Harm Reduction Planning for Live Events
Introduction

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Disclaimer

- Rockdoc is a commercial provider of event medical services, event consulting, event construction safety services, corrections medicine & addictions services
- No remuneration has been received for this presentation
- Promotional Consideration for this presentation
  - Booth @ expo area
  - Advertisement in conference program
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Harm Reduction - Traditional Definition

- Harm reduction is a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use. Harm Reduction is also a movement for social justice built on a belief in, and respect for, the rights of people who use drugs.¹

¹ http://harmreduction.org/about-us/principles-of-harm-reduction/
Is this what we are talking about?
Traditional Harm Reduction Principles

• Accepts, for better and or worse, that licit and illicit drug use is part of our world and chooses to work to minimize its harmful effects rather than simply ignore or condemn them.

• Understands drug use as a complex, multi-faceted phenomenon that encompasses a continuum of behaviors from severe abuse to total abstinence, and acknowledges that some ways of using drugs are clearly safer than others.

• Establishes quality of individual and community life and well-being—not necessarily cessation of all drug use—as the criteria for successful interventions and policies.

• Calls for the non-judgmental, non-coercive provision of services and resources to people who use drugs and the communities in which they live in order to assist them in reducing attendant harm.

• Ensures that drug users and those with a history of drug use routinely have a real voice in the creation of programs and policies designed to serve them.

• Affirms drugs users themselves as the primary agents of reducing the harms of their drug use, and seeks to empower users to share information and support each other in strategies which meet their actual conditions of use.

• Recognizes that the realities of poverty, class, racism, social isolation, past trauma, sex-based discrimination and other social inequalities affect both people’s vulnerability to and capacity for effectively dealing with drug-related harm.

• Does not attempt to minimize or ignore the real and tragic harm and danger associated with licit and illicit drug use.

1 http://harmreduction.org/about-us/principles-of-harm-reduction/
Expanded Practical Definition

- Harm reduction aims to keep people safe and minimize death, disease and injury from high-risk behaviour.²

² [Link](http://www.bccdc.ca/health-professionals/clinical-resources/harm-reduction)
Expanding Substance Use Context

• The Principles of Harm reduction apply all risk taking behaviour
• Can be modified to apply to specific locations and contexts – EVENTS
• Retain key concepts
  • Accept that drug and substance use occurs and endeavour to minimize negative effects
  • A range of behaviours that can result in harm
  • Focus is on the quality of the individual and community experience
  • Non judgement and non coercive
  • Peer involvement and empowerment
  • Provide information and Education
• Recognize real risk of harm and don’t ignore or minimize
Event Harm Reduction Principles

• Accepts, for better and or worse, risk taking behaviour and drug use is part of our world and chooses to work to minimize its harmful effects rather than simply ignore or condemn them.

• Understands risk taking behaviour and drug use as a complex, multi-faceted phenomenon that encompasses a continuum of behaviors from severe abuse to total abstinence, and acknowledges that some ways taking risks of using drugs are clearly safer than others.

• Establishes quality of individual and community life experience and well-being—not necessarily cessation prohibition of all risk taking behaviour and drug use—as the criteria for successful interventions and policies.

• Calls for the non-judgmental, non-coercive provision of services and resources to people who attend events and may use drugs and the communities in which they live at the events they attend in order to assist them in reducing attendant harm.

• Affirms event attendees drugs users themselves as the primary agents of reducing the harms of their drug use, and seeks to empower them to share information and support each other in strategies which meet their actual conditions of use.

• Does not attempt to minimize or ignore the real and tragic harm and danger associated with licit and illicit drug use and risk taking behaviour.

1 http://harmreduction.org/about-us/principles-of-harm-reduction/
Risk Taking Behaviour at Events

• Sense of suspension of usual cultural and community rules and usual norms – “New Normal”
  • Anonymity
  • Contagion – lack of perceived immediate consequences will embolden others
  • Suggestibility combined with Influencers – Initiators and first followers
• Sense of Invincibility of young people – Developmental – Brain Stage “Wiring”
Risk Behaviours

Drug and Alcohol Use

• Promiscuity/Unprotected Sex/Sexual Assault

• Physical Harm risk
  • Stage Diving/Moshing/Other
  • Environmental Exposure
  • Falls

• Poor self care
  • Sleep, Food, Water, Hygiene
Harm Reduction History at Events

• “Trip Tents” at Woodstock in 1969

• In 1972, Bill Graham asked the Haight Ashbury Free Clinics to staff a medical care tent at his Grateful Dead and Led Zeppelin outdoor concerts. That was the start of a vision that was formalized in 1973 by Dr. George "Skip" Gay.
Steps to Harm Reduction at Events Today

