the target substance in the sample. For example, the reagents might react as expected if MD* is present, but since we cannot really know what other substances are also present, or the strength or concentration of the target substance, it makes it impossible to estimate the dosage the sample contains. We thus recommend that a potential user start with a small amount to see how their body reacts and to wait at least an hour to let the effects become apparent before considering taking any more.

PMMA and reagents

A focus on the potentially negative health implications of PMA and PMMA use has been a part of our party safe program for the past few years however there is no easy-to-use field test available for these

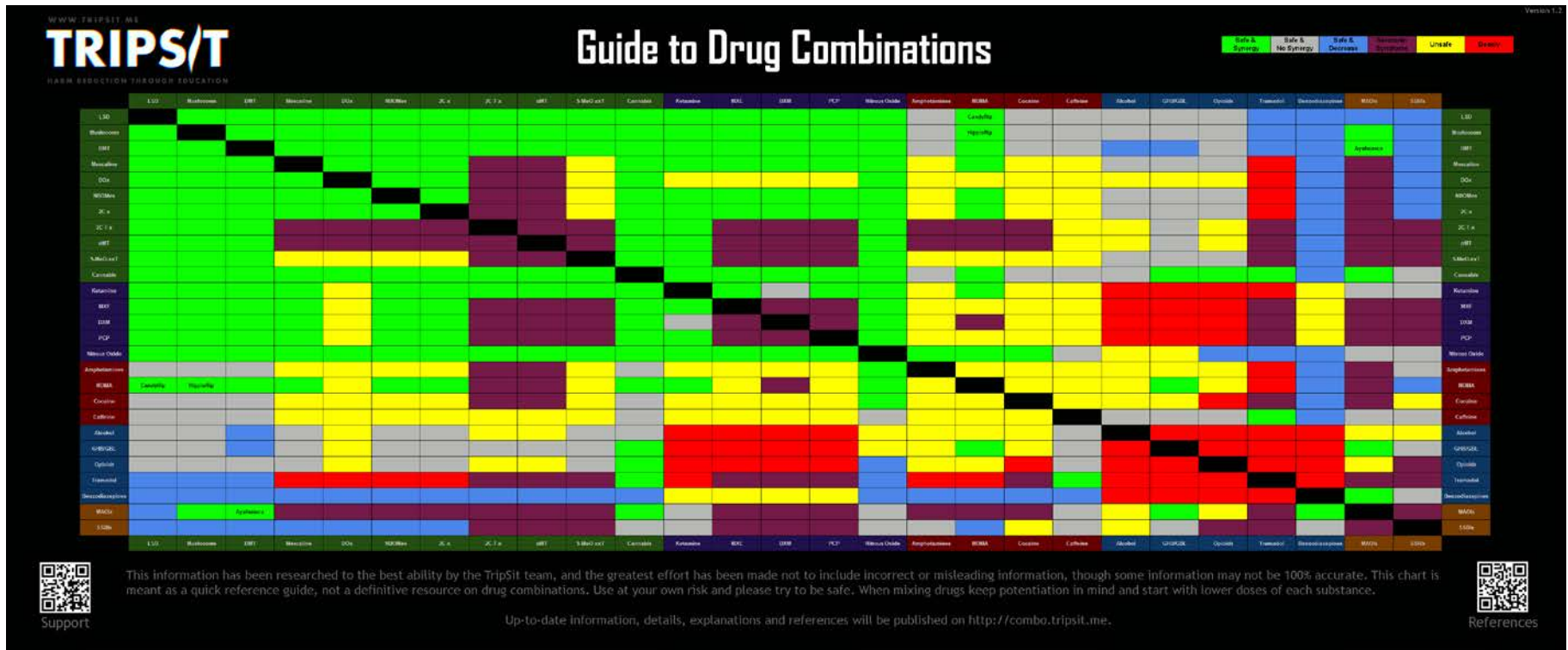
substances. To an experienced tester, a PMA/PMMA-related reaction might be visible in the first flash of colour change indicative of MD* family substances when using the Mandelin test on such a sample.

Figure 19: Reference card for interpreting test reagent colour changes



Appendix 3: TripSit Drug Combination Matrix

The matrix chart below gives an indication of the safety risks from combining various kinds of substances, indicating those which are safe and have synergistic reactions (green), safe with no synergy (grey), safe but where the combination reduces effects (blue), with known risks for inducing serotonin syndrome (brown), known to be unsafe to use in combination (yellow) and potentially deadly combinations (red).



