

# Burning Man 2011

Delivering Medical Services to a Mass Event in a Remote Location



Pat Songer, NREMT-P, Chief Humboldt General Hospital Ambulance/Rescue

Who we are:

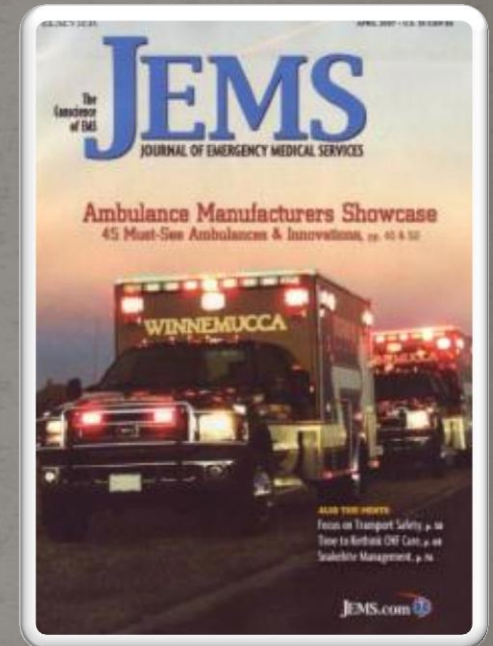


Who we are:

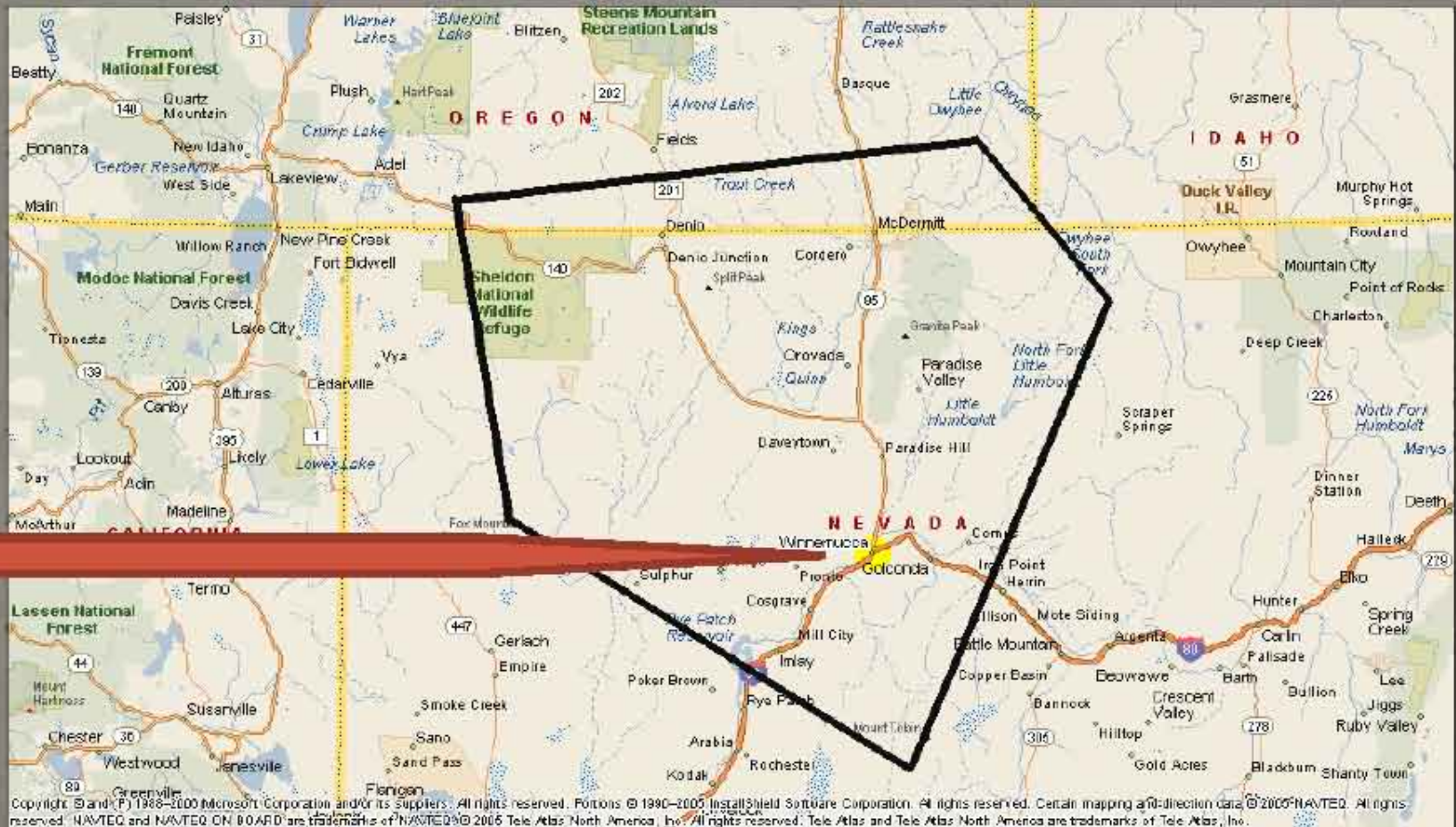


# Humboldt General Hospital EMS/Rescue

- ALS 911 Ambulance Service
- Critical Care Ground Transport
- Heavy Rescue Service
- TEMS Team
- SORT Team
- Fulltime Education Department
- Ambulance Disaster Network Provider
- Hazmat Response Team
- Community Paramedicine Department



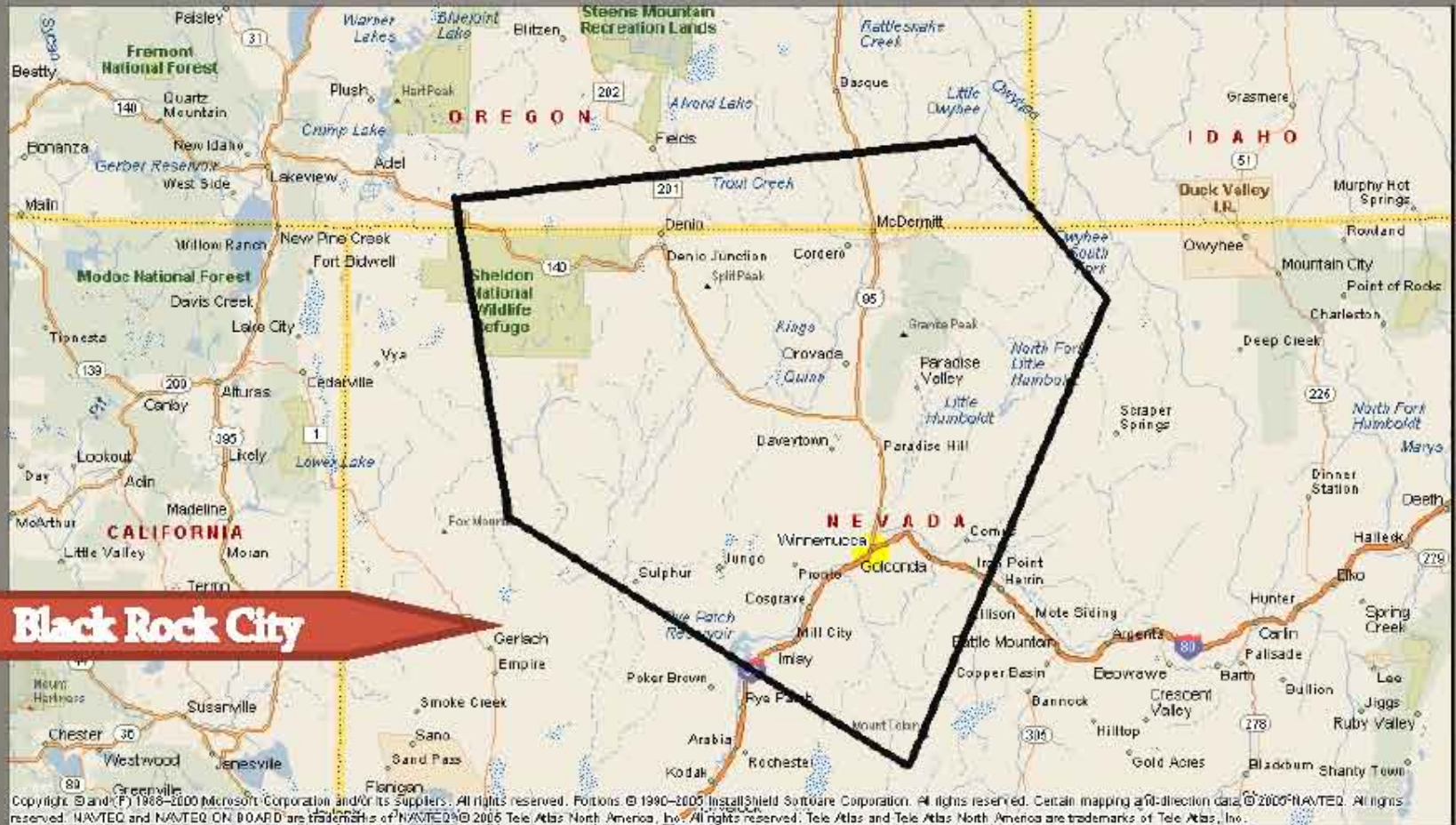
# Where we are:



# Humboldt General Hospital Black Rock City Emergency Services *Partnership*



# Where is Burning Man?

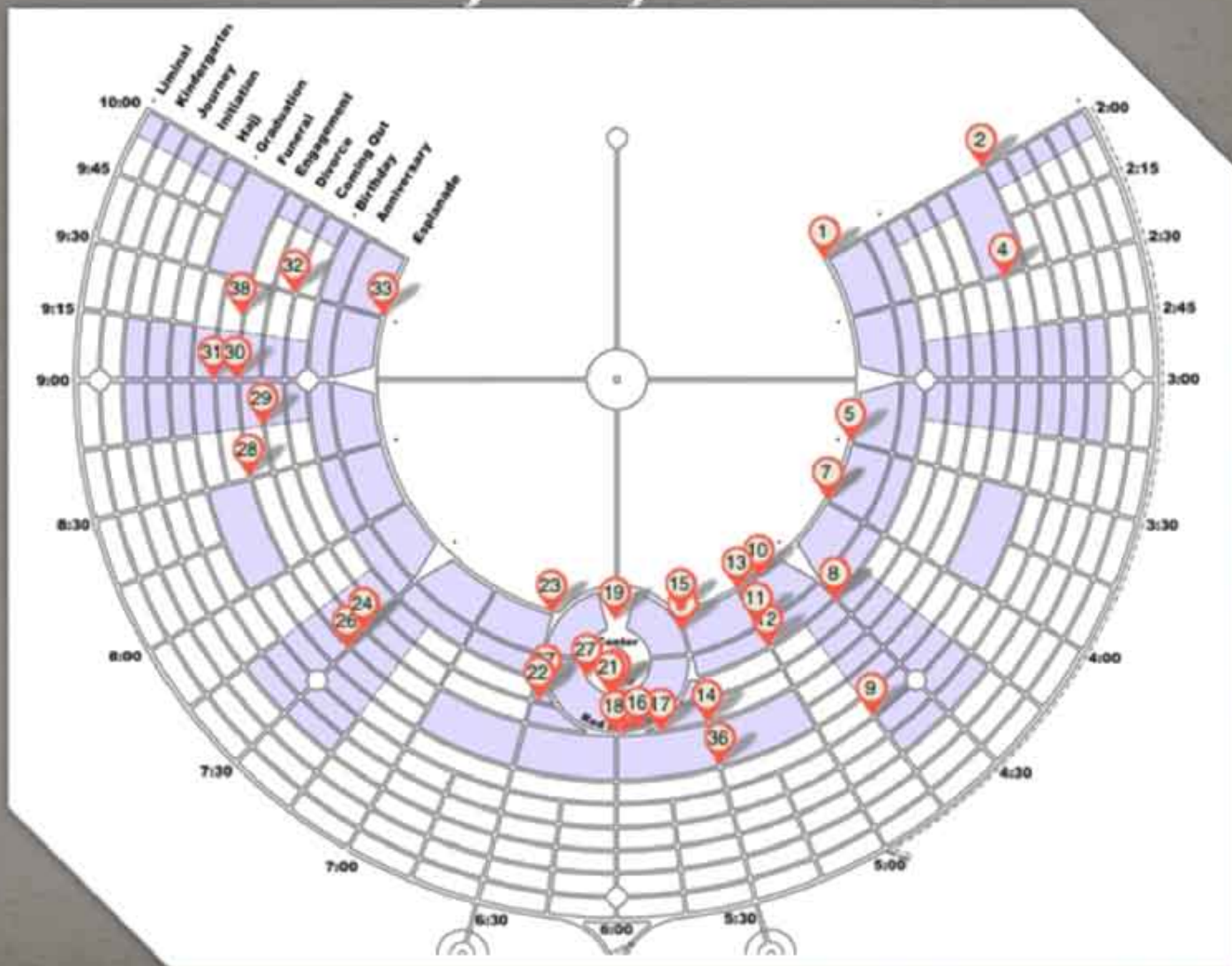


# Where is Burning Man?

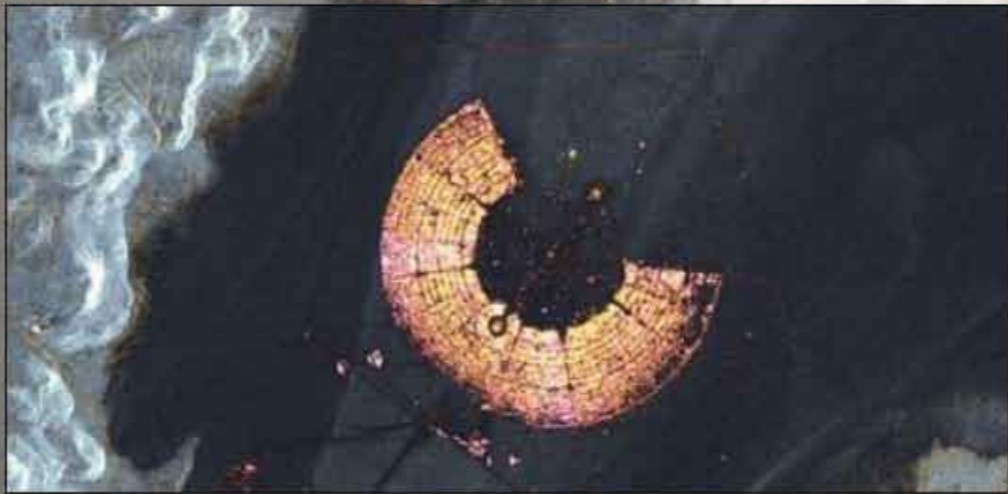




# Black Rock City Layout



# Black Rock City



# Black Rock City



*3<sup>rd</sup> Largest City in Nevada for 1 week!*

# What is Burning Man?



# What is Burning Man?



# What is Burning Man?

- There are no words to describe Burning Man.
- You have to experience it to understand.



# What is Burning Man?

- Burning Man is radical self-expression.
- Few rules.
- No commercialism (nothing can be bought or sold).
- Strong belief in “Leave no trace” philosophy – strictly enforced.



# What is Burning Man?





# What is Burning Man?



# What is Burning Man?



# What is Burning Man?



# What is Burning Man?



# What is Burning Man?



# What is Burning Man?



# What is Burning Man?



# What is Burning Man?





# What is Burning Man?



# What is Burning Man?



# What is Burning Man?



# What is Burning Man?



# What is Burning Man?



# What is Burning Man?



*Woodstock meets Road Warrior*

# What is Burning Man?



# What is Burning Man?





# What is Burning Man?



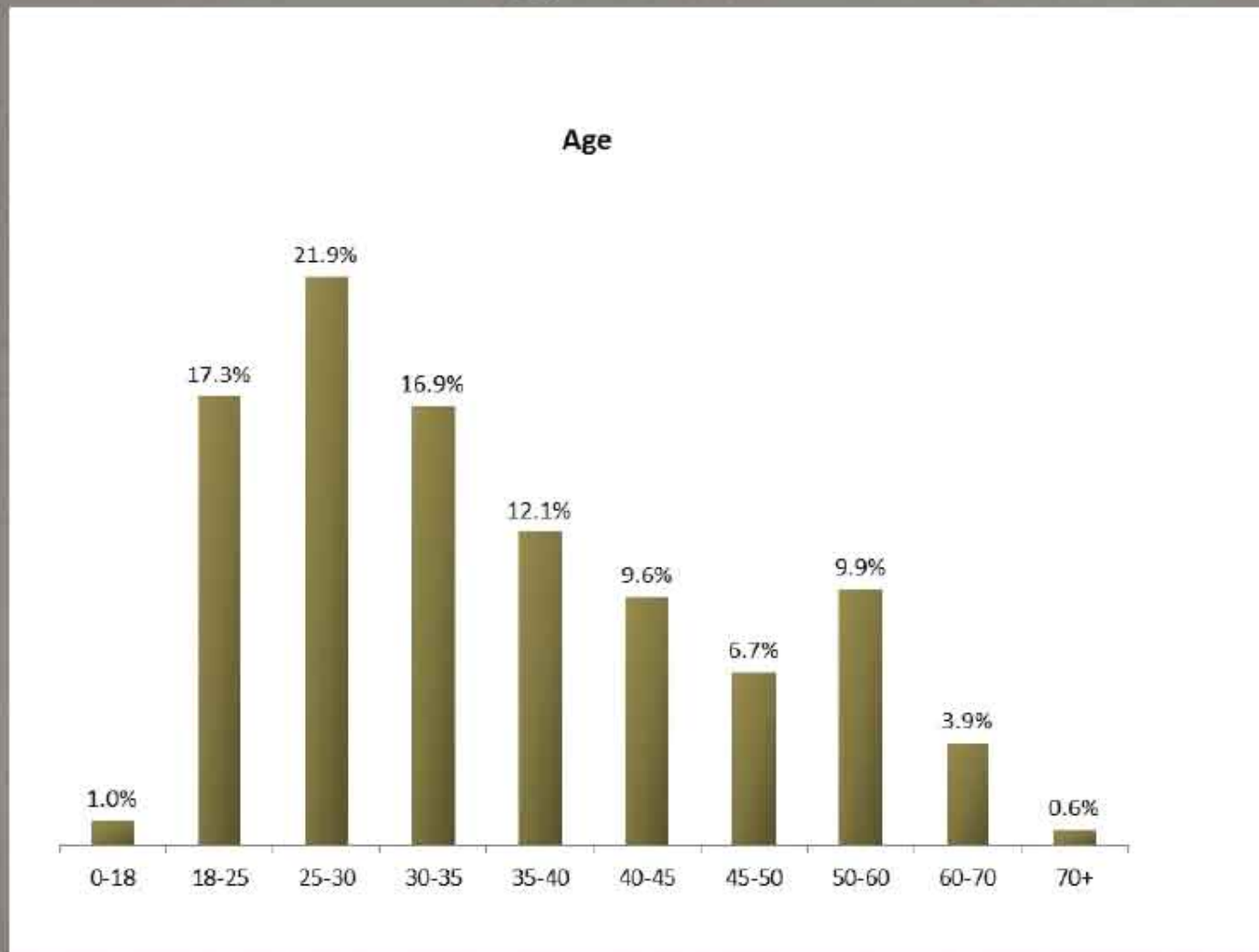
# What is Burning Man?