- Pre Event Planning
- Site Design
- Messaging – Social Media
- Peer involvement and Safe Spaces
- Drug Testing
- Site Operations
- Emergency and Medical Services
Pre Event Planning

• Harm Reduction starts at the very “beginning”

• Apply the following mindset to all planning activity:
  • “How can I make it safer and lower risk for my guests – Acknowledging that they will participate in high risk behaviours and will use drugs and alcohol”
Pre Event Planning

Define and understand your event and your guests:

• The time and date
• Your timeline for planning
• The venue
• Location
• Attendees/target audience
• Likely activities
• Your budget for medical and harm reduction
Time and Date Selection

- Weather
  - Hot and humid, vs cold and wet
  - Storms/Wind/Lightening
- Long weekend or holiday
  - Don’t have to go to work on Monday morning
  - Early arrivals
- Doors and event duration
- Competing events
  - limiting availability of emergency services
  - Traffic
- Is there enough time to plan and prepare and consider/mitigate risks
Timeline for Planning

• 6 -12 months minimum
• Engage stakeholders and gain support for the principles
• Socialize the concept of harm reduction with all parties
• View every stage of planning with the view “how can I make my event safer for my attendees?”
• Acquire peer support/volunteers to support elements of harm reduction/messaging and info sharing
Venue

- Permanent vs Temporary
- Venue vs. Park vs Streets
- Open vs. Fenced
- Ticketed vs Free
- Size – Max Capacity Defined by the lowest number that you can safely handle in an emergency
- Terrain – trip and fall, slippery, puddles, mud
- Site specific hazards – falls, poison ivy, traffic, etc.
- Water – lakes, rivers, swamps
- Weather risks
Location

- Remote vs Urban
- Micro climates or site specific environmental considerations
- Temporary vs permanent structure
  - Sanitation
  - Drinking water quality, availably and access – Free? Containers allowed
- Access/egress – highway routes,
- Transit impact
- Parking – patrons, parents, cost, distance,
- DUI risk
Target Audience and their Behaviour

• Try to put yourself in their position…or find someone who is/was!

• All ages
  • Transit vs ride share/bike share
  • Pre-loading (no liquor in venue)—also impacted by start finish times
  • Intoxicated minors

• Seniors
  • Trip and fall hazards
  • Mobility
  • Pre-existing health conditions

• Drug of Choice
  • Molly, Acid, Coke, Ketamine, or “Alphabet Soup” or “Trans Fats and Booze”
Likely Activities

• Do attendees need to make it “home” after the show or stay on site?
• Crowd dynamics “mood”
  • Mosh pit, stage diving, fights, sexual behaviours
• Event specific
  • Pemberton Chicken fights
  • Van’s Warped Tour – Skate boarding
  • Event Demonstration/competition – BMX, Jet Ski competitions
Minimize Attendee High Risk participation

• Security for dangerous areas
• Professionalize as demonstration vs. participation
• Lower risk alternatives - ziplines, waterslides
What to Do With Known High Risk Activities

• Moshing
• Chicken Fights
• Prohibit?
• “Professionalize“ and organize?
• Accept?
• Prepare for Carnage?
Wildlife

- Bears, Racoons, and Skunks
- Rattle Snake
- Rave Guy
Site Planning & Design

• Natural Hazards
  • Water, uneven terrain, wildlife
• Fencing Creating Choke Points
• Gates and access limitations – Venue, Camping, Parking, VIP
• Transit & Parking
  • Safety on roads, drop offs and lots
• Attendee Ingress Egress
Site Planning & Design

• Lighting
• Way finding – signage
• Info desk, lost and found, ambassadors, briefing all staff on site layout
• Water stations & food vendors
• Alternate viewing sites
• Shade
• Showers, hand washing, hand sanitizer
• Locations of services
• Emergency plans
  • Natural disasters, terror attacks, stage collapse
Messaging/Social

• Proactive messaging
  • Weather, environmental risks, preparatory/preventive
• Monitoring for chatter to direct security efforts
• Monitor Social– promote positive and watch for negative
• On event messaging – Event App, Message Boards, Social
  • Feed from medical, security, weather, traffic
  • PA delivered by a voice that will resonate and be heard

• Don’t depend only on electronic messaging – dead batteries
• Repetition - just cause you said it once, doesn’t mean it has been heard or listened to!
Woodstock ‘69 Harm Reduction Messaging!
On Site Operations

