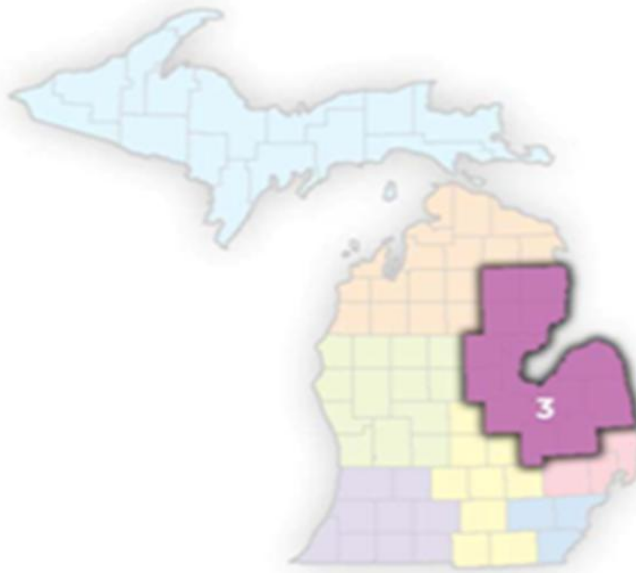


MICHIGAN DEPARTMENT OF COMMUNITY HEALTH BUREAU

# Michigan Regional Trauma System

## Region 3



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Region 3 Trauma Coordinator

August, 2013



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### Introduction to Region 3

Region 3 is a highly diverse area, ranging from medium sized cities and highly fertile agricultural areas to very sparsely populated areas of undeveloped woodlands. The fourteen Counties that make up Region 3 are: Alcona, Arenac, Bay, Genesee, Gladwin, Huron, Iosco, Lapeer, Midland, Ogemaw, Oscoda, Saginaw, Sanilac, and Tuscola. There are four significant urban areas; Flint, Saginaw, Bay City, and Midland. The regional population from the 2010 Census is 1,139,144.

Region 3 has two international airports, two international seaports, and a lengthy shoreline that shares an international border with Canada. The region is home to the Dow Chemical Company, the Great Lakes Loons minor league baseball team, and several colleges and universities including Saginaw Valley State and Northwood Universities.

The “Sunrise Side” also hosts many festivals year round such as the Tall Ships, the Bavarian Festival, and the Bay City River Roar. The region also has a host of other tourist attractions that bring in an influx of participants particularly in the summer months.

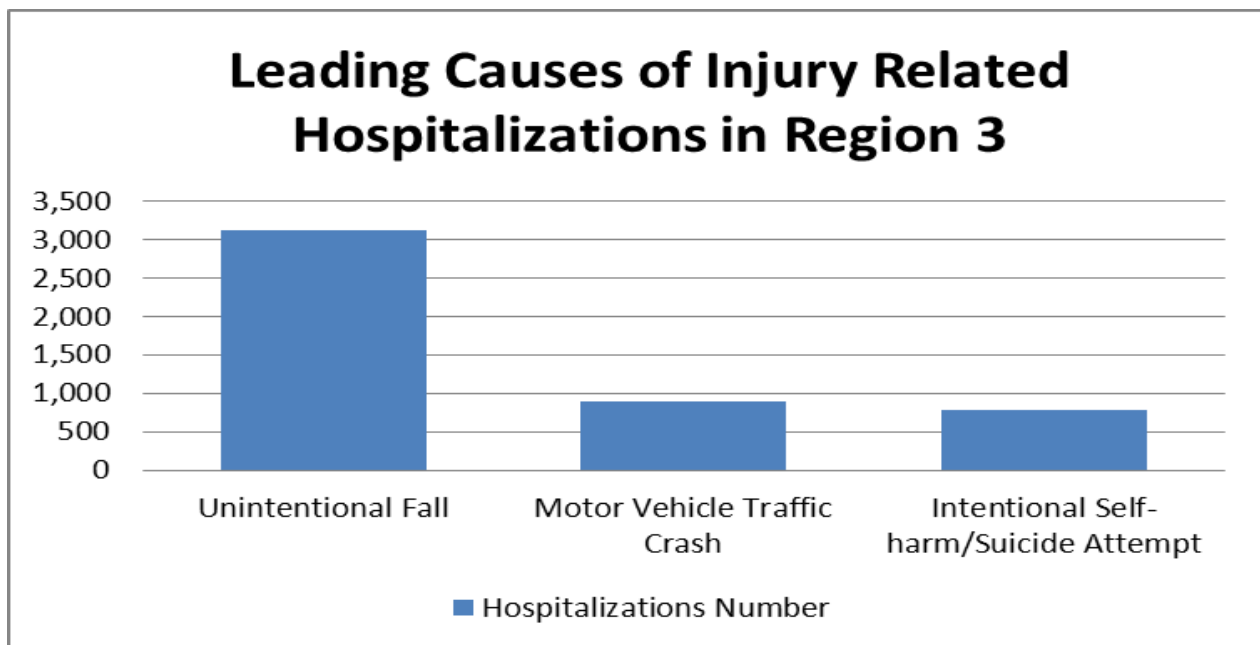
The region has 24 hospitals, 11 Medical Control Authorities (MCA), 126 Emergency Medical Service (EMS) Agencies, 10 Health Departments, and the federally recognized Chippewa Tribe.

Region 3 County	Total Population	Pediatric Population
Alcona	10,800	1,555
Arenac	15,649	3,051
Bay	107,110	23,349
Genesee	422,080	103,831
Gladwin	25,851	5,118
Huron	32,675	6600
Iosco	25,541	4,393
Lapeer	88,082	20,787
Midland	84,063	19,418
Ogemaw	21,570	4,249
Oscoda	8,608	1,704
Saginaw	199,088	45,790
Sanilac	42,605	9,884
Tuscola	55,422	12,691
<b>Totals</b>	<b>1,139,144</b>	<b>262,420</b>