# What is Burning Man?

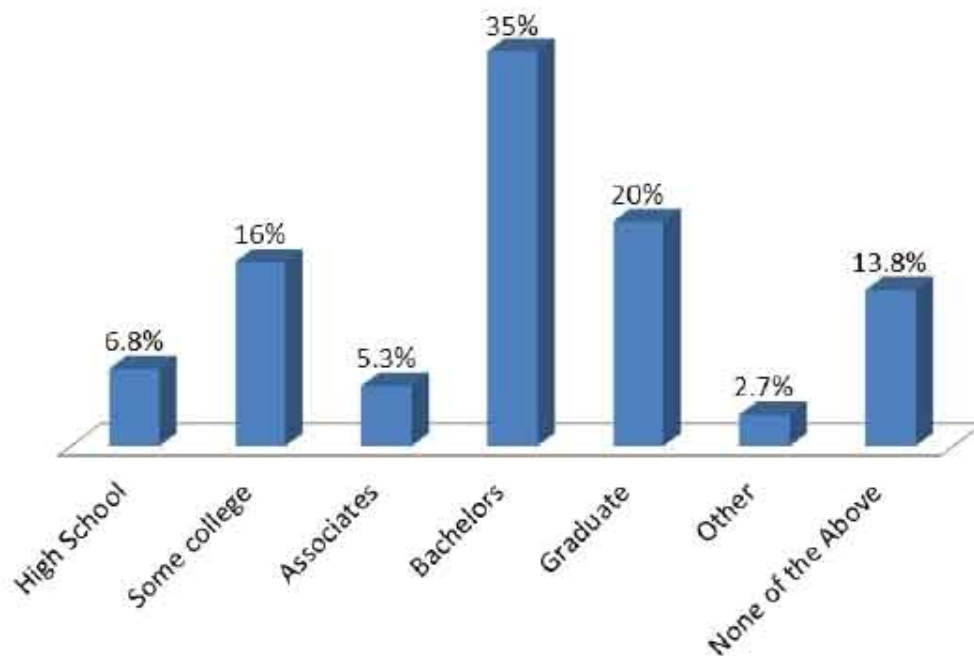


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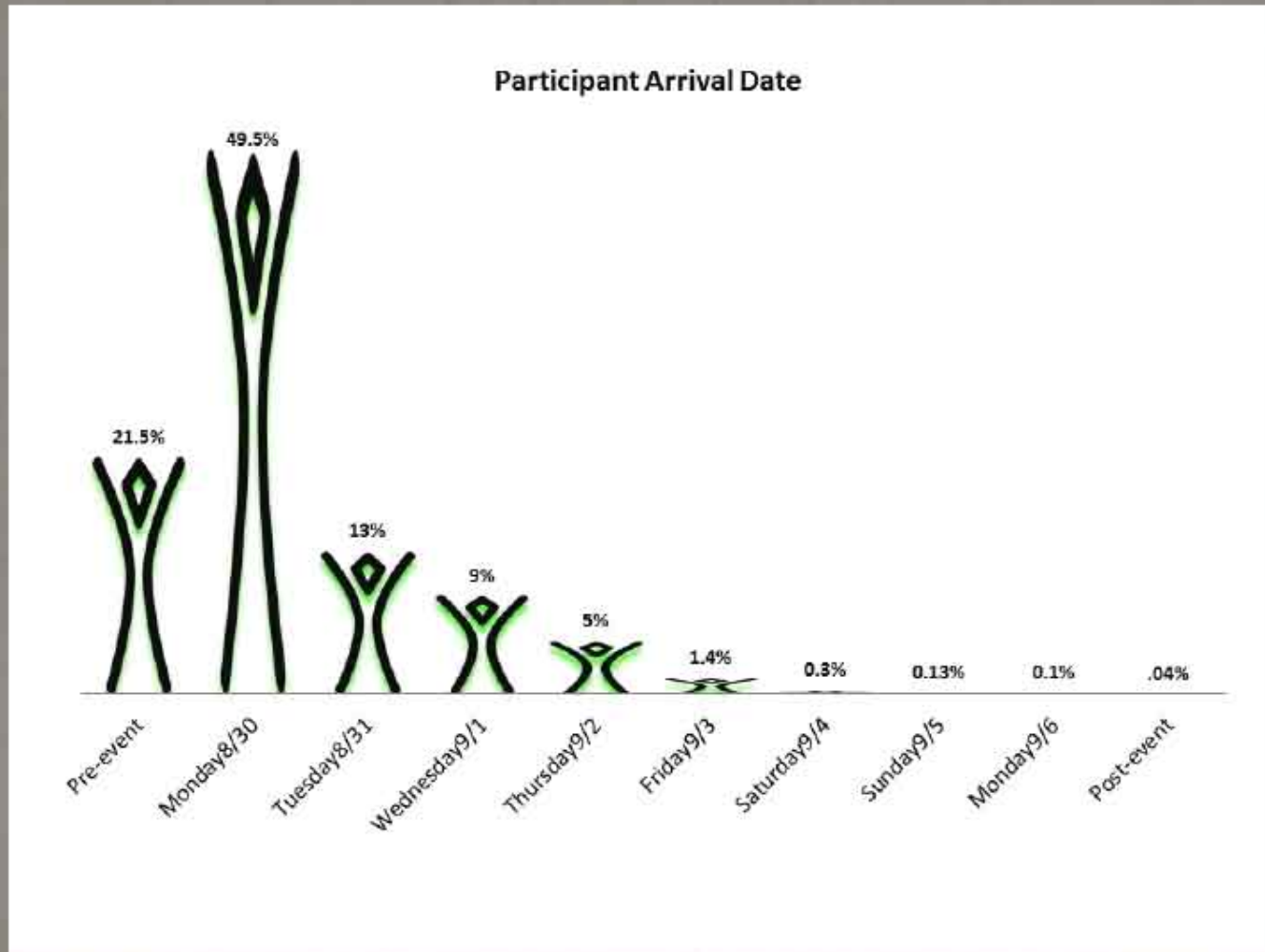