• Doors/Curfew
  • Consider line ups and crowd flows

• Event Attitude – Set the tone in advance with messaging and then follow through

• Security and Police Posture
  • Cooperation and agreement on handling of intoxicated patrons, minors, sexual assaults
  • Visibility of security & patrols
  • Safety Ambassadors – Peers, Volunteers, Info “Ask Me”

• Surveillance Cameras
Walking the site

- Get out in the crowd to “feel the crowd”
  - Mood
  - Level of intoxication
  - Temperature and exposure
  - Bathroom lines
- Do it frequently
- Use all available information to adjust programming if patrons are at risk
Programming

- Rest time between popular sets
- Quiet times
- Alternative programming
  - Art exhibits, comedy, nature walks/retreats
  - Yoga
  - AA meetings
- Alternative viewing options vs. crowded stage front
- Minimize “extreme activities”
Peer Involvement

• Volunteer Ambassadors – Info, messaging
• Safety Ambassadors/Safe Spaces
• Support Peer Groups – Karmik, Dance Safe, Party Safe, RockMed
• Culture of Community – Look after each other
Safe Spaces

• Accessible and Visible
• Low Barriers
  • No Violence, No exploitation, No drug Use
  • Avoid appearance of “Authority”
• Peer Led
• Security Plan for Violence or Exploitation
• Medical Oversight
• Two-Way referral with Medical
Opiate Crisis

- Few if any Opiate intoxications at EDM despite widespread drug usage
- Few in general at music events - still a risk
- Concern about accidental
- Numerous artists have died with opiate intoxication as a factor
Naloxone (Narcan)

- Naloxone is a medication that reverses the effects of an overdose from opioids.
- Medical Responder teams should have Naloxone Reversal Kits
- Remember Treatment of Opiate Intoxication is about AIRWAY and BREATHING !!!
History Of Drug Testing at Music Events

• 1992: the Netherlands developed the Drug Information and Monitoring System (DIMS) for pill and powder testing, information provision.
  • Lab-quality purity testing using chromatography techniques
  • Conducted in offsite laboratories and later on-site using mobile labs.
• 1999: DanceSafe starts selling test kits, starts accepting pill samples by mail for GC-MS analysis (now: ecstasydata.org, managed by Erowid)
• 2000’s: organizations such as DanceSafe, TRIP! Project, MindBodyLove, Island Kids, ANKORS, Calgary PartySafe, Bunk Police, and GRIP formed
  • Implemented harm reduction strategies for party and festival-goers across North America
  • Provide drug checking services at some of these events.
• 2001: the European Monitoring Centre for Drugs and Drug Addiction conducted a comprehensive inventory of on-site pill-testing interventions in the European Union
• 2003: ANKORS began providing drug testing services at the Shambhala Music Festival
Pill-testing

- On-site offering by some music festivals
  - ie: Shambhala, Nelson BC
- Individuals may purchase testing kits/supplies to do it themselves
- Mail-in testing services using GC-MS
  - ie: ecstasydata.org
Test Kits
(well, some of them...)
Dancesafe.org

• Standard Set Of 4 Testing Kits = $65.00 USD
  • Includes Mandelin, Mecke, Marquis and Folin reagents

• Complete Set Of All 7 Testing Kits = $95.00 USD
  • Includes Mandelin, Mecke, Marquis, Folin, Froehde, Liebermann and Ehrlich’s Reagents.
Reagents

- **Marquis** – formaldehyde and concentrated sulfuric acid
  - Primary test for MDMA/Ecstasy

- **Mecke** – selenous acid and concentrated sulfuric acid

- **Mandelin** – ammonium metavanadate and concentrated sulfuric acid
  - Primary used for the detection of ketamine and PMA

- **Folin’s** - sodium 1,2-naphthoquinone-4-sulfonate
  - used with a secondary reagent to distinguish MDMA and related compounds from PMMA and related compounds

- **Froehde** – molybdic acid and sulfuric acid

- **Liebermann** – potassium nitrite and sulfuric acid
  - used to test for cocaine, morphine, PMA and PMMA

- **Ehrlich’s** – p-dimethylaminobenzaldehyde (DMAB) in ethanol and hydrochloric acid.
  - Identifies possible psychoactive compounds such as tryptamine (ie: DMT) and ergoloids (ie: LSD)
  - **Fun fact!** Developed by Paul Ehrlich in 1881 and originally used as a urine test which could distinguish various types of typhoid from simple cases of diarrhea
Prices range from €2,69 for single-use tests to €49,71 for cocaine purity multi-test kits (+ shipping to Canada)
www.bunkpolice.com

- Single reagent spot-test kits
- Multi-reagent spot-test kits
- “Seperation Kit”
  - DIY thin layer chromatography
  - Designed to separate mixed samples BEFORE testing them with Spot Test Kits
  - Even more steps, equipment, time, and interpretation required than spot-testing kits
Pros and Cons of Test Kits
Test kits: The Good...