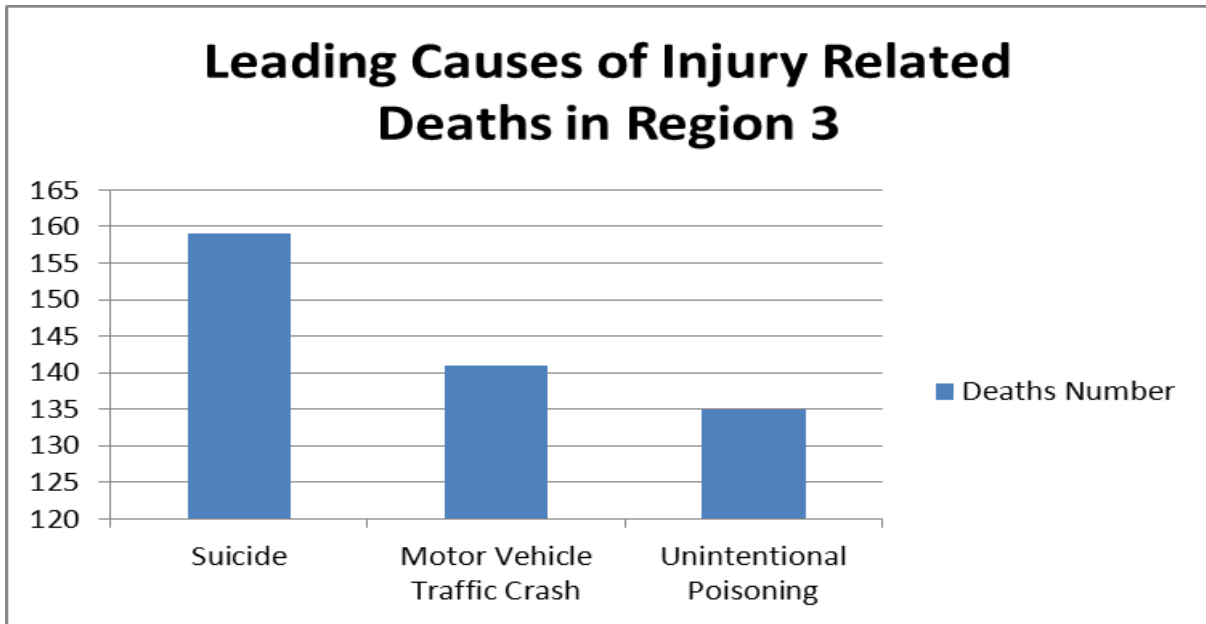
## Injury

In order to address a systematic, regionalized approach to injury, it is necessary to assess regional data. Accurate assessment of data provides the means for policy development organized to address the goals of injury prevention, incident response and post-injury rehabilitation.

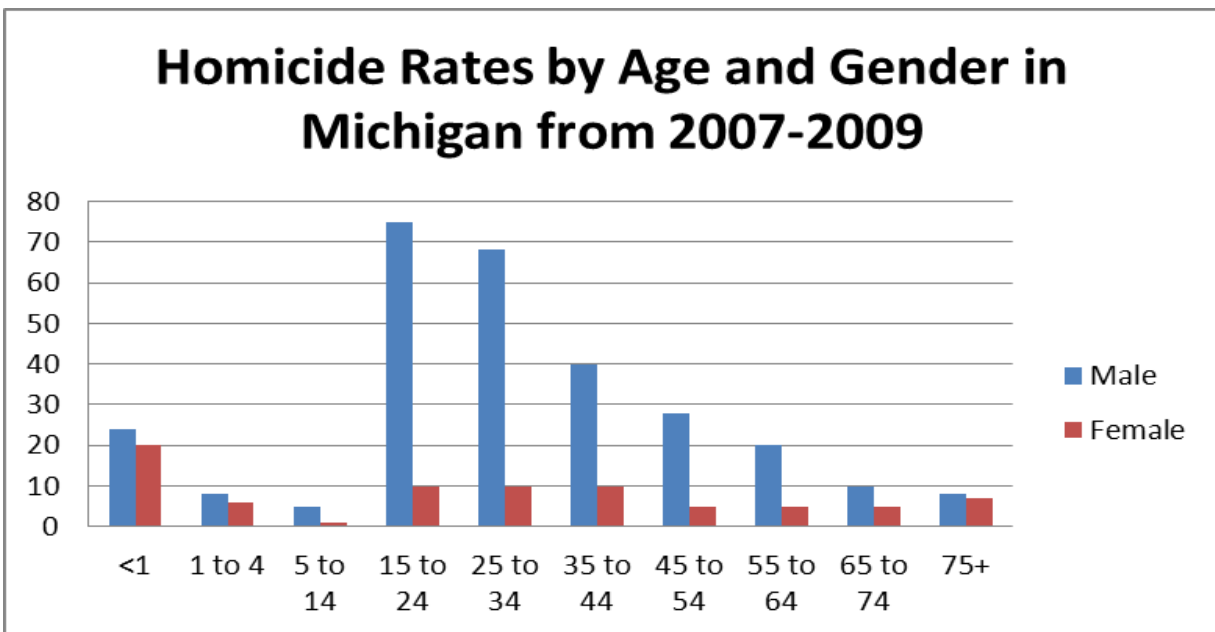
This data, along with other data sets including the Michigan trauma registry, will be used to enhance system performance and to drive change. The injury and fatality information that follows was abstracted from a variety of sources to provide an understanding of trauma within the region. The graphs below describe the three leading causes of both injury related deaths and injury related hospitalizations for Region 3 in 2010.



Source: Thomas W. Largo, MPH Division of Environmental Health, Bureau of Disease Control, Prevention, and Epidemiology, Michigan Department of Community Health, 2010 data



Source: Thomas W. Largo, MPH Division of Environmental Health, Bureau of Disease Control, Prevention, and Epidemiology, Michigan Department of Community Health, 2010 data



Source: Michigan Department of Community Health-Injury & Violence Prevention Section, 2007-2009

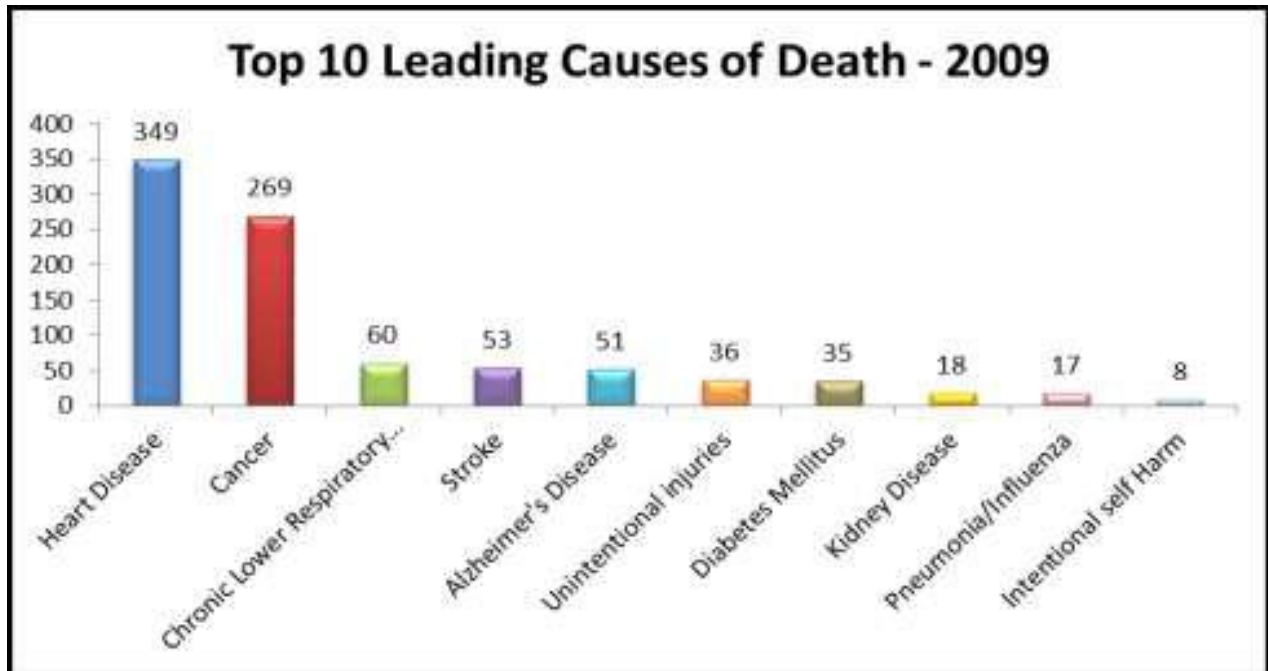
**Leading Causes of Injury and Death, by Age Group  
Michigan Residents Aged 0-19, 2007-2010**