# What is Burning Man?

Highest level of education completed

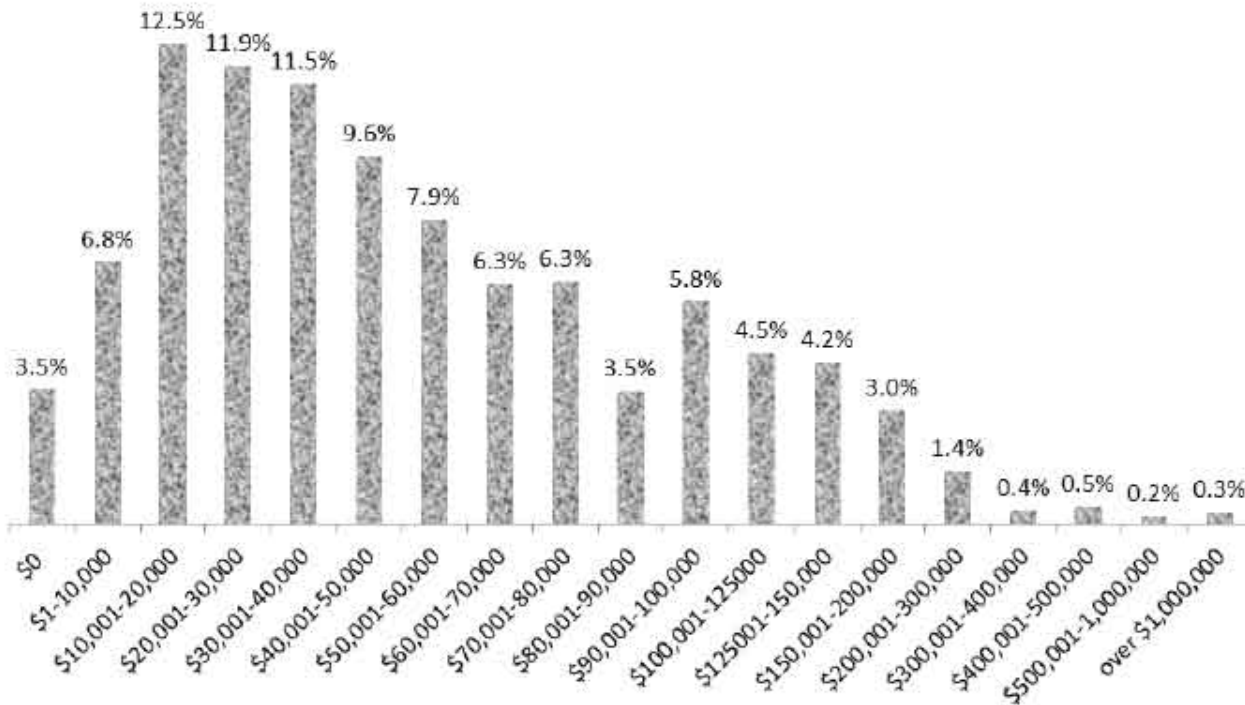


# What is Burning Man?



# What is Burning Man?

Percentage of respondents with annual income in range



# What is Burning Man?





# What is Burning Man?



<http://www.burningman.com/whatisburningman/>

# Environment

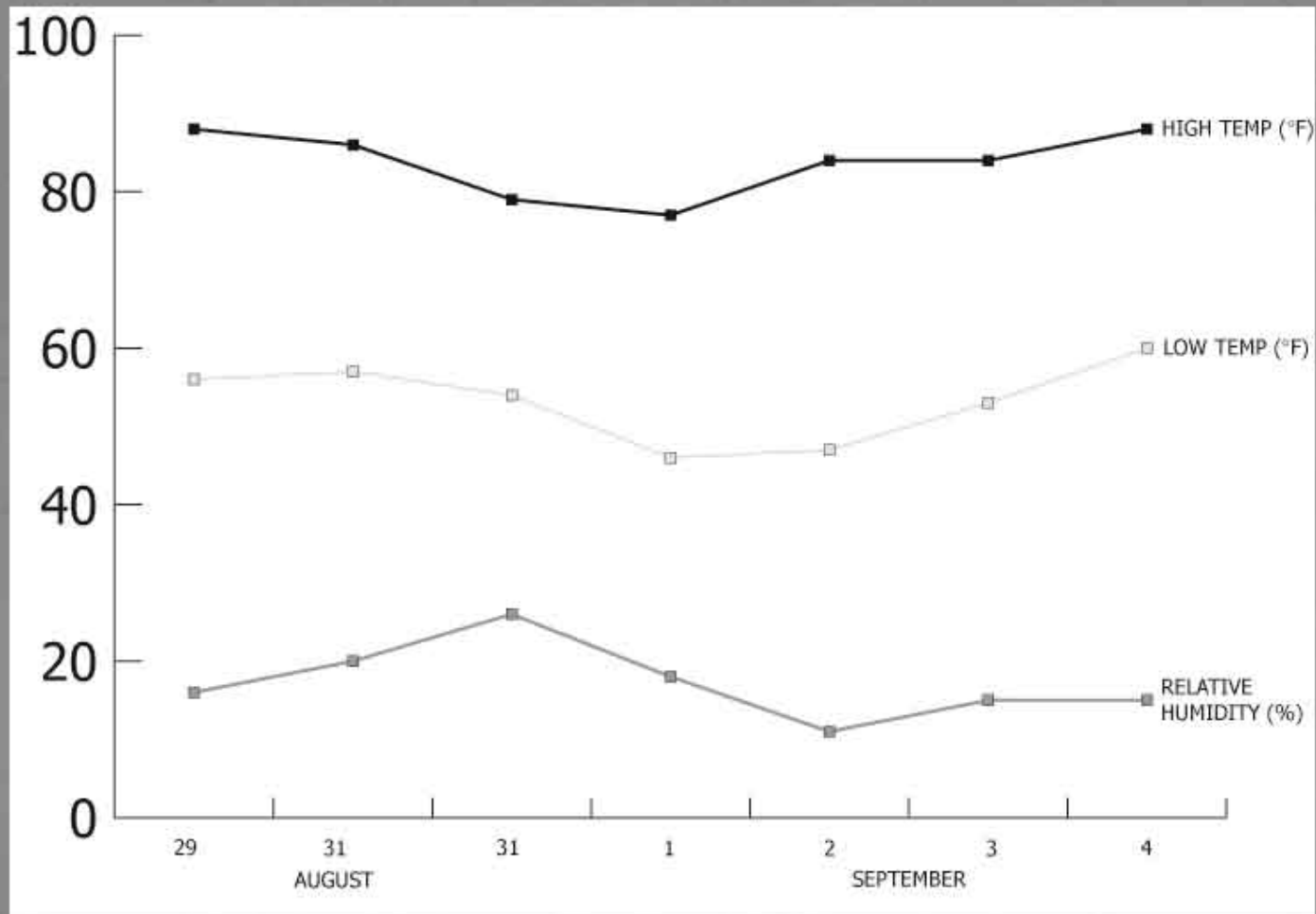
- High Desert.
- Part of the Great Basin Desert System.
- Sand fine and very alkaline (pH=10.0)
- Extremely dry.
- Significant temperature variations.
- No wind barriers.



# Environment



# Environment



# 2011 Stats

- 53,735 attendees.
- Lasts for 7 days.
- Tickets \$300.00 each.
- Sold out 30 days before event started, first time.
- Black Rock City, NV is recognized as a true city despite being present only one week a year.
  - Third largest city in Nevada during event.
- On-site airport with control tower (FAA). Black Rock City – 88NV
- Complete infrastructure:
  - Fire
  - Law Enforcement – NDI, County Sheriffs’ Officers, NHP
  - Black Rock “Rangers”
  - BLM
  - EMS/Medical
  - Public Works
  - DMV
  - Post Office
  - Mental Health Services (Sanctuary)



# Burning Man Preparation

- Intense planning for 9-months – Base Camp Project Board
- Dedicated team worked diligently to make it a success
- Prepared and operated as an MCI vs. mass gathering
  - Entirely different dynamic and operation vs. large concerts, sporting events, etc.
- Have to operate as a fully functioning city for one week during the event and a second week before/after

The screenshot shows a project management dashboard for 'Burning Man Humboldt General Hospital EMS/Rescue'. The interface includes a navigation bar with tabs for Overview, Messages, To-Do, Calendar, Worksheets, Tasks, and Files. The main content area features a 'Project overview & activity' section with a calendar view for the week of March 16-22, 2015. A yellow highlight on Wednesday, March 18, indicates a 'Contractors Meeting Reno'. Below the calendar, a list of tasks is displayed, including 'supply bin system' assigned to Tony S., 'Recruitment' tasks assigned to Pat S. and Bryan S., and 'Order 5 more of the radio harness' assigned to Tony S. The right sidebar contains the HGH EMS Rescue logo, a subscription status for a daily email digest, and a list of project team members with their last activity dates.

Back to Dashboard | Switch to a different project

Project Settings | Help | Logout

## Burning Man Humboldt General Hospital EMS/Rescue

Overview | Messages | To-Do | Calendar | Worksheets | Tasks | Files | People & Permissions | Search

### Project overview & activity

NEW MESSAGE | NEW TO-DO LIST | NEW EVENT | NEW FILE

Mon	Tue	Wed	Thu	Fri	Sat	Sun
16	17	<b>Today 18</b> Contractors Meeting Reno	19	20	21	22
23	24	25	26	27	28	29

[View the full calendar](#)

**MONDAY, 23 MARCH 2015**

- To-do** supply bin system [Task] Assigned to Tony S. | [Message](#) [MSU] | [History](#) [MSU]

**WEDNESDAY, 25 MARCH 2015**

- Calendar** Rec. Recruitment | [Message](#) [MSU] | [History](#) [MSU]
- Calendar** Rec. Recruitment | [Message](#) [MSU] | [History](#) [MSU]
- Message** Recruitment | [Message](#) [MSU] | [History](#) [MSU]

**FRIDAY, 27 MARCH 2015**

- To-do** Order 5 more of the radio harness! [Task] Assigned to Tony S. | [Message](#) [MSU] | [History](#) [MSU]

**THURSDAY, 26 MARCH 2015**

- Message** Application site | [Message](#) [MSU] | [History](#) [MSU]

<https://hghems.humboldtshq.com/d/rooms/1425226/g/rooms> | [Info](#) | [Tools](#)

Completed by **LEAH M.**

**Stay up to date on this project**

You are subscribed to the daily email digest. See details about the digest or [unsubscribe](#).

Project Risk feed (Weekly Report)

#### People on this project

**Humboldt General Hospital EMS/Rescue**

**Pat Songer**  
You are currently signed in

**Ken Whittaker**  
Last active 1 day ago

**Jeff Westin**  
Last active 2 days ago

**Louis Mendola**  
Last active 4 days ago

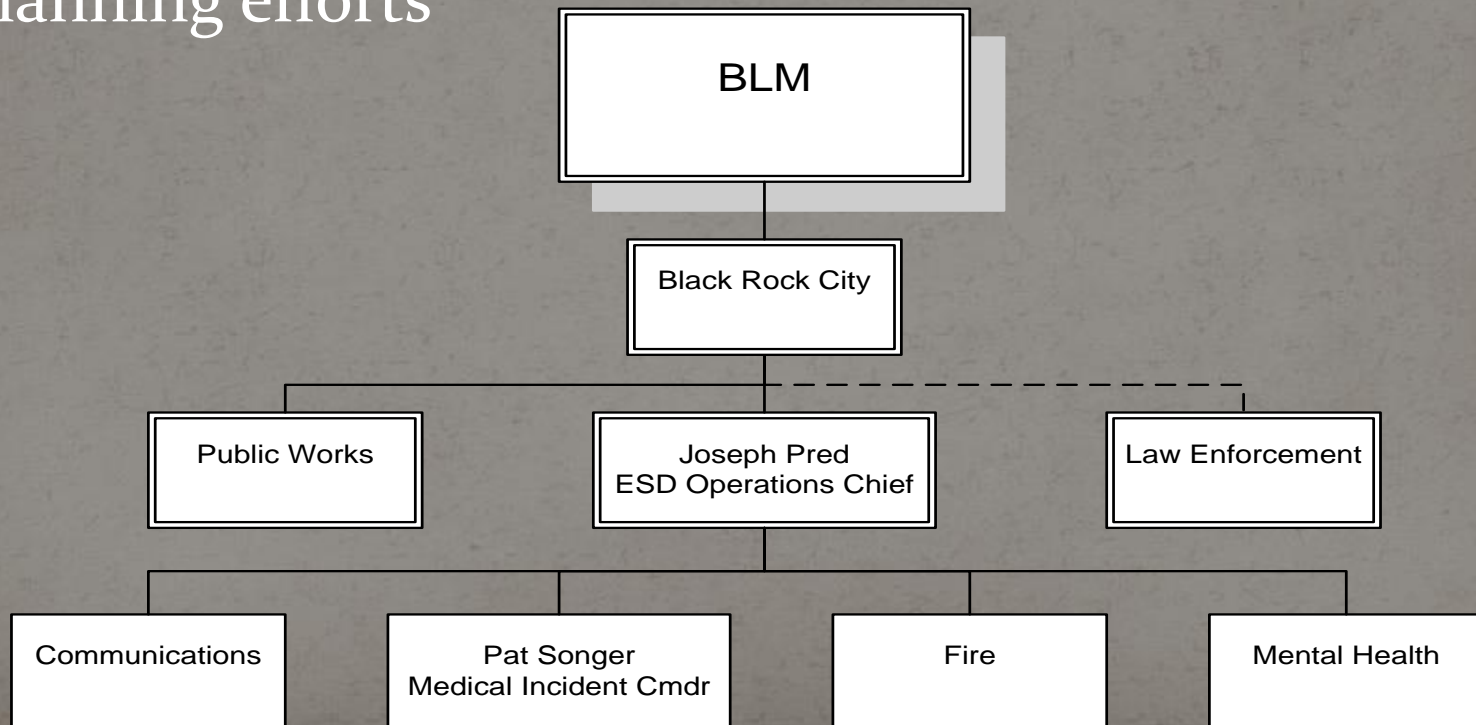
**Adam House**  
Last active 5 days ago

**Lacy Constable**  
Last active 17 days ago

**Tori Stephen**  
Last active 23 days ago

# Burning Man Command

- Level 3 Unified Command due to scale and duration of the event
- Full incorporation of all functions and agencies into planning efforts



