

# Newsletter

Helping people navigate healthcare.



First  
Edition

## Monthly Newsletter

Thank you for reading our first edition of the Rockdoc newsletter. Rockdoc will now produce a monthly newsletter which will feature key topics occurring in the medical industry, highlight previous Rockdoc events, showcase our volunteers, feature one “Rock Star” who has gone above and beyond his or her volunteer duties, announce our social media winner and inform all our readers about upcoming Rockdoc events. We hope you will enjoy our monthly newsletter. Happy reading!



## In This Issue

What Happens When The Music Stops..... Page 1

Featured Rock Star..... Page 2

Social Media Winner & Updates..... Page 3

Upcoming Events.....Page 4



Dr. Sam Gutman addressing a group of students at night with the MGM Interest Group”.



## What Happens When The Music Stops?

Q & A with Dr. Sam Gutman, The Rockdoc, about Ecstasy (MDMA) and Raves.



### What does “MDMA Intoxication or Overdose” look like?

MDMA increases alertness, reduces fatigue, and leads to feelings of increased physical and mental powers, and euphoria. Users typically begin to experience the desired effects of MDMA approximately one hour following oral administration. Minor adverse reactions such as agitation, nausea, bruxism (grinding teeth), ataxia, diaphoresis, blurry vision, tachycardia, and hypertension can also occur at typical MDMA doses.

### Are there Serious Side Effects?

MDMA can cause hypertension, tachycardia, and hyperthermia and a lot of other problems. I break it down by body system.

**Cardiovascular**— Life-threatening increases in heart rate and blood pressure can occur. Cardiovascular toxicity can include high blood pressure, intracranial bleeding, myocardial infarction (heart attack), aortic dissection, and cardiac dysrhythmia.

**Hyperthermia**— Hyperthermia (elevated core body temperature) may result from drug effects on the central nervous system, prolonged physical exertion (eg, dancing all night and environmental conditions eg, dancing in a densely populated, hot room). Hyperthermia can lead to DIC (abnormal clotting) and rhabdomyolysis (break down of muscle tissue leading to kidney failure).

**Hyponatremia** — Users of MDMA experience an elevation in antidiuretic hormone levels, which may cause hyponatremia and hypoosmolality (abnormal dilution of the salts in the serum). Also, some MDMA users believe they can avoid hyperthermia by drinking large amounts of water but the repletion of volume losses with free water (too much water without any electrolytes) can itself lead to hyponatremia.

**Seizures, cerebral edema (brain swelling), cerebral herniation, and death** have been reported as a result of hyponatremia and hypoosmolality.

**Neurologic** — Stimulation of the CNS is common and can manifest as agitation, hyperactivity, anxiety, and even delirium. Seizures and status epilepticus (intractable seizures) can occur.

**Serotonin syndrome findings** — Serotonin syndrome is a potentially life-threatening condition characterized by the triad of autonomic nervous system dysfunction, abnormal neuromuscular activity, and altered mental status.

### What type of medical treatment/interventions happen when a patient intoxicated with Ecstasy is taken to hospital ER?

The general approach to any poisoned patient always begins with the ABCs.

**Airway** — MDMA toxicity frequently leads to obtundation (coma) to a degree that necessitates endotracheal intubation (putting a breathing tube into the throat) to protect the airway and prevent asphyxiation and or aspiration.

**Breathing** — Abnormalities of oxygenation are not expected and should prompt consideration of another diagnosis or a separate concurrent problem (such as aspiration).

**Circulation** — Severe hypertension (high blood pressure) can occur. Benzodiazepines such as lorazepam (Ativan) or diazepam (Valium) are the mainstay of treatment. Indiscriminate fluid resuscitation should be avoided, as it may cause or exacerbate hyponatremia.

**Gastrointestinal decontamination** — For a recent ingestion (ie, less than one hour) of MDMA, a single dose of activated charcoal should be administered.

### MDMA or Stimulant specific Considerations

**Cardiac effects** — Tachycardia alone, rarely requires treatment. Other cardiac arrhythmias are managed according to current advanced cardiac life support (ACLS) protocols. Since MDMA can lead to cardiac ischemia (heart attack). An electrocardiogram (ECG) should be obtained in all patients.

**Psychomotor agitation** — Benzodiazepines are again very effective for this purpose. Very high doses may be required. Minimizing stimuli, such as light and noise, is helpful. Physical restraint should be avoided, if possible, and should only be used until the patient can be chemically sedated. Antipsychotic agents are not indicated and may exacerbate hyperthermia and rhabdomyolysis.