Age Group (Years)	Cause	Average Annual Deaths	Average Annual Population	Average Annual Rate
<1	1. Unintentional Suffocation	62.0	117,443	52.8
	2. Homicide	10.0	117,443	8.5
	3. Suffocation - Undetermined Intent	3.5	117,443	3.0
1-4	1. Homicide	12.3	492,184	2.5
	2. Unintentional Drowning	8.8	492,184	1.8
	3. Unintentional Exposure to Fire/Flames/Smoke	7.5	492,184	1.5
5-9	1. Motor Vehicle Traffic Crash*	10.0	647,691	1.5
	2. Homicide	4.8	647,691	0.7
	3. Unintentional Exposure to Fire/Flames/Smoke	4.3	647,691	0.7
10-14	1. Motor Vehicle Traffic Crash	17.8	691,722	2.6
	2. Suicide	8.5	691,722	1.2
	3. Homicide	7.0	691,722	1.0
15-19	1. Motor Vehicle Traffic Crash	106.0	753,455	14.1
	2. Homicide	86.5	753,455	11.5
	3. Suicide	59.8	753,455	7.9

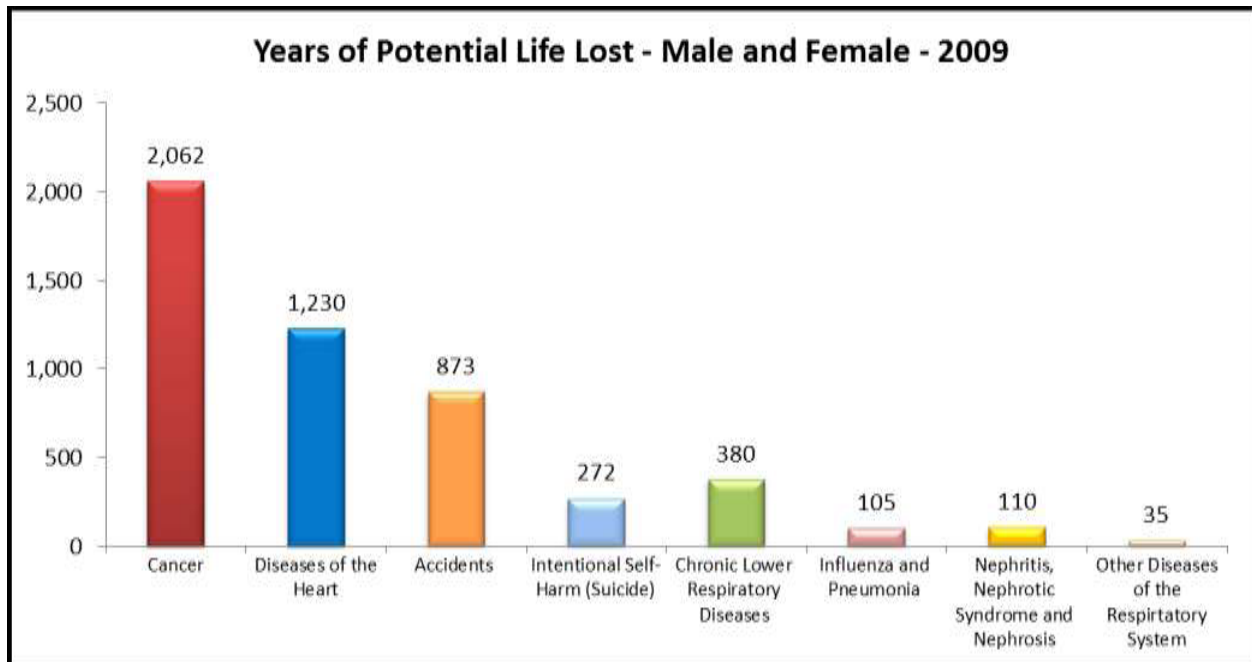
\*Those killed in motor vehicle traffic crashes include: motor vehicle occupants, motorcyclists, bicyclists, pedestrians, and others. Rates are the number of deaths per 100,000 population.

Data Source: Vital Records and Health Data Development Section, MDCH

## County Injury Data



Source: Bay County Health Department Community Health Data Report-2012



Source: Bay County Health Department Community Health Data Report-2012

## Regional Trauma System Infrastructure

### EMS Medical Control Authorities and Emergency Medical Services

Of the 126 EMS agencies 23 are Advanced Life Support, 17 are Basic Life Support and 88 are Medical First Response Services. These agencies work under 11 Medical Control Authorities (MCA) established within the region.

A Medical Control Authority is an organization designated by the Michigan Department of Community Health Crime Victims, EMS and Trauma Section for the purpose of supervising and coordinating an emergency medical services system. A Medical Control Authority is a hospital or group of hospitals that operate a service that treats patients 24 hours a day, 7 days a week. Each MCA is administered by the participating hospitals of the designated MCA region. In Region 3 the MCA's are:

<b>Medical Control Authority</b>	<b>Participating Hospitals</b>
<b>Northeast Michigan MCA</b>	Alpena General
<b>Arenac County MCA</b>	St Mary's of Michigan-Standish
<b>Bay County MCA</b>	McLaren Bay Regional
<b>Genesee County MCA</b>	Hurley Medical Center Genesys Medical Center McLaren Flint
<b>Huron County MCA</b>	Huron Medical Center Scheurer Hospital Harbor Beach Community Hospital
<b>Iosco County MCA</b>	St. Joseph Health System
<b>Lapeer County MCA</b>	McLaren Lapeer
<b>Midland/Gladwin MCA</b>	Mid-Michigan Medical Center-Midland Mid-Michigan Medical Center-Gladwin
<b>Ogemaw County MCA</b>	West Branch Regional Medical Center
<b>Saginaw Valley MCA</b>	St. Mary's of Michigan Covenant Medical Center Caro Community Hospital Hills & Dales Community Hospital



## Regional Trauma Coordinator

The Regional Trauma Coordinator (RTC) is responsible for this report, and is one of the resources provided to the region by MDCH. Responsibilities of the RTC include: acting as a liaison between the RTN and MDCH, coordinating and attending RTN meetings, facilitating activities related to the RTN work plan, report writing, and to address educational needs.