# Emergency Services Unit

- First Aid Stations
- Medical First Response
- Fire Department
- 911 Communications Center
- Black Rock Rangers
- Sanctuary





# Emergency Services Unit



# Emergency Services Unit



# Law Enforcement

- Multiple Local, County, State, and Federal Agencies



# Law Enforcement



# Fire

- Fully equipped fire services – volunteer and professional
- Primary fire response (RV fire)
- Fire standby – Trojan Horse, The Man, Mausoleum



# Medical Operations

- Mobile Medical Unit (Rampart Urgent Care)
  - 24-hour per day operation
- Incident Command for all Medical Ops
- Two Aid Stations
- Numerous Ambulances
- Staff:
  - Physicians
  - Resident physicians
  - Mid-Levels
  - Nurses
  - Paramedics & EMTs
  - Medical Students
  - Support Staff



# Medical Operations

- Our Philosophy
  - Triage patients and treat them fast, effectively, and with the right level of care
- ICS Command Structure followed
  - Each division had an IAP filed with BLM
- EMS Ambulance Response
  - On playa EMS response and off Playa transport to area hospitals.
  - 911 Response – Dispatch by Black Rock City 911
  - Ambulances “Dynamically Deployed” on the Playa.



# Medical Operations

## Rampart

9:00 First Aid



3:00 First Aid





# Medical Operations



# Medical Operations

- Medical Control – Dr. Bledsoe  
Hospital Operations
- Medical Control – Dr. Stringham  
911 Operations
- Hospital Ops Chief



# Medical Control



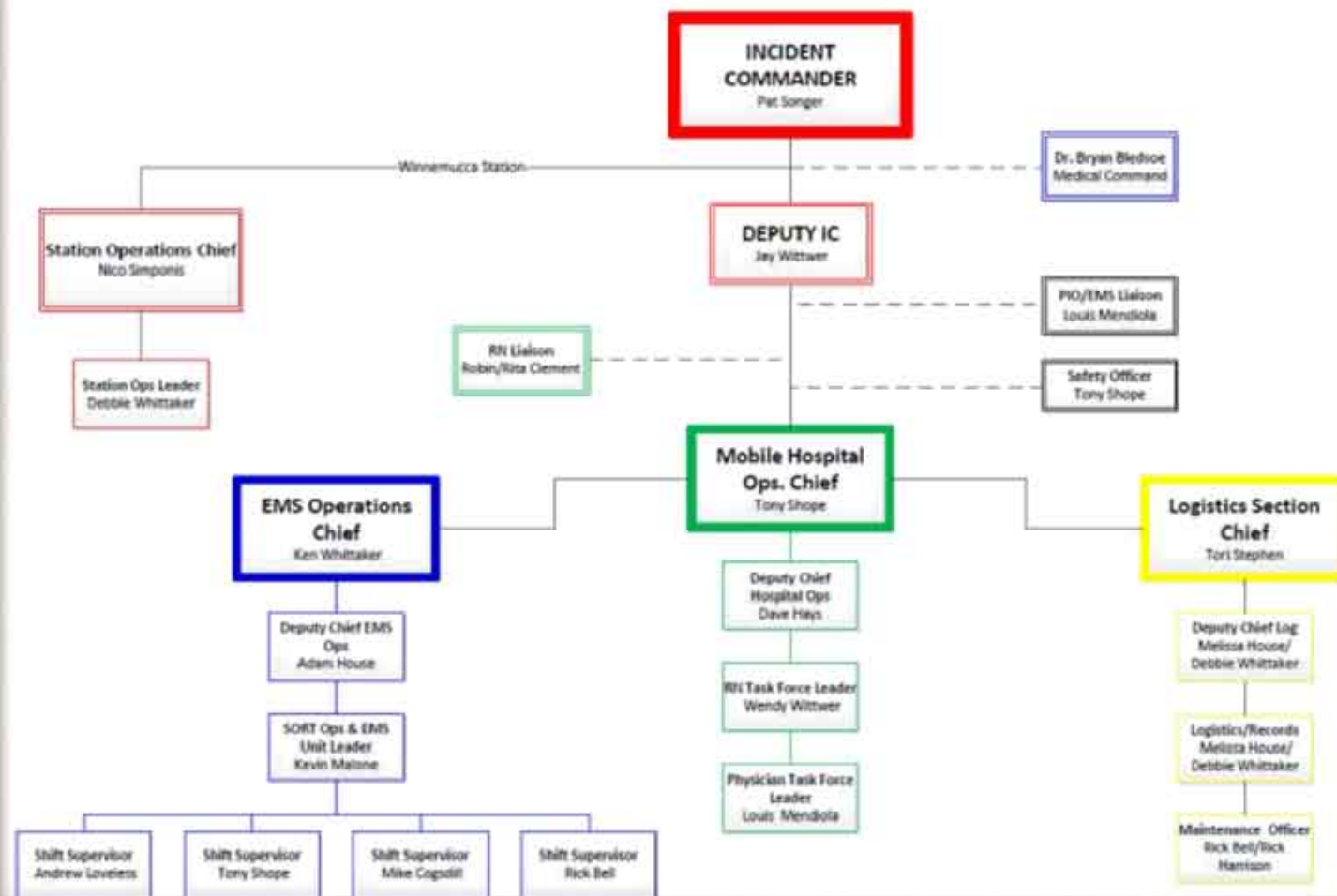
# HGH ICS

- Incident Command System
  - Medical Incident Commanders for BLM



# Command Staff Organization Chart

## HUMBOLDT GENERAL HOSPITAL EMS/RESCUE BURNING MAN CHAIN OF COMMAND 08/15/2011 TO 09/07/2011



# Welcome to Rampart



Humboldt General Hospital  
Black Rock City Emergency Services  
Rampart Urgent Care

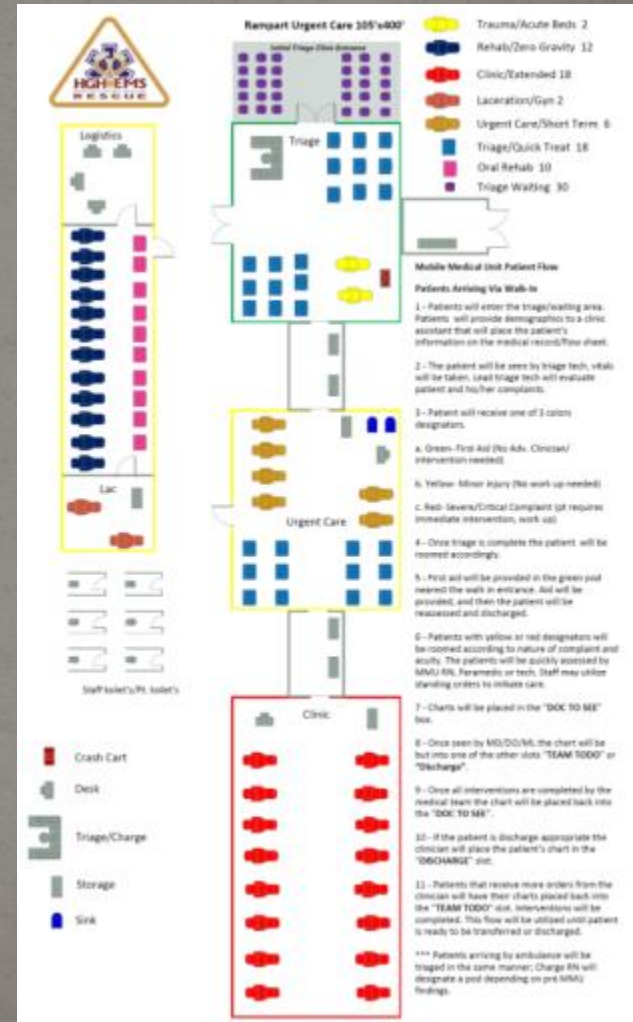


# Mobile Medical Unit Operations

- MMU Operations Chief
  - Deputy Chief
  - RN Task Force Leader
  - Physician Task Force Leader

## COMMAND BADGING COLORS

Commanders	GOLD
Managers	RED
EMS Staff	BLUE
Clinic Staff	GREEN
Charting/Gopher	ORANGE





# Triage/MCI Care System

- Patient treatment via MCI colors.
- Level's of Care to facilitate mass's.
- Efficient through times.
- Community Paramedicine Model.