From: TripSit Wiki:

<http://wiki.tripsit.me/images/d/d6/TripSitDrugComboChart.gif>

Appendix 4: Ethics Approval Certificate from UBC and Letter from IHA

Certificate of Approval from The University of British Columbia (UBC) Behavioural Research Ethics Board for the amendment to author WM’s existing PhD research project under which this survey was conducted as an additional stage.

<https://rise.ubc.ca/rise/Doc/0/77GECHCVK7HKP7HTJ844GH7R4D/fromString.htm>



The University of British Columbia
Office of Research Services
Behavioural Research Ethics Board
Suite 102, 6190 Agronomy Road, Vancouver, B.C. V6T 1Z3

CERTIFICATE OF APPROVAL - MINIMAL RISK AMENDMENT

PRINCIPAL INVESTIGATOR: Chris G. Richardson	DEPARTMENT: UBC/Medicine, Faculty of/School of Population and Public Health	UBC BREB NUMBER: H07-01674
INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT:		
<small>Institution</small>	<small>Site</small>	
Other locations where the research will be conducted: IN THE FIELD: The research will take place at a multi-day electronic music festival occurring at an outdoor location in the BC Interior approximately 650 km from Vancouver in August each year. Approximately 10,000 people are expected to attend this event over the course of 5 days. IN THE COMMUNITY: interviews will take place in a venue that is agreeable to the research participant where it is quiet and private enough to record the interview for later transcription. Interview locations may include a research participant’s home, a private office at UBC Mather building, or a private interview room at the BCCDC.		
CO-INVESTIGATOR(S): Warren Michelow Cheryl Lynn Dowden Heather A. Cooke Tim Stockwell Trevor A. Cornell Jane Buxton		
SPONSORING AGENCIES: Mathematics of Information Technology and Complex Systems (MITACS) - Networks of Centres of Excellence (NCE) - "An investigation into the determinants, characteristics and health outcomes of simultaneous polysubstance use among recreational drug users at music and dance-oriented cultural events"		
PROJECT TITLE: Patterns of use, determinants and factors in high-intensity simultaneous poly-substance use among recreational drug users: An exploratory study		

1 of 2 06/08/2013 8:08 AM

Letter from Interior Health Authority recognising the UBC Research Ethics Board approval of the survey via delegated review.



Research Ethics Board
Interior Health Authority
#210- 1815 Kirschner Road
Kelowna, B.C. V1Y 4N7
Web: www.interiorhealth.ca

Ann Ferguson
Chair, Research Ethics Board
Phone: (250) 870-4602
Facsimile: (250) 870-5753
e-mail: ann.ferguson@interiorhealth.ca

August 2, 2013

Dr. Chris Richardson
UBC School of Population & Public Health
2206 East Mall
Vancouver, BC V6T 1Z3

Re: *Patterns of use, determinants and factors in high-intensity simultaneous poly-substance use among recreational drug users: An exploratory study*

Dear Dr. Richardson,

The Interior Health Research Ethics Board (IH REB) provides recognition of the initial ethics approval provided on August 2, 2013 by the UBC Behavioral Research Ethics Board (UBC BREB) AND for the Amendment H07-01674-A010 approved August 2, 2013 for the above named study. This decision was made following a delegated review process approved by the IH REB.

The IH REB recognition of the ethics approval provided by the UBC BREB facilitates harmonized continuing review of the study. This means that all requests for amendments or renewals and review of any safety reports will be carried out by both the UBC BREB and the IH REB at the same time, with a view to streamlining the review and approval processes.

If you have any questions or concerns about the harmonized processes for the continuing ethics review of the study, please contact me.

Best regards

A handwritten signature in black ink that reads "Ann Ferguson".