## The Regional Trauma Network

All MCA's in a region are required to participate in the Regional Trauma Network (RTN). The RTN will appoint an advisory committee and approve the regional trauma work-plan developed with input from the Trauma Steering Committee and the Regional Trauma Advisory Council.

Each participating Medical Control Authority (MCA) shall (acting through its own governing body) appoint one member to the Regional Trauma Network; there shall be as many members as there are participating Medical Control Authorities in the Regional Trauma Network. Each member of the Regional Trauma Network will receive one vote for each Medical Control Authority they represent.

<b>MCA Medical Director</b>	<b>MCA</b>
Chris Rancont, MD	Alcona/NE MI MCA
Rasheed Siddiqui, MD	Arenac County MCA
Jeffrey Ozan, DO	Bay County MCA
Raymond Rudoni, MD	Genesee County MCA
Tressa Gardner, DO	Huron County MCA
Robert May, DO	Iosco County MCA
Brad Blaker, DO	Lapeer County MCA
Danny Greig, MD	Midland/Gladwin MCA
Jeff Duff, MD	Ogemaw County MCA
Noel Wagner, MD	Saginaw Valley MCA
William Starbird, MD	Sanilac County MCA

## **The Regional Trauma Advisory Council**

The Regional Trauma Advisory Council (RTAC) provides leadership and expertise for the development of the trauma system which includes the development of the trauma work plan and to monitor the delivery of patient care and performance of the agencies and healthcare facilities within the region, including, but not limited to, the review of trauma deaths and preventable complications.

The Regional Trauma Advisory Council will be comprised of the following eligible membership with the goal of maximizing inclusion of the NETWORK's constituents:

- Medical Director or designee of each MCA within Region 3
- MCA administrative representative
- Trauma Director or designee from each verified trauma facility
- Trauma Program Manager from each verified trauma facility
- Trauma Registrar from each verified trauma facility
- Trauma Nurse Representative from each verified trauma facility
- Trauma Outreach/Prevention Coordinator from each verified trauma facility
- Emergency Department Physician representative from licensed hospitals and free standing surgical outpatient facilities (as defined in MCL 333.20918.1) within Region 3
- Emergency Department Nurse Representative from licensed hospitals and free standing surgical outpatient facilities (as defined in MCL 333.20918.1) within Region 3
- Life Support Agency Representative from each licensed air or ground transporting EMS agency within Region 3
- Consumer representative not affiliated with EMS or trauma care
  - Consumer representative shall be appointed by the Regional Trauma Advisory Council.
  - Each consumer representative shall serve for a two year term

## **The Regional Trauma Steering Committee**

The Regional Trauma Steering Committee (RTSC) provides direction and supervision for the activities of the Regional Trauma Advisory Council and the Sub-Committees based on the most current standards of care.

The Regional Trauma Steering Committee shall be comprised of the Medical Director or alternate from each member Medical Control Authority, the Trauma Director or designee from each verified level I, II or III trauma facility within the Regional Trauma Network.

## **The Regional Professional Standards Review Organization**

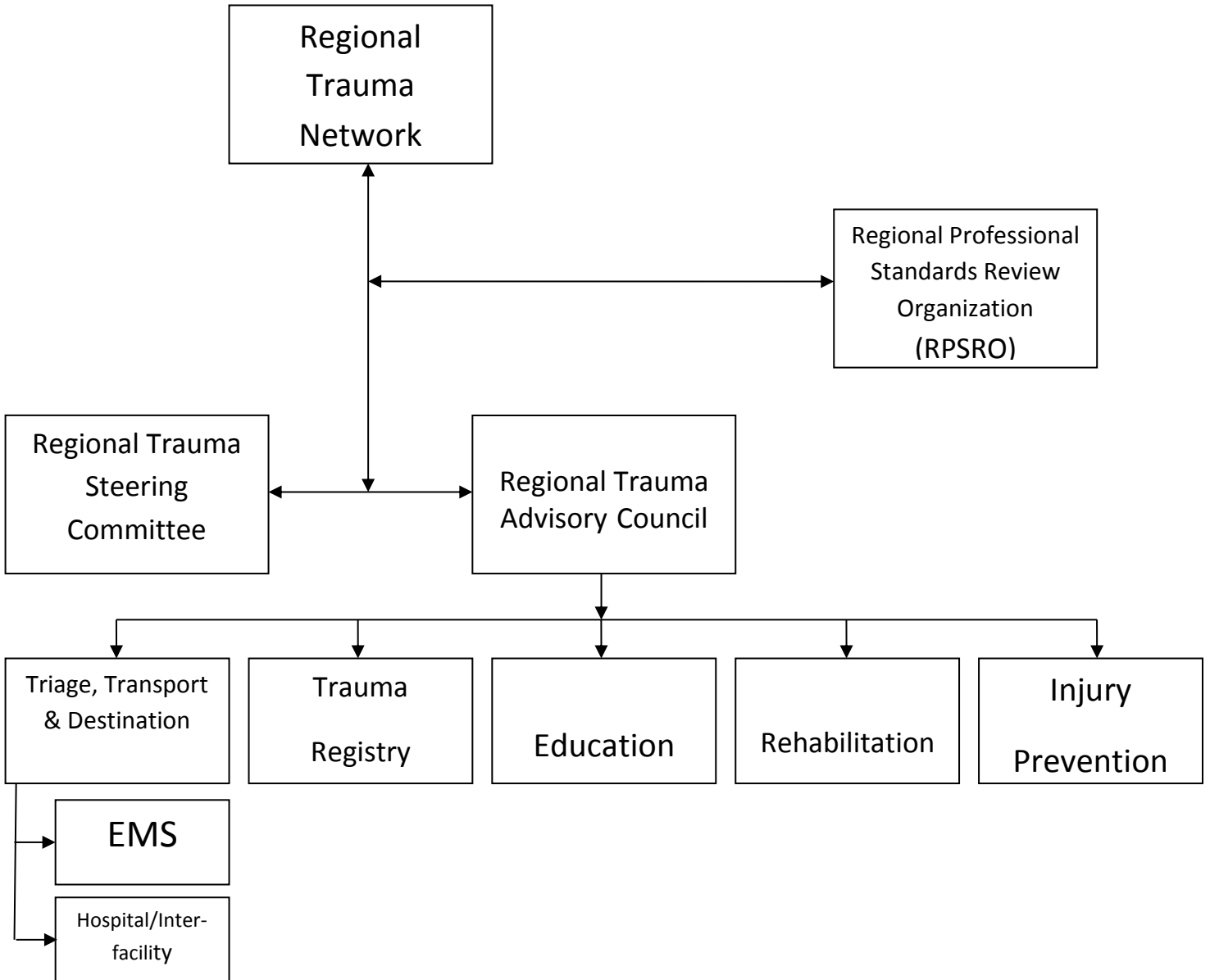
The Regional Professional Standards Review Organization (RPSRO) formulates recommendations for the development of performance improvement plans submitted to the Regional Trauma Network by using the statewide comprehensive data collection system and metrics as described in the administrative rules.