## LANYARD IDENTIFICATION

- **ORANGE** – Charting/Gopher
- **GREEN** – Clinic Staff
- **BLUE** – EMS Staff
- **RED** – Managers
- **GOLD** – Commanders

# Hot Triage



# Hot Triage



# Cold Triage



# Cold Triage



# Long Term



# Long Term



# Medical Care/Suture Room/GYN





ER



ER



ER



# Logistics and Accountability



# Logistics and Accountability

- Logistic Section Chief
  - Deputy Chief
  - Logistics and Records
    - Custom Database
  - Maintenance Officer

Record Patient Record

Last Record  
Next Record  
Previous Record  
Add Record

### Initial Triage

Patient #  Room

**Basic**  **Intermediate**  **Advanced**

Date  Last Name  First Name

Triage Time  DOB  Age  Sex

Exam Time  Accident  Accident Date  Accident Time

Discharge/Transfer Time  Place  Camp

Mode of Arrival  Condition on Arrival  Accompanied By

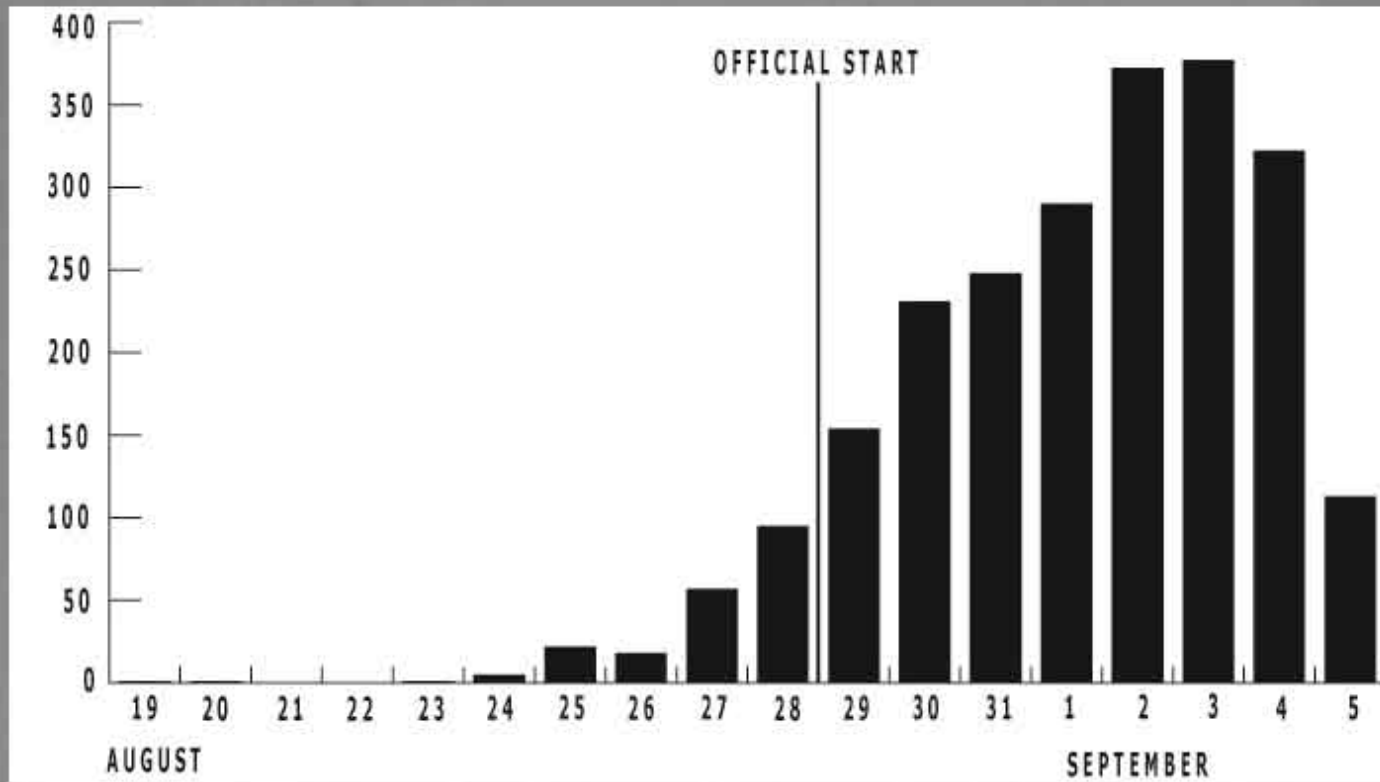
Disposition  Triage Complaint  Past Medical History

Medications  Allergies  ETOH/Drugs

Chief Complaint  LMP  Visual Acuity  Last Tetanus

Chief Complaint  Pain Type  Pain Quality  Pain Duration

# Data Management – Clinic Services



# Data Management – Clinic Services

- Peak population 2011: 53,735
- Approx. 1% of the population seen daily
- 2011 Statistics

- **Green Patients seen 1894**

- **Yellow Patients seen 387**

- **Red Patients seen 23**

- Soft tissue injury's 282
- Dehydration 215
- Eye Problems 191
- UTI 181
- Orthopedic injury 166
- Minor Trauma 163
- Suturing 120



# Medical Stats

- Patients treated: 2,307
- Transferred off playa: 33
- Transferred by HEMS: 5
- Interesting facts:
  - Alcohol-related: 21 (0.9% of all complaints)
  - Drug-related/overdose: 37 (1.6% of all complaints)



# Statistics Cont.

- Average through time: 49.9 minutes
- Walk in's: 1831
- Transported to Clinic: 463
- X-Ray Studies: 147
- Ultrasound Studies: 20
- Lab's: 68