Ann Ferguson
Chair
IH REB

cc: UBC Office of Research Ethics Services

Appendix 5: Survey Questionnaire

SECTION I. USING ANKORS HARM REDUCTION SERVICES AT THIS FESTIVAL

1.1 Is this your **first time** at this music festival venue?

- NO, I have been to this festival ____ times (including this time)
- YES, this is my first time here at this festival

1.2 How many **days** have you been at the festival so far this year? ____ (incl. today)

1.3 Is this the first time EVER that you have visited the ANKORS Harm Reduction tent here? NO YES

1.4 If NO, how many times have you EVER visited ANKORS Harm Reduction tent here? ____ (including this time)

1.5 Why did you visit the ANKORS tent at the festival? (Circle answers, Y=YES, N=NO)

	EVER		THIS FESTIVAL		If YES to THIS FESTIVAL, did you access this service for:		
	Y	N	Y	N	self only	self & others	others only
Pill Testing	Y	N	Y	N	self only	self & others	others only
Condoms	Y	N	Y	N	self only	self & others	others only
Safer Injecting Kit	Y	N	Y	N	self only	self & others	others only
Safer Smoking / Inhalation Kit	Y	N	Y	N	self only	self & others	others only
DanceSafe Drug Cards	Y	N	Y	N	self only	self & others	others only
Harm Reduction Info, or Other Info Pamphlets	Y	N	Y	N	self only	self & others	others only
Report Bad Drugs or Pills	Y	N	Y	N	self only	self & others	others only
Bad Trip	Y	N	Y	N	self only	self & others	others only
Just checking the place out	Y	N	Y	N	self only	self & others	others only
Other Reason (please explain)	Y	N	Y	N	self only	self & others	others only

IF USED PILL TESTING THIS YEAR (if not then skip to 1.10)

1.6 The most recent time you used the pill testing service, what were you testing for? Presence of _____ or/and Absence of _____

1.7 Did you get the result you expected?

- NO
- YES
- Not Sure
- Had no specific expectations

1.8 Given the test result you got, what would you (did you) do with the substance?

- Not Sure
- Take it, or Keep it for later
- Return it to who I got it or bought it from
- Get Rid of it

1.9 If GET RID OF IT then where would you (did you) get rid of it?

- Dispose at ANKORS tent
- Dispose in toilet / washroom / porta-potties
- Give it away
- Sell it
- Other: (describe):

1.10 Have you visited or used any other harm reduction services at this festival? NO YES

1.11 If YES what other services? (Circle answers)

	EVER		At THIS Festival	
	No	Yes	No	Yes
First Aid	No	Yes	No	Yes
Sanctuary	No	Yes	No	Yes
Women's Space	No	Yes	No	Yes
Other (describe)	No	Yes	No	Yes

2. SUBSTANCES USED	EVER Used?	Used in the past 12 months BEFORE THIS FESTIVAL?	Used AT THIS FESTIVAL?	Used in the PAST 24 HOURS	IF USED AT THIS FESTIVAL did you: BRING it with you GET it HERE or both
ALCOHOL	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
2C-B, 2C-I, 2CT-7 or other 2C-LIKE SUBSTANCES	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
ACID / LSD	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
AMPHETAMINE / SPEED (EXCL. Dexedrine – see below)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
“BATH SALTS”	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
BENZOS (e.g. Ativan) <input type="checkbox"/> On Rx	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
BZP or other PIPERAZINES	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
CANNABIS: Marijuana	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
CANNABIS: (Bubble) Hash / Oil	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
COCAINE POWDER	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
CRACK COCAINE (“Rock”)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
CRYSTAL METH	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
DEXEDRINE <input type="checkbox"/> On Rx	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
DMT	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
DXM (Cough Medicine)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
ECSTASY or MDMA	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
FOXXY (5-MEO-DIPT)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here

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2. SUBSTANCES USED	EVER Used?	Used in the past 12 months BEFORE THIS FESTIVAL?	Used AT THIS FESTIVAL?	Used in the PAST 24 HOURS	IF USED AT THIS FESTIVAL did you: BRING it with you GET it HERE or both
GHB (Incl. GBL & BD)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
HEROIN	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
KETAMINE	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
MAGIC MUSHROOMS	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
METHADONE <input type="checkbox"/> On Rx	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
NITROUS OXIDE (Laughing Gas)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
PCP (Angel’s Dust)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
POPPERS (Amyl Nitrite)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
RITALIN / Adderall / Other ADHD Drugs <input type="checkbox"/> On Rx	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
SALVIA	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
SOLVENTS / GLUE	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
STEROIDS <input type="checkbox"/> On Rx	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
TOBACCO (all kinds)	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
OTHER (specify): <input type="checkbox"/> On Rx	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here
OTHER (specify): <input type="checkbox"/> On Rx	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Bring <input type="checkbox"/> Got here