The RPSRO membership will consist of one Medical Care Authority Medical Director, one Emergency Department Medical Director, one Trauma Center Medical Director, and a total of 10 pre-hospital providers, nursing staff, and rehabilitation specialist from throughout the region. Members will be appointed by the Regional Trauma Network.

## **Governance**

Part 209 of Michigan's Public Health Code (Act 368 of 1978) stipulates that the Michigan Department of Community Health "develop, implement, and promulgate rules for the implementation and operation of a statewide trauma care system within the emergency medical services system" [20910(1)(l)] in consultation with the statewide trauma care advisory (STAC) subcommittee of the state emergency medical services coordination committee (EMSCC). The statutorily promulgated administrative rules task the department with establishing regional trauma networks (RTN) comprised of collaborating local medical control authorities within a region, and provide for supporting resources to the region consistent with criteria found in the Michigan Trauma Systems Plan (2004). The RTN will submit an application to the department which will be reviewed by STAC and the EMSCC. The RTN is considered provisional until approved by MDCH.

### Region 3 Trauma Network Organizational Chart



## Hospitals

The region currently has six American College of Surgeons (ACS) verified trauma centers and 2 ACS verified Pediatric Trauma Centers:

<b>Hospital</b>	<b>County</b>	<b>ACS</b>	<b>MCA</b>
<b>McLaren Bay Regional</b>	Bay		Bay County MCA
<b>Caro Community Hospital</b>	Tuscola		Bay County MCA
<b>Covenant Medical Center</b>	Saginaw	Level 2 Adult and Pediatric	Lenawee MCA
<b>Deckerville Community Hospital</b>	Sanilac		Sanilac County MCA
<b>Genesys Regional Medical Center - Health Park</b>	Genesee	Level 2 Trauma	Genesee County MCA
<b>Harbor Beach Community Hospital</b>	Huron		Huron County MCA
<b>Hills &amp; Dales General Hospital</b>	Tuscola		Bay County MCA
<b>Hurley Medical Center</b>	Genesee	Level 1 Trauma ABA Burn Center	Genesee County MCA
<b>Huron Medical Center</b>	Huron		Huron County MCA
<b>McLaren Lapeer Regional</b>	Lapeer	Level 2 Trauma	Lapeer County MCA
<b>Marlette Regional Hospital</b>	Sanilac		Sanilac County MCA
<b>McKenzie Memorial Hospital</b>	Sanilac		Sanilac County MCA
<b>McLaren Regional Medical Center</b>	Genesee	Level 3 Trauma	Genesee County MCA
<b>Mid-Michigan Medical Center - Gladwin</b>	Gladwin		Midland County MCA
<b>Mid-Michigan Medical Center - Midland</b>	Midland		Midland County MCA
<b>Saint Mary's Standish Community Hospital</b>	Arenac		Arenac County MCA
<b>Scheurer Hospital</b>	Huron		Huron County MCA
<b>St. Mary's Of Michigan Medical Center</b>	Saginaw	Level 2 Trauma	Saginaw County MCA
<b>St. Joseph Health System Tawas</b>	Iosco		Iosco County MCA
<b>West Branch Regional Medical Center</b>	Ogemaw		Ogemaw County MCA
<b>St. Mary's of MI North</b>	Saginaw		Saginaw County MCA

## Region 3 EMS to Hospital Radio Communication

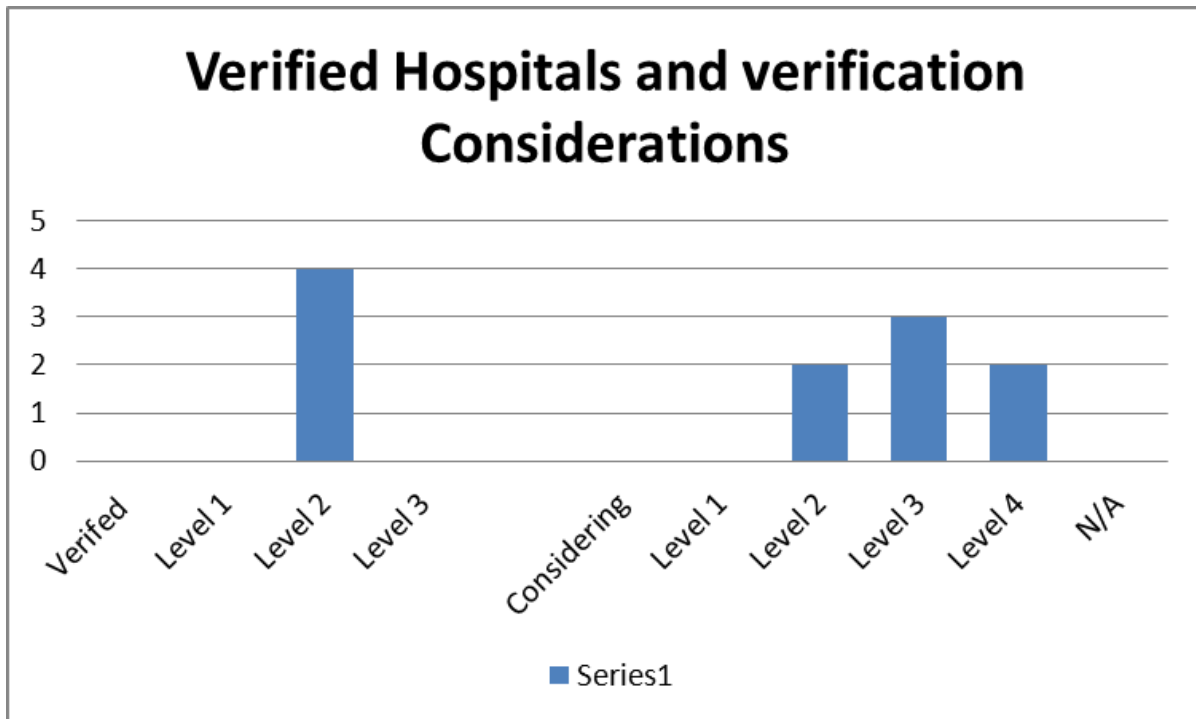
Region 3 has consistently worked to establish interoperability in public safety communications. All Region 3 Hospital Emergency Departments have been provided with 800 MHz base radios as well as a portable 800 MHz radios for each Medical Control Authority (MCA) Medical Director. The radio system is tested once every month. Many EMS agencies, fire departments and police departments in Region 3 are now utilizing the 800 MHz Michigan Public Safety Communication System (MPSCS) as their primary dispatch communication network that allows interoperable public safety communication between all agencies on the MPSCS system. This system is used for daily emergency operations and during disaster or mass casualty situation.