# Supplies and Maintenance



- Large medical supply trailer

- HVAC and ambulance maintenance at least once per shift



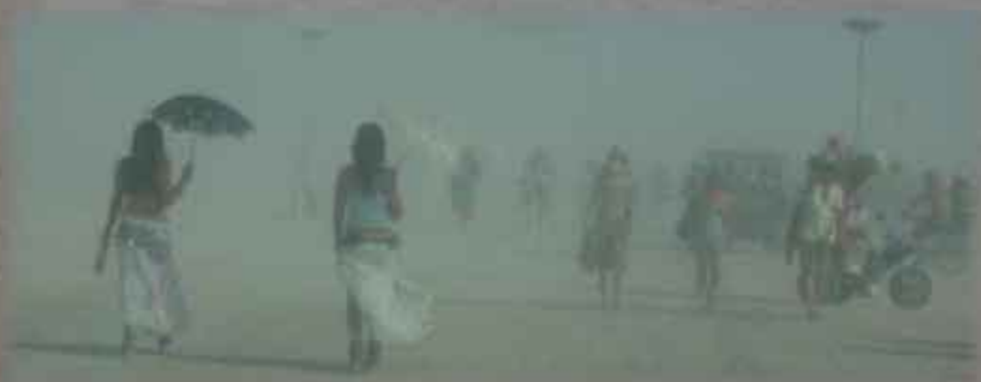






# Playa Foot and Sore Throats





# Rehab





# Rehab



# X-Ray



011

# X-Ray





# University Medical Center





# Thunder Dome Standby





# Thunder Dome UMC Doc's



# Thunder Dome



# Thunder Dome

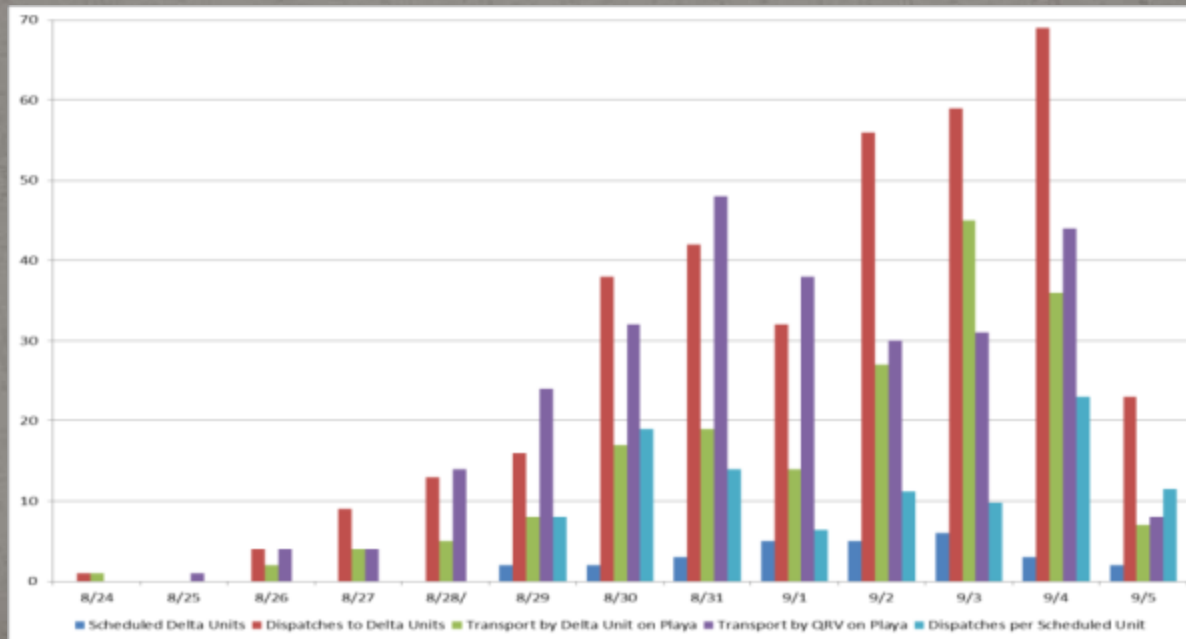


# EMS Response Operations

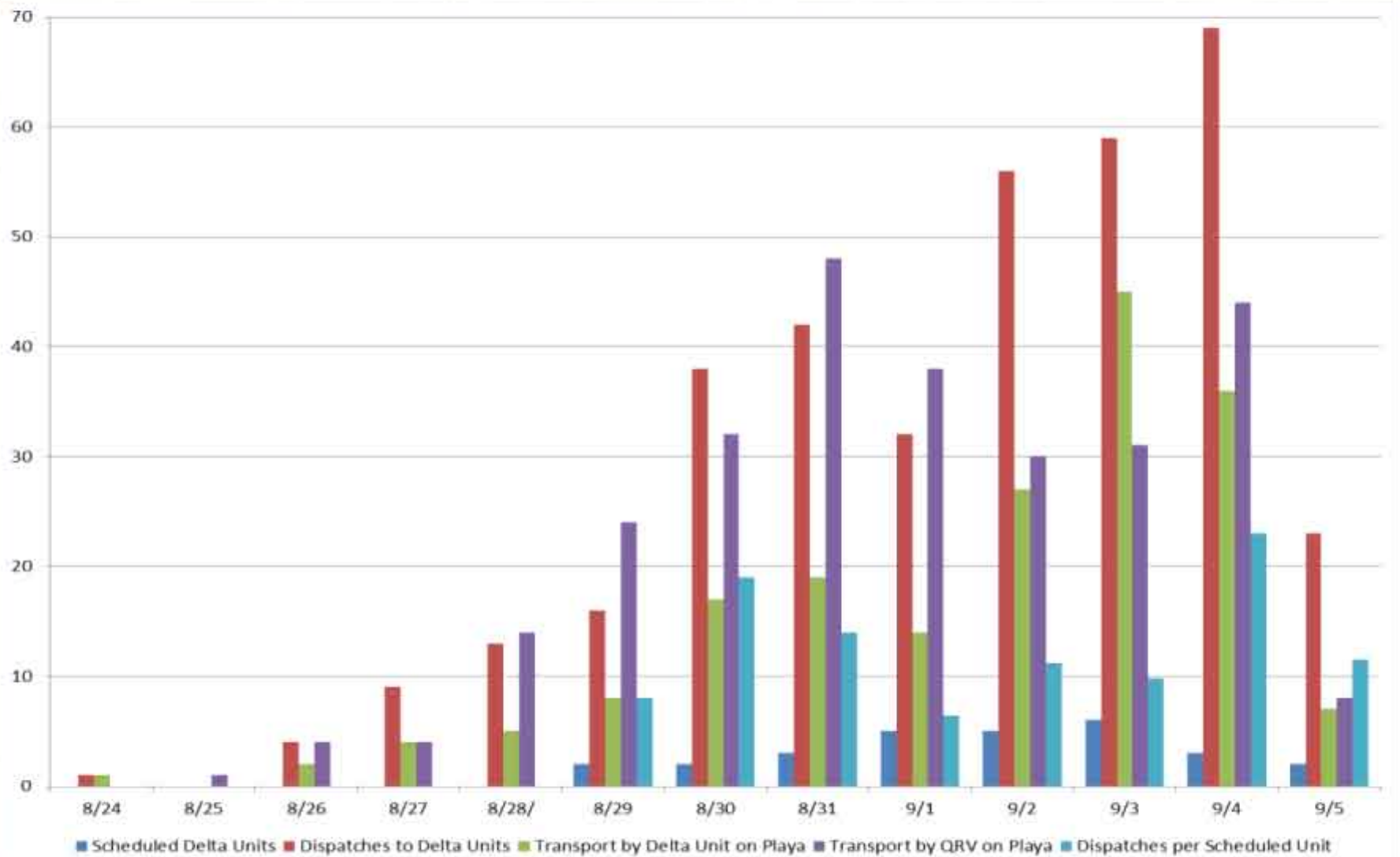
- Pre-Hospital
  - Deployed 6 ALS Delta Ambulances
  - 3 Quick Response Vehicles
  - 1 Command Unit
  - Operated under BRC's 911 System
    - System status dispatching
    - Event staging
- 2011 Statistics
  - 28 Patients transported by Ground to Reno
  - 5 Patients transported by Care Flight
  - 16 Patients returned to Black Rock City from Reno
  - 362 Delta Unit transports to Rampart
  - 278 QRV transports to Rampart

# EMS Response Operations

- EMS Operations Chief
  - Deputy Chief EMS Ops
  - SORT Ops & EMS Unit Leader
  - Shift Supervisors



# EMS Response Operations



# Delta Ambulance Response



# Delta



# Delta







Rampart  
Ambulance Only









# QRV Response



# Notable Events

- Rescue off of the Man
- MCI Event
- GHB
- Headache
- Cardiac Arrest Save
- Care Flight Crash



# Rescue on the Man



# Interesting Cases

- Young female (30s).
- Structure collapse on the playa.
  - Initially dispatched as an MCI
- Complained of chest pain.
- CXR showed 5-10% PTX on right.
- Given high-flow O<sub>2</sub> and CXR 2 hours later.
- No improvement. Patient initially refused transport.
- Planned to fly to Toronto. Counseled. Agreed to go to Renown where admitted.



# Interesting Cases

- Male (40s-50s)
- Took a “shitload” of GHB.
- Unresponsive with respirations of 8.
- RSI and mechanical ventilation.
- Remained on vent on playa.
- Extubated self 4 hours later. After rest and monitoring he returned to the playa.
- “Party on dudes!”

# Interesting Cases

- 33 y.o. female with worst headache of life.
- Denied ETOH/drug use within last 24-hours
- N/V failed to improve with Tylenol and anti-emetics.
- Became unresponsive and posturing.
- RSI and mechanical ventilation.
- Transferred by HEMS to Renown in Reno.
- Massive occipital subarachnoid hemorrhage.
- Positive drug screen for LSD.
- Died in ICU. Organs harvested.

# Interesting Cases

- 60 y.o. male developed chest pain on the playa
- EMS extricated from trailer
- Went into cardiac arrest during transport (ventricular tachycardia)
- Resuscitated with precordial thump (really!)
- Arrived at Rampart alert and oriented (but no BP)
- Fluids given to get a systolic of 72 mm Hg
- CXR revealed 10.5 cm mediastinum
- Flown to Renown.

# Interesting Cases

- Renown receiving physician said, doubtfully, when told we thought it was an aortic dissection, "I'll look at him when he gets here."
- Dr. Westin was right.
- Patient to OR for aortic repair.
- Went from surgery to CCU.
- Suffered second cardiac arrest in ICU.
- To cath lab where stented and back to ICU doing well.
- Planning next years visit to Black Rock City!

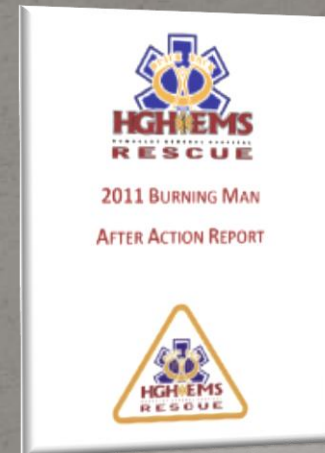
# Interesting Cases

- Care Flight Crash/Hard Landing/Brown out
  - Inbound for patient pick up
  - Dropped from approximately 8-feet
  - No injuries but aircraft downed until FAA released

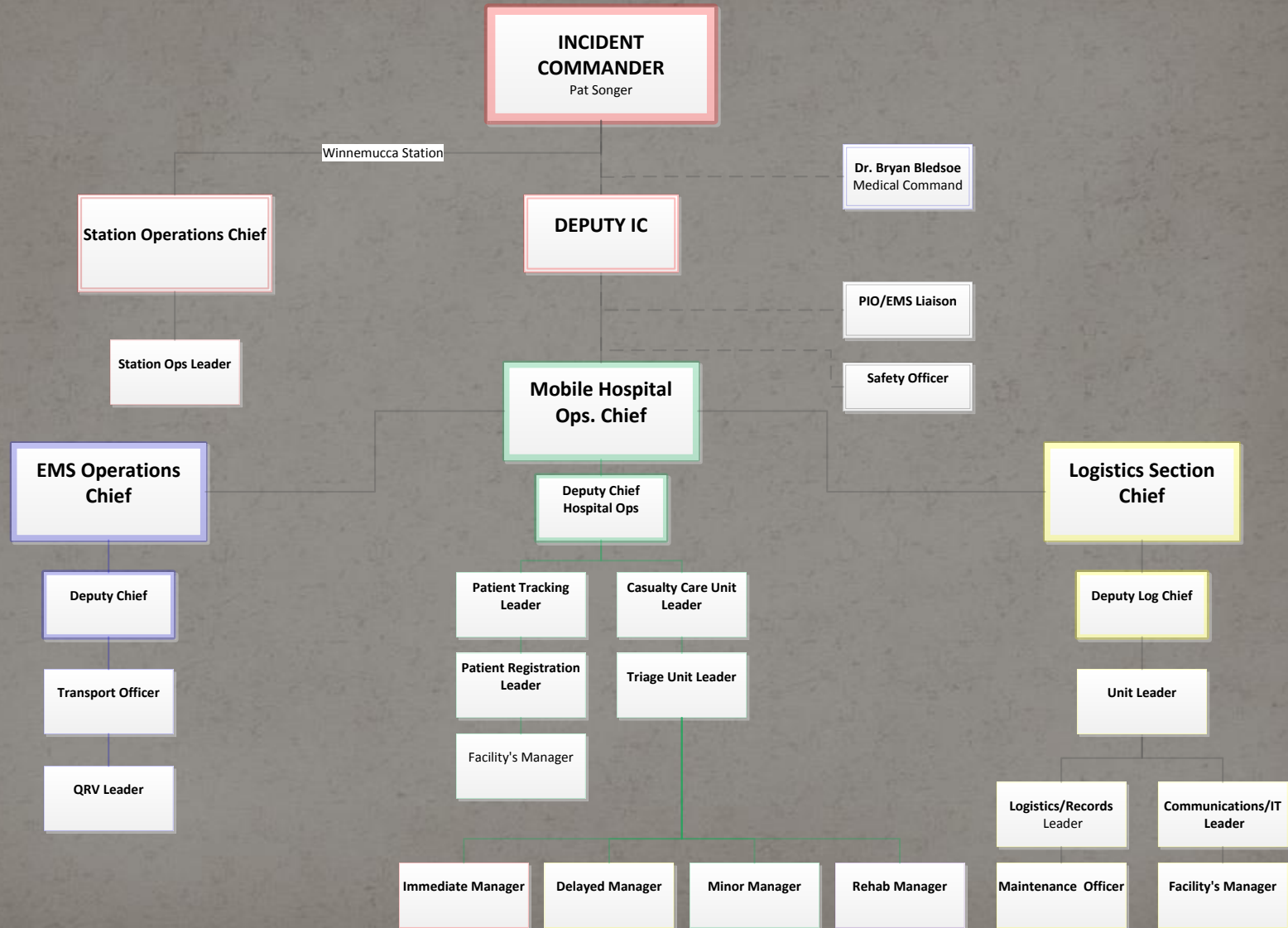


# After Action Review

- Key Points:
  - Increase of support staff
  - Multiple Channels of Communication
  - Increase level of ICS Command Staff
    - Incident Commanders
    - Deputy Chiefs
    - Hospital Ops
  - Earlier event staffing
  - Staging of units off Playa
    - Crew Rest
    - Place to clean units.
  - MCI Response