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SECTION III. GENERAL INFORMATION ABOUT YOU

3.1 What is your gender?

- Female
- Male
- Transgender
- Intersex

3.2 What is your age? _____ (years)

3.3 How would you identify your ethnicity?

- White / Caucasian / European
- Aboriginal (First Nations, Métis, Inuit, North American Indian)
- Other (describe):

3.4 What is your highest level of education achieved so far?

- Not completed high school
- Completed high school
- Currently doing undergraduate university / college / technical diploma
- Completed undergraduate university / college / technical diploma
- Currently doing graduate university / college / technical diploma
- Completed graduate university / college / technical diploma
- Other: (describe):

3.5 How do you describe your sexual orientation?

- Heterosexual / Straight
- Homosexual / Gay or Lesbian
- Queer
- Bisexual
- Unsure / Questioning
- Prefer not to disclose

3.6 Do you (or did you) have trouble accessing condoms while at the festival?

- NO
- YES
- Did not look for condoms at the festival

3.7 Did you obtain condoms from anywhere else (not ANKORS) at the festival?

- NO
- YES
- Did not look for condoms at the festival

IF YES, please list where you obtained condoms

- Brought my own

(a) _____

(b) _____

3.8 What town and province (or state) do you live in?

(If between places or on the move then enter the place where you last lived.)

Town/City: _____ Province/State: _____

3.9 Please tell us about one main thing you do to keep yourself safe and healthy when using alcohol or other drugs at this festival?

.....

.....

.....

3.10 Are there any other health or harm reduction services that you wish were available here at this festival?



.....

.....

.....

**THANK YOU VERY MUCH FOR COMPLETING THIS QUESTIONNAIRE.
DO YOU HAVE ANY QUESTIONS FOR US?**

Appendix 6: Survey Cover Letter

<div style="display: flex; justify-content: space-between; align-items: center;">  <div style="text-align: center;"> <p>COVER LETTER FOR RESEARCH PARTICIPANTS</p> </div>  </div> <div style="margin-top: 10px; font-size: small;"> <p>101 Baker Street, Nelson, BC, V1L 4H1 Tel: 250-505-5506 Fax: 250-505-5507</p> </div> <p style="text-align: center; margin-top: 20px;">Use of ANKORS harm reduction services and patterns of alcohol and other substance use at the music festival</p> <p>Investigators: Dr. Christopher Richardson (Principal Investigator, UBC), Warren Michelow (UBC), Cheryl Dowden (ANKORS), Heather Cooke (IHA), Dr. Jane Buxton (BCCDC), Dr. Trevor Cornell (IHA).</p> <p>PURPOSE You are invited to participate in a study about accessing harm reduction services provided by ANKORS and use of alcohol and other drugs at this music festival. We aim to learn about how <u>individuals aged 19 years and older</u> use the various harm reduction services provided at the festival by ANKORS as well as some contextual information about their alcohol and other drug use. This study is being funded by the Co-Investigators with financial and in-kind support from ANKORS with ethics approval from the University of British Columbia Behavioural Human Research Ethics Board.</p> <p>STUDY PROCEDURES If you decide to participate in the study, a trained interviewer will help you <u>fill out an anonymous questionnaire</u>. The questionnaire will take approximately 10-15 minutes to complete. The questionnaire will ask some general questions about you which will not identify you personally in any way. It will then ask some questions about your use of ANKORS services and about alcohol and other drug use at the festival and in the recent past.</p> <p>CONFIDENTIALITY <u>All of the information you provide will be kept in the strictest confidence and no personally identifying information will be recorded in any way.</u> The data will only be seen by the people involved in the study (the research team) and results will be reported in <u>anonymous group form</u>. All of the information you provide will be kept in a locked cabinet or on a password-protected computer in the investigators' offices or at UBC for a minimum of five years (according to national standards).</p> <p>REMUNERATION & BENEFITS There is no payment to you or other remuneration for completing this survey. There is no specific benefit to you as a participant, however the results of this survey will help ANKORS assess the services they provide at the festival and how to improve them in the future. Your participation in the survey may also benefit future festival-goers and society</p> <p style="font-size: x-small;">Version 1.2 – 2 August 2013 Page 1 of 2</p>	<p>at large by helping us better understand the harm reduction needs and concerns of people who use substances in recreational settings.</p> <p>CONTACT INFORMATION If you have any questions about this study please contact one of the researchers listed below:</p> <table style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th style="text-align: left;">Role & Contact</th> <th style="text-align: left;">Phone</th> <th style="text-align: left;">Email</th> </tr> </thead> <tbody> <tr> <td colspan="3"><u>Principal Investigator:</u></td> </tr> <tr> <td>Dr. Chris Richardson</td> <td>604-827-4023</td> <td>chris.richardson@ubc.ca</td> </tr> <tr> <td colspan="3"><u>Co-Investigators:</u></td> </tr> <tr> <td>Warren Michelow</td> <td>604-683-8513</td> <td>warren@michelow.ca</td> </tr> <tr> <td>Cheryl Dowden (ANKORS)</td> <td>250-505-5506</td> <td>cheryl@ankors.bc.ca</td> </tr> <tr> <td>Heather Cooke (Interior Health)</td> <td>250-851-7300 ext. 7447</td> <td>heather.cooke@interiorhealth.ca</td> </tr> </tbody> </table> <p>Should you have any questions comments or complaints concerning your rights as a research subject, or the manner in which you have been treated in this study, please contact the Research Subject Information Line at the University of British Columbia Office of Research Services at 604-822-8598, or you may contact the Chair of the Interior Health Research Ethics Board at 250-870-4602 or by email at researchethics@interiorhealth.ca.</p> <p>CONSENT <u>Your participation in this study is entirely voluntary</u> and you are free to withdraw from the study at any time without penalty.</p> <p>Please <u>keep this cover letter</u> for your records.</p> <p>Please contact the Principal Investigator or one of the Co-Investigators at the phone numbers or email addresses shown above if you have any questions.</p> <div style="border: 1px solid black; padding: 10px; text-align: center; margin: 10px auto; width: 80%;"> <p>If the questionnaire is completed, it will be assumed that your consent has been given.</p> </div> <p>Thank you very much for your consideration.</p> <p style="font-size: x-small;">Version 1.2 – 2 August 2013 Page 2 of 2</p>	Role & Contact	Phone	Email	<u>Principal Investigator:</u>			Dr. Chris Richardson	604-827-4023	chris.richardson@ubc.ca	<u>Co-Investigators:</u>			Warren Michelow	604-683-8513	warren@michelow.ca	Cheryl Dowden (ANKORS)	250-505-5506	cheryl@ankors.bc.ca	Heather Cooke (Interior Health)	250-851-7300 ext. 7447	heather.cooke@interiorhealth.ca
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Appendix 7: Resource List & References