Listed below are the Hospital Emergency Alert Network (HERN) radio frequencies and Private Line (PL) tones for each hospital as well as the 800 MHz talk groups for each hospital:

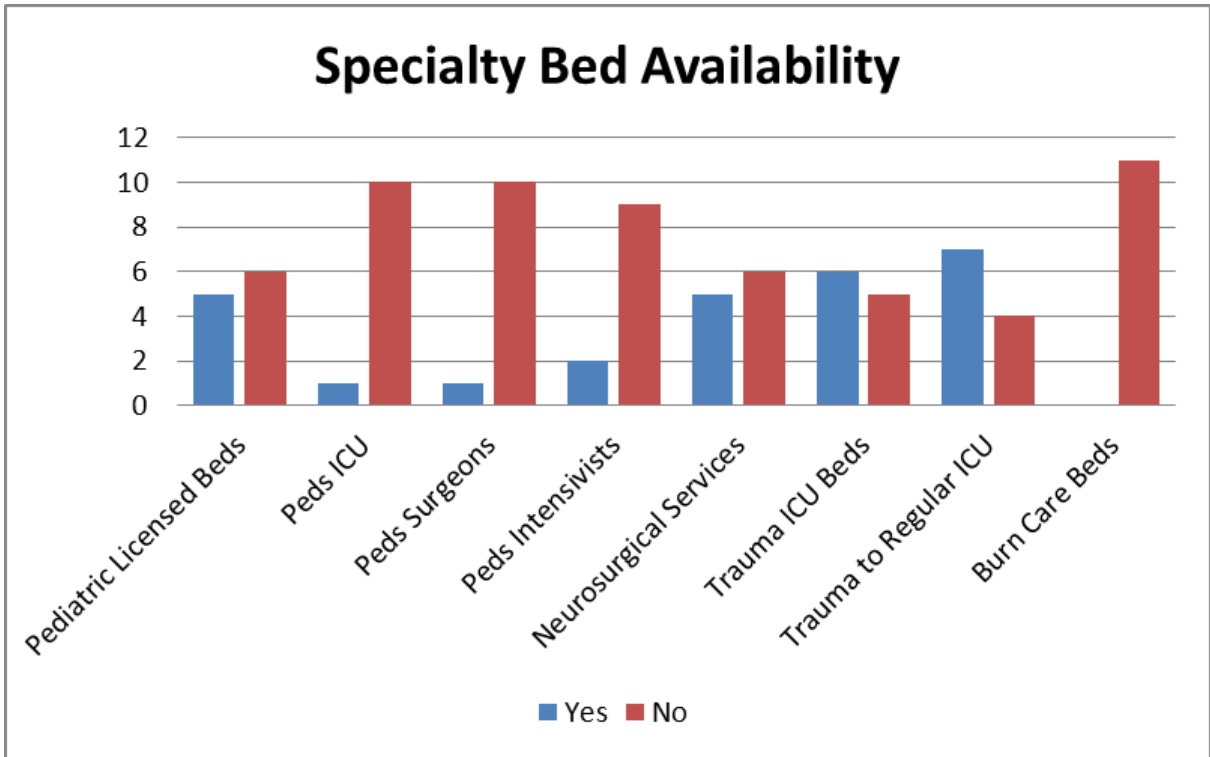
Aleda E. Lutz VA Medical Center	N/A Non-Emergency	
McLaren Bay Region	114.8 989-894-2869 Dedicated line in ED	Zone C 1 09BRMC
McLaren Bay Region-West Campus	N/A Non-Emergency	N/A
Caro Community Hospital	114.8 989-673-3141	Zone C 2 79CARO
Covenant Medical Center, Cooper	91.5 989-583-6521 Emergency Dept	Zone C 3 73COV
Covenant Medical Center	91.5 989-583-6521 Emergency Dept	Zone C 3 73COV
Covenant Medical Center, Michigan	91.5 989-583-6521 Emergency Dept	Zone C 3 73COV
Deckerville Community Hospital	118.8 810-376-2835 Switchboard	Zone C 4 73DECK
Genesys Regional Medical Center - Health Park	114.8 810-606-5933 ED Desk	ZONE C 5 25GENE
Harbor Beach Community Hospital	N/A	Zone C 6 32HARB
HealthSource Saginaw	N/A	Zone C 7 73HSS
Hills & Dales General Hospital	127.3 989-872-2121	Zone C 8 79DALE
Hurley Medical Center	74.4 810-232-1372	Zone C 9 25HURL
Huron Medical Center	103.5 989-269-9521	Zone C 10 32HURON
Lapeer Regional Medical Center	103.5 810-664-2244	Zone C 11 44LAP
Marlette Regional Hospital	141.3 989-635-3377 Recorded	Zone C 12 76MARL
McKenzie Memorial Hospital	131.8 810-648-1911 Nurses Station, recorded	Zone C 13 76MCK
McLaren Regional Medical Center	71.9 810-342-2308 ED	Zone C 14 25MCLAR
MidMichigan Medical Center - Gladwin	79.7 989-246-6258 ED	Zone C 15 26GLAD
MidMichigan Medical Center - Midland	110.9 989-837-9099 Dedicated line in ED	Zone C 16 56MIDL
Saint Mary's Standish Community Hospital	91.5 989-846-2748	Zone D 3 06STAN
Scheurer Hospital	206.5 989-453-3393	Zone D 1 32SCH
St. Mary's Of Michigan Medical Center	107.2 989-776-8200 Emergency Dept	Zone D 2 73SMAR
St. Joseph Health System Tawas	103.5 989-362-3411	Zone D 4 35STJOE
West Branch Regional Medical Center	100.0 989-343-3261 ED	Zone D 5 WBRM
Bay Special Care Center	N/A Non-Emergency	N/A
Caro Center	N/A Non-Emergency	N/A
Select Specialty Hospital-Flint	N/A Non-Emergency	N/A
Select Specialty Hospital-Saginaw	N/A Non-Emergency	N/A
St. Mary's of MI North	N/A	