- Simple rule in/out process:
  - may result in discarding of misrepresented product

At Shambhala in 2013:
  - Total tests done: 2,254
  - Number of drugs disposed of after the test: 155 (6.8%)

- Organized testing services (ie: booths at music festivals): may act as an early detection system for adulterated products

- Increased awareness, opportunity for education and harm-reduction
## Test Kits: The bad...or unknowns

<table>
<thead>
<tr>
<th>Human or Environmental Factors:</th>
<th>Test-related Factors:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Inter-individual differences in color interpretation</td>
<td>• Complex multi-step process</td>
</tr>
<tr>
<td>• Influence of drugs/alcohol</td>
<td>• Cannot test for carfentanil, W-18... others?</td>
</tr>
<tr>
<td>• May be hesitant to “waste” drug on the testing process</td>
<td>• Qualitative only (EZ-test sells semi-quantitative tests... reliability?)</td>
</tr>
<tr>
<td>• False sense of security – MDMA is the “safe” drug, trust in accuracy of test results</td>
<td>• False positives/False negatives</td>
</tr>
<tr>
<td>• Requires pre-planning (shipping from US or Europe, time required to test samples)</td>
<td>• Differences in color response due to varying drug concentrations or salt forms.</td>
</tr>
<tr>
<td>• Expensive</td>
<td>• Predominant color change may mask color change from other substances, leaving them unidentified</td>
</tr>
<tr>
<td>• Poor lighting</td>
<td></td>
</tr>
</tbody>
</table>
Legal Gray Areas...

• Test kits are legal to buy and possess
  • But the drugs aren’t!

• Canadian legal system
  • Testers (even when testing for someone else) risk being “in possession” or “aiding and abetting” drug use
    • Most organizations that practice drug checking do not touch the substance themselves.
How accurate are these tests??
- **Part 1:** 39 tablets of “MDMA” from the Alachua County Sheriff’s office and Forensic Toxicology Lab at the U of Florida
- Each sample tested by 3 chemists, using **DanceSafe** reagents
- Results compared to GC-MS analysis
- **Results:**
  - Accurately ruled in/out presence of MDMA
    - Analyst 1 = 35/35 positive, 3/4 negative + 1 false positive
    - Analysts 2 + 3 = 35/35 positive + 4/4 negative
  - Test kit **did not identify any adulterants**, present in 7 of the samples
    - Amphetamine, ephedrine, PMMA, diazepam, caffeine
- **Part 2:** 8 known substances (including 2 MDMA samples)
- Each tested for presence of MDMA by 2 analysts using DanceSafe reagent kit (Pharm/Tox professionals but inexperienced in use of the test kit)
- **Conclusion:** “DanceSafe Complete Adulterant Screening Kit is inadequate for identifying MDMA in the hands of inexperienced users.”

<table>
<thead>
<tr>
<th>Drug</th>
<th>Tester A</th>
<th>Tester B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codeine</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Dihydrocodeine</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>d-Norpropoxyphene</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dextromethorphan</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Ketamine</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>MDMA</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Morphine</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
• Pill testing booth set up at an Australian rave
  • 84 samples tested with Marquis and Mandelin reagents, results interpreted by harm-reduction volunteer
  • Results compared to GS-MS analysis
• Results:
  • 100% correctly identified products containing ecstasy type drugs (MDMA, MDA, MDEA) and amphetamines/methylamphetamines
  • Only 18% (4 of 22 pills) correctly identified as containing ketamine
  • Only 11% (2 of 19 pills) correctly identified as containing multiple substances (excluding caffeine)
Conclusion: Test kits may provide a false sense of security by only identifying MDMA and similar substances, while failing to detect the presence of additional illicit drugs.
Other services

http://www.ecstasydata.org

- Independent laboratory pill testing program run by Erowid
- Can mail in sample for GC/MS analysis
- Results in 2-3 weeks (more if from outside the US) - Results posted online
- USD Cash payment:
  - Pressed ecstasy tablets = $40
  - Other ecstasy or research chemical samples = $100
  - Pharmaceutical tablets and herbal supplements = $150
Results from www.ecstacydata.org