ANKORS website: <http://www.ankors.bc.ca>

- ▶ 1-800-421-AIDS (2437)
- ▶ information@ankors.bc.ca

Please contact us If interested in pill and powder testing.

Volunteering for ANKORS harm reduction activities:

<http://www.ankorsvolunteer.com>

Information on:

- volunteer positions and requirements
- statistics and media
- training tools and videos

Excellent Internet Resources:

Erowid <https://www.erowid.org/>

Most comprehensive source of information on psychoactive substances including plants and drugs, cognitive freedom and the law, arts and culture and trip reports.

TRIP! Project <http://www.tripproject.ca/trip/>

Information on drugs, safer partying, sex information, blog and testing kits.

DanceSafe <http://www.dancesafe.org/>

pill and powder testing <http://www.dancesafe.org/drug-checking/>

Information on drugs, health and safety, drug checking/testing and user forums.

EZ Test <http://www.eztest.com/>

Drug testing kits and instructions, articles and videos about substance use.

European Monitoring Centre for Drugs and Drug Addiction ([EMCDDA](#)):

- Pill Testing information and reports:
<http://www.emcdda.europa.eu/html.cfm/index1577EN.html>
- Inventory of on-site pill-testing interventions in the EU, EMCDDA, 2001 available at
http://www.emcdda.europa.eu/attachements.cfm/att_2878_EN_pill_testing_report.pdf

Quantitative Substance Analysis Methods:

- [High Performance Liquid Chromatography](#) (HPLC)
- [Thin Layer Chromatography](#) (TLC)
- [Gas Chromatography/Mass Spectroscopy](#) (GC/MS)

Other References:

- CTUDS – tobacco use: <http://healthycanadians.gc.ca/science-research-sciences-recherches/data-donnees/ctads-ectad/summary-sommaire-2013-eng.php>
- 12-Colour technical palette used in the figures was obtained from <http://colorbrewer2.org>,
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