## MDCH 2013 Trauma Needs Assessment

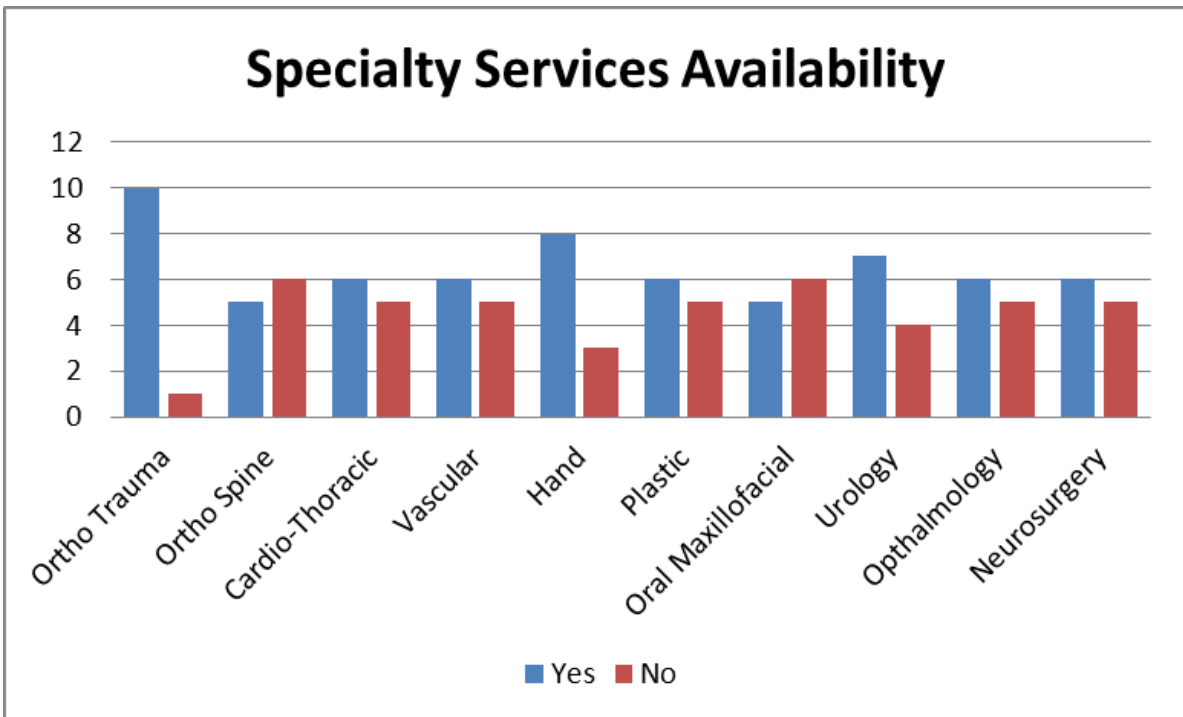
In July 2013, the MDCH Trauma Section sent out a survey request to the hospitals in the 8 trauma regions. The intent of the survey was to provide information to regional stakeholders regarding the assets, resources and demographics of their individual regions in order to assist in the development of regional trauma plans.



Region 3 Hospital ACS Verification Level and Considered Level. Source: 2013 MDCH Hospital Survey.

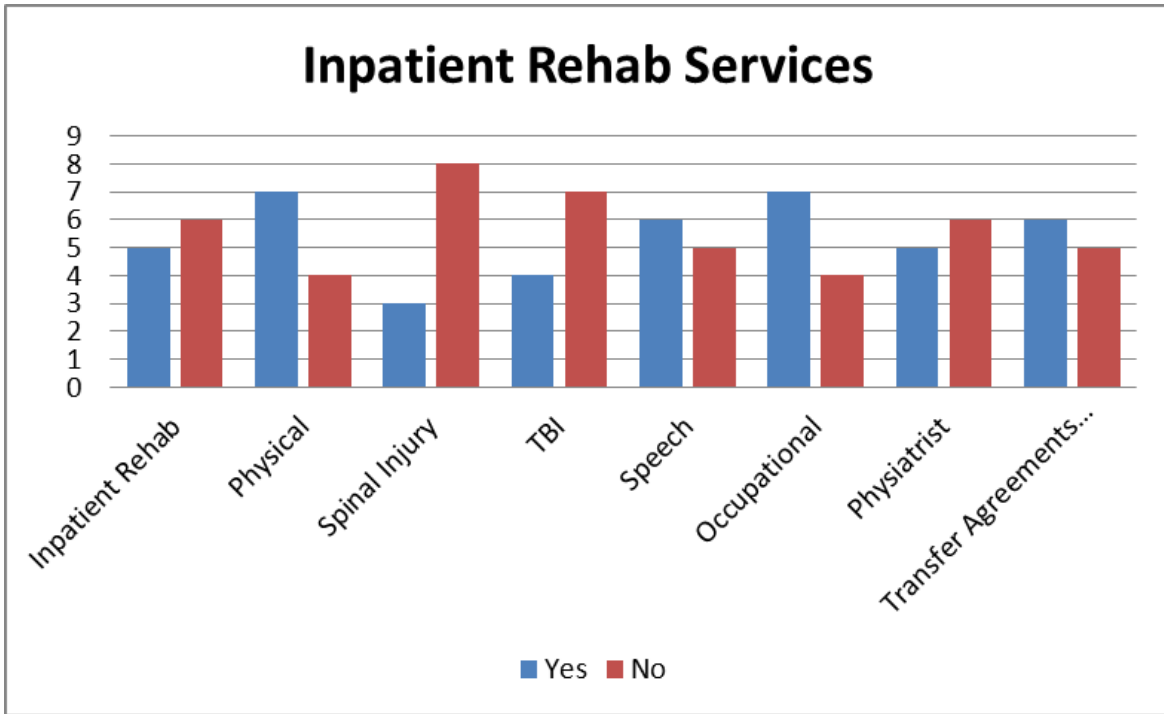


Region 3 Specialty Bed Resources. Source: 2013 MDCH Hospital Survey.