<table>
<thead>
<tr>
<th>Sample Name</th>
<th>Status</th>
<th>Result</th>
<th>Ratio</th>
<th>Data Published</th>
<th>Notes</th>
<th>Location</th>
</tr>
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<tbody>
<tr>
<td>336a Elexis</td>
<td>✅</td>
<td>METH</td>
<td>✅</td>
<td>Jan 21, 2013</td>
<td>1</td>
<td>Quebec, MB, Canada</td>
</tr>
<tr>
<td>L260h Catd</td>
<td>✅</td>
<td>MDAH</td>
<td>✅</td>
<td>Jan 21, 2013</td>
<td>1</td>
<td>Calgary, AB, Canada</td>
</tr>
<tr>
<td>NS16h Catd</td>
<td>✅</td>
<td>MDAH</td>
<td>✅</td>
<td>Jan 18, 2013</td>
<td>1</td>
<td>Calgary, AB, Canada</td>
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<tr>
<td>NS16h Fynda</td>
<td>✅</td>
<td>Ethylene</td>
<td>✅</td>
<td>Jan 18, 2013</td>
<td>1</td>
<td>Vancouver, BC, Canada</td>
</tr>
<tr>
<td>Redlands Bean</td>
<td>✅</td>
<td>SF/</td>
<td>✅</td>
<td>Aug 17, 2014</td>
<td>1</td>
<td>Tul-Athabasca, AB, Canada</td>
</tr>
<tr>
<td>Redlands Bean</td>
<td>✅</td>
<td>SF/</td>
<td>✅</td>
<td>Aug 17, 2014</td>
<td>1</td>
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</table>
True Content of samples sold as “ecstasy”

** “Not necessarily representative of what is available in the underground markets. Most tablets were voluntarily submitted by harm reduction workers or individuals and the data will naturally have unknowable sampling biases.” **
Conclusion

• Testing: A good idea... in theory.
  • Current methods are inaccurate, expensive and prone to user error

• From the Canadian Center on Drug Abuse document: Preventing Drug- and Alcohol-related Harms at Music Festivals in Canada:
  “The value of drug checking is vastly diminished if not paired with appropriate education and messaging to highlight limitations, give context to test results and deliver appropriate messages about substance use.”
Medical and Emergency Service

• First Aid Posts
• Layered Response
• Capabilities of Main Medical
• Experience of Medical Team with “Event Medicine”
• Transport Considerations
  • Ambulances
  • Receiving Hospital
• Non Judgmental – Goal to safely return as many as possible to the event
Harm Reduction – Shared Responsibility

- Stakeholders
- Event Producers
- Security/Medical/Police
  - “Red ambulance vs Blue ambulance”
- Outdated concepts like – ‘Teaching a “Lesson”’ to be avoided
- Educate Event Attendees - Look after Each other
  - Always have a “wing-man”
  - Meeting places – “dead battery plan”
  - Good Samaritan-community responsibility
Case 1 - What risks do you see with this:

- All Ages EDM Show
- Opening Act’s New Song has just gone #1
- Doors 1700-Curfew 2330
- Downtown Urban Venue
- Winter
Case 2 - What could go Wrong here?

• 1100 am-1500 pm
• All inclusive Resort – free booze!
• Day 4 of Festival
• Country Music
• Mexican Riviera
  31°C 98% Humidity
Case 3 – Campground “C”

- Semi Remote Rural
- Country Music Festival
- Car-Camping
- Legacy of Debauchery
- Extreme Heat
- Uneven Terrain
- Moving Water
Case 4 – Know Your Crowd

- Outdoor Beach Festival Ground
- Shuttle Buses 1 km walk
- Average Age 55 (infant- 87 yrs)
- Hot days, Warm nights
- 2 x 2+ hour sets
- VIP Package Show/Wealthy Demo
- Lots of LSD
Summary – Always Use Appropriate Safety Equipment
Always Plan Ahead...
Problems/Issues with Harm Reduction

This should be obvious that we are trying to reduce the harm on our guests!

• Lack of forethought or planning
• Cost/investment
• Police & lack of understanding or willingness to embrace Harm Reduction
• Producers/Lawyers fear of liability
• Public Relations concerns – condoning drug use, negative perception of the event
• Lack of peer trust/belief
Take Away message

• Harm reduction aims to keep people safe and minimize death, disease and injury from high-risk behaviour.²

• At every step ask yourself “how can I make it safer and lower risk for my guests – Acknowledging that they will participate in high risk behaviours and will use drugs and alcohol”
Questions?