# Proposed 2012 Command Staff



# After Action Review

- Opportunities for Improvement:
  - Clinic Efficiency Improvements
    - Reduce through time
  - Mobile Pharmacy
  - Additional systems for provider level identification
  - Long-term patient monitoring
  - Expanded QRV response
  - Real time unit status



# 2011 Ambulance/QRV Tracker

- Handwritten white board

System Status Burning Man										
<u>Transport Units</u>	<u># Pt. Transporting</u>	<u>Location</u>	<u>Contacted Hospital via</u>	<u>Communications Route</u>	<u>Renown</u>	<u>St. Marys</u>	<u>Northern Nevada</u>	<u>Renown South</u>	<u>Banner Churchill</u>	<u>Other</u>
Delta 11										
Delta 12										
Delta 13										
Delta 14										
Delta 15										
Delta 16										
Medic 13										
Medic 14										
Medic 15										
<u>Non-Transport Units</u>		<u>Location</u>	<u>Detail</u>							
QRU-2 (Yukon)										
QRU-3 (Polaris)										
QRU-4 (Golf Cart)										
Hospital Totals:										

# 2012 Delta Unit Tracker

- Electronic real-time tracking

Unit	Status	Location	Crew 1	Crew 2	Notes
Delta 11	Available	Rampart	Erlach	Peek	
Delta 12	Available - In Transit	Mobile	Bell	Chadwell	
Delta 13	Out of Service	Rampart			Not Scheduled
Delta 14	Committed	3:00 & B	Walsh	Mendiola	
Delta 15	Out of Service	Rampart	Cogsdill	Billows	Mechanical
Delta 16	Committed	Reno	Loveless	Jodi	Renown
QRV 61	Committed	8:00 & F	Malone		
QRV 62	Available	Rampart	Whitwer		
QRV 63	Out of Service	Rampart			Not Scheduled
QRV 64	Out of Service	Mobile			Courtesy Transports

# Fan Mail

“I have never been as impressed with medical care anytime, anywhere as I was with the newly-contracted camp medics. The injury I sustained this year was such that in any of my 13 years, I would have had to evac. These guys took an x-ray, sent it to Reno to be read by the radiologist, had it back, and had me in a cast in such a short time that I would still be waiting to be seen in any other ER by the time I was all done. I was able to stay on the playa with the admonition that I would likely need surgery in 7-10 days. My dear friend and orthopedic surgeon met me at the hospital yesterday to do follow-up and prep for surgery but he found the bones now well aligned making surgery unnecessary.

The biggest impression that it has made is that this was a free service to me. Hence, likely paid for all 13 years of tickets I have purchased. This is what medical care needs to be in this country. We have accomplished it perfectly in our community.”

Fun



Fun



Fun



© SCOTT LONDON

Fun



Fun



ART VANDALS HAVE  
TINY DICKS/NO BALLS  
KEEP TAKING THEIR  
PIC'S/TURN THEM IN  
TO THE RANGERS/POLICE



Fun



Fun



Fun



Fun



Fun



Fun



Fun



Fun





# The Man Burns







# The Man Burns



# The Temple Burns

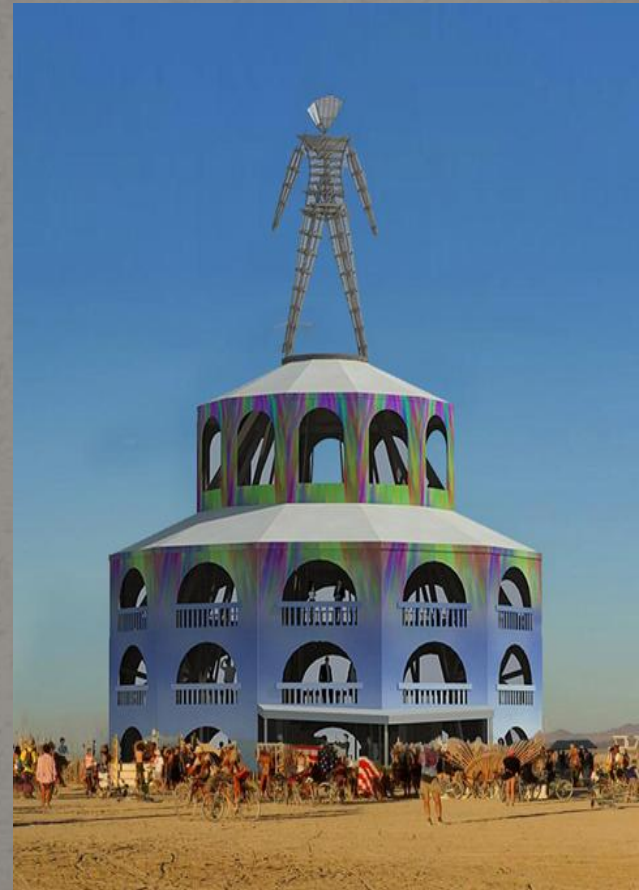
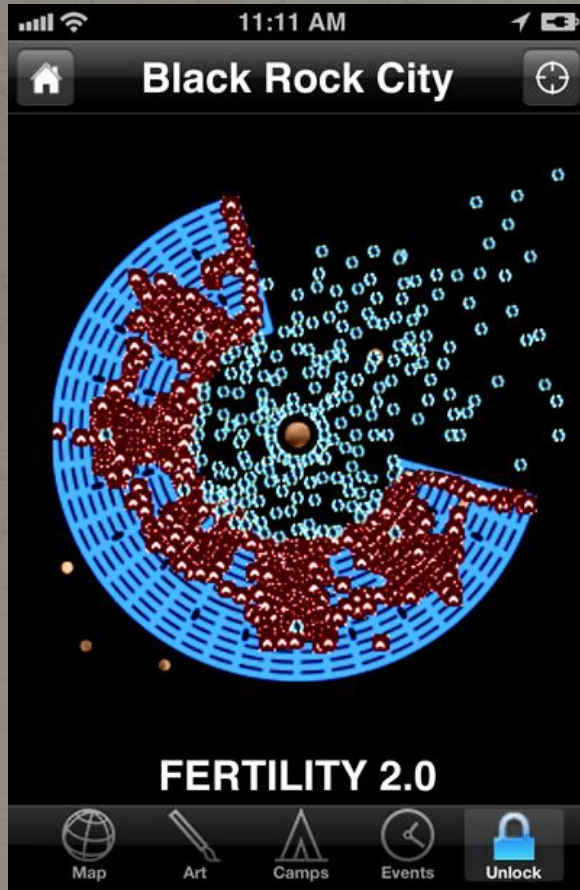






# Burning Man 2012

*Plan now for the experience (personal and medical) of your life.*

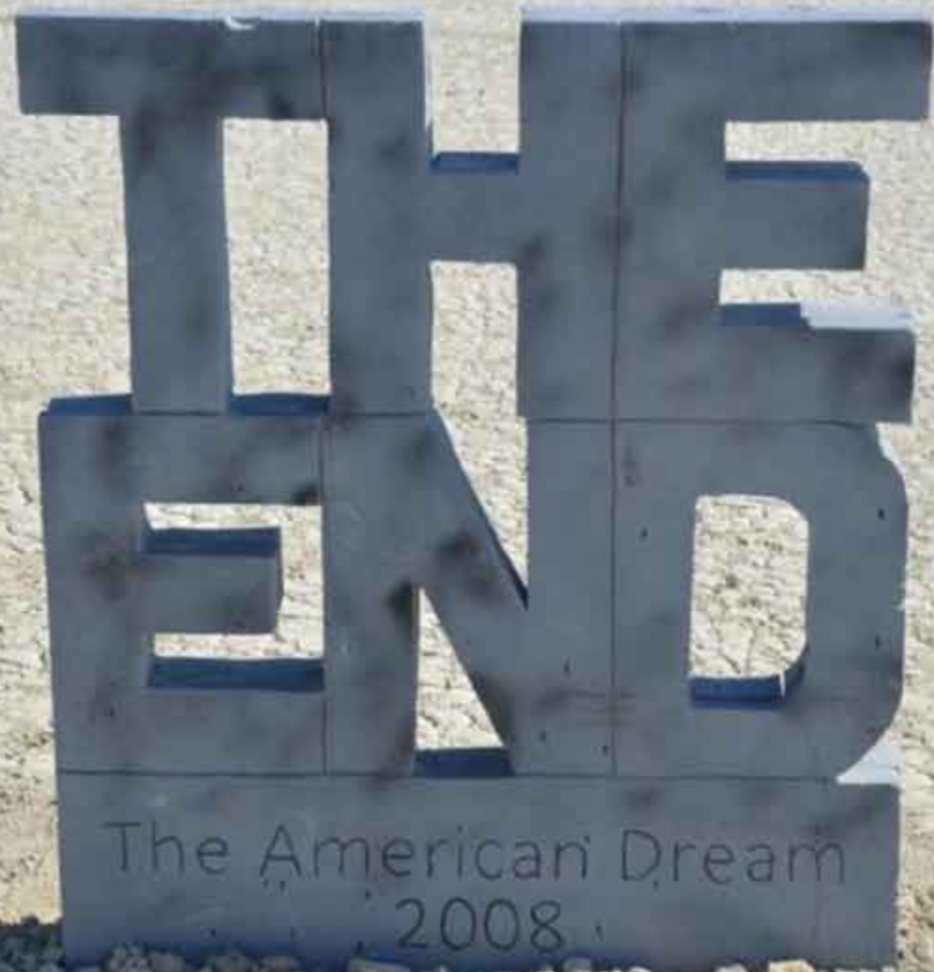


[www.hghemsmedstaff.com](http://www.hghemsmedstaff.com)

Contact: Pat Songer - [psonger@hghospital.ws](mailto:psonger@hghospital.ws)



Questions?



THE  
END

The American Dream  
2008

# 2011 Time Lapse