**Hyperthermia** — An accurate core body temperature should be obtained. Severe hyperthermia (temperature >41°C) can be managed by immersion in an ice bath. (Continued on page 4)

## Featured Rock Star: Ryan Casselman



Ryan Casselman (left) pictured with Rockdoc's Director of Production and Strategic Planning, Jordan Myers (right),

Ryan is a full-time student in the Advanced Care Paramedic (ACP) program at The Justice Institute of BC and is one of Rockdoc's rock stars. Ryan joined the Rockdoc team in 2008 after he noticed the Rockdoc tent at the Sam Roberts Concert in Dear Lake Park. After speaking with Dr. Sam, realizing the opportunities, experience and fun to be had with Rockdoc, Ryan jumped on the opportunity and has not looked back. His most memorable experience with Rockdoc was the 2010 Winter Olympics, Live City event. Alexis on Fire was on stage and the barrier collapsed right in front of Ryan and a few other team members; almost crushing his toes. Ryan was right in the action and was able to aid and care for several people who had been injured. Ryan said that if he could have one superpower it would be to, "run really, really, fast!" Now you might be wondering why he would want this power? Here's why: So he could out run danger, chase down bad guys, never be late (unless he wanted to be), always win a foot race, kick a ninja in the back, then run away safely, justifiably wear "flashy track suits," and run up on people and surprise them, often. Thank you Ryan, for being such a fantastic volunteer and being a Rockdoc rock star!

## Social Media Winner

CONGRATULATIONS!!

Congratulations Donna Tagabi who was our social media winner of the month!

Donna has won a custom made Rockdoc scrub shirt, simply because she "likes" us on Facebook! To be eligible to win the social media prize persons must "like" us on Facebook, and "follow" us on Twitter, Instagram or LinkedIn. If you have an account on all four, your name is entered in the draw four times! Once again, thank you for your support Donna, and congratulations!!

## Rockdoc on Social Media



Be sure to "Like" us on Facebook, and LinkedIn (Rockdoc Consulting Inc.), and "Follow" us on Twitter, Instagram (@Rockdoconline) for up-to-date information, priority registration for events, and Motivational Monday's, Where's Rockdoc Wednesday's, plus featured rockstars and much much more. Stay in the loop with Rockdoc via social media.

(From page 1)

Moderate hyperthermia should be treated with other cooling measures, including cooling blankets and the combination of cool water mist with fanning.

Hyponatremia and seizures — Hyponatremia is managed by fluid restriction and usually resolves in 12-24 hrs, unless the patient is hypovolemic.

Seizures are treated with benzodiazepines and (if necessary) appropriate correction of the patient’s serum sodium with close monitoring, to avoid overly rapid correction, which can induce osmotic demyelination syndrome (brain damage).

Disposition — Patients with severe toxicity should be managed in an intensive care setting. Patients with mild symptoms and no evidence of end-organ damage may be discharged awfter their symptoms resolve, usually within six to eight hours.

### An opportunity for you to participate in groundbreaking MGM RESEARCH



The MGM Interest Group would like to invite members of Rockdoc to participate in a quick research project which will help us validate the Triage & Discharge Acuity Tool.

Having a common triage system designed for mass gatherings has the potential to allow for comparison of patient acuities between the world’s MGM research community, something never done before.

- interested participants will complete an online, self-directed teaching session, followed by a 30 question post-test (approximately 40 minutes of time in total)
- the first 25 participants from each category will receive a \$10 Tim Horton’s or Starbucks gift card (nurse, physician, pre-hospital, allied providers)

If you are interested in participating in this unique MGM initiative, email Kerrie Lewis directly at [kerrie@ubcmgm.ca](mailto:kerrie@ubcmgm.ca) to register.

The MGM Interest Group is hoping to present the findings of this study at the 18<sup>th</sup> World Congress on Disaster and Emergency Medicine in Manchester this May.



## Upcoming Events

### December



Contact Winter Music Festival  
December 26th, 2012  
Location: BC Place  
Registration: FULL

\*The Winter Contact Music Festival was filled with volunteers just two hours after it was released. This Boxing Day internationally acclaimed artists Deadmau5, Nero and Alesso will be taking to the stage in the biggest electronic dance music event in the history of western Canada. 12,000 attendees will take over the floor of BC Place in what is sure to be an epic night of music and fun. Rockdoc will be providing medical services for this incredible event in conjunction with BC Place staff and the BC Ambulance Service. We have 30+ fantastic nurses, EMRs and MDs coming out to keep the concert goers safe, can’t wait to see you all on Dec 26th!