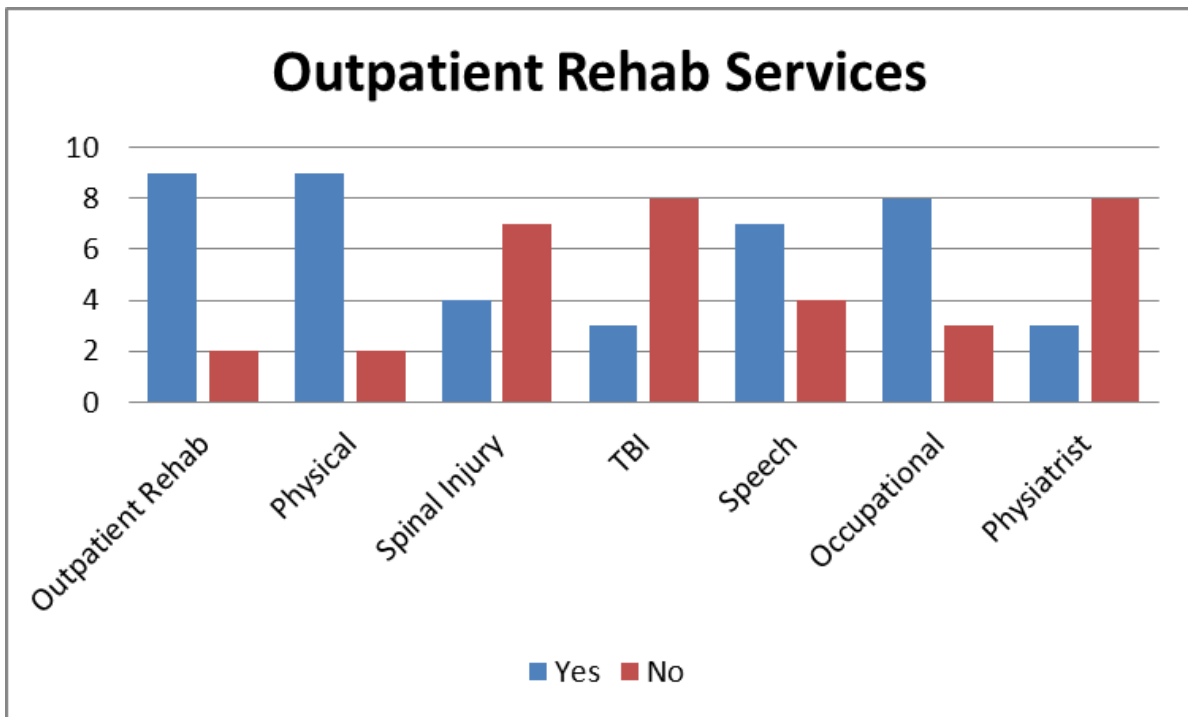


Region 3 Specialty Service Resources. Source: 2013 MDCH Hospital Survey.

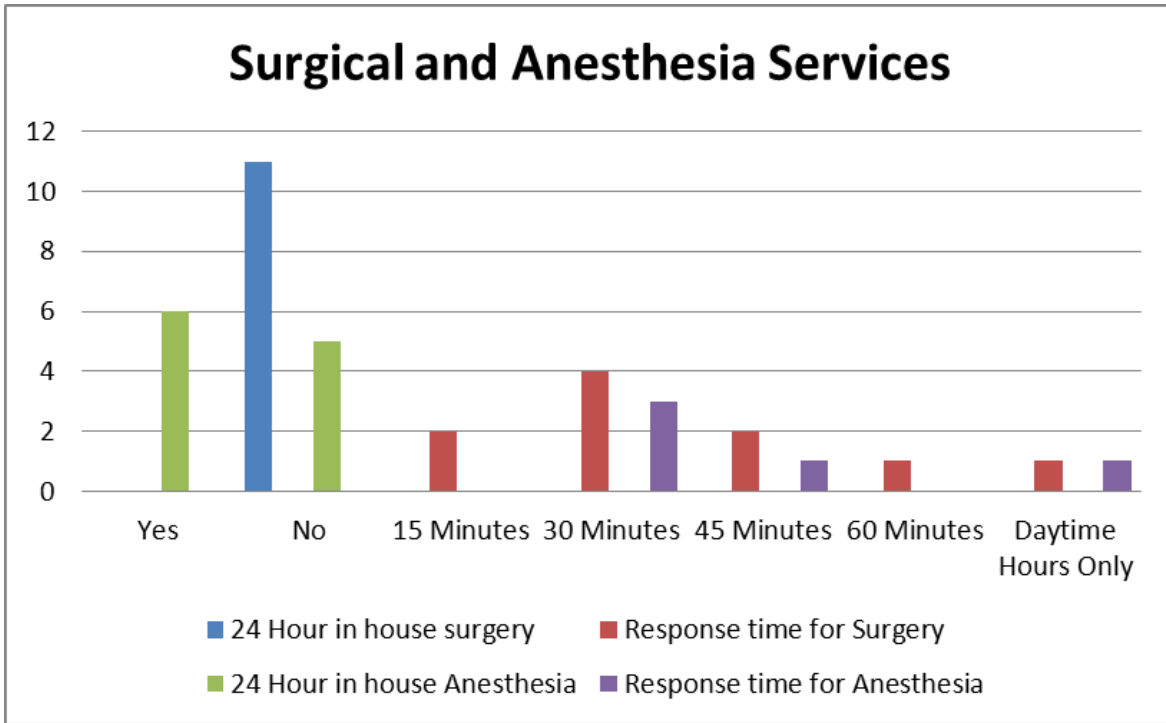




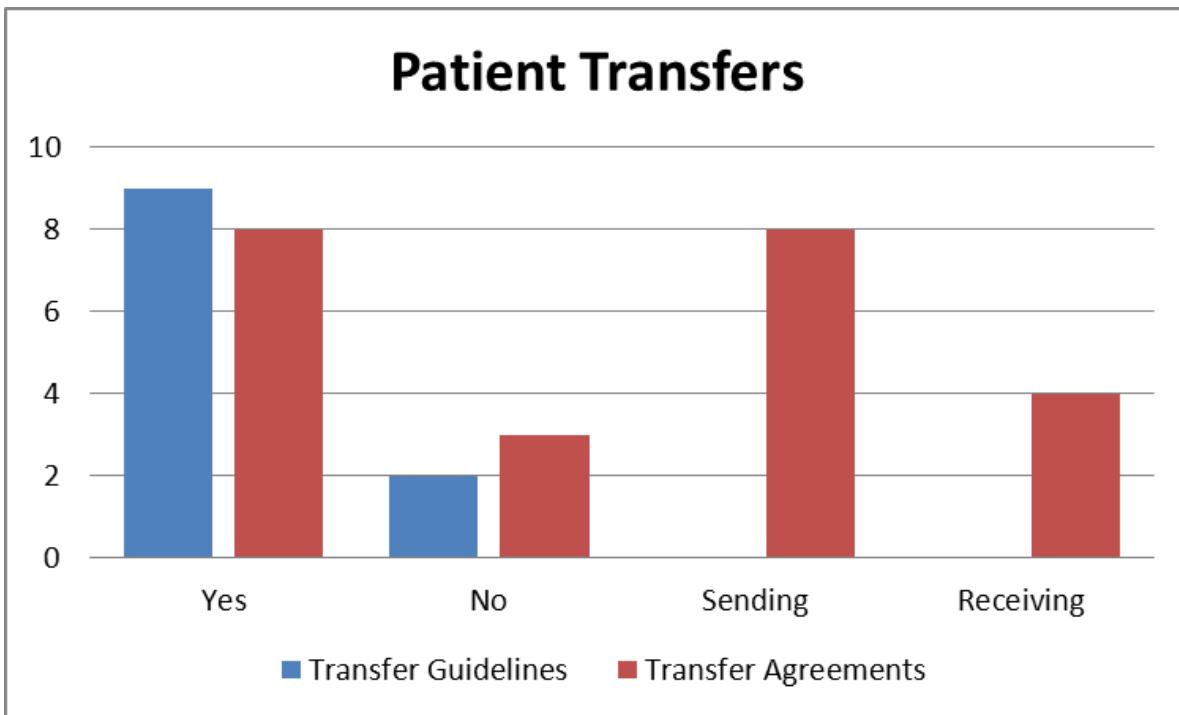
Region 3 Inpatient Rehabilitation Service Resources. Source: 2013 MDCH Hospital Survey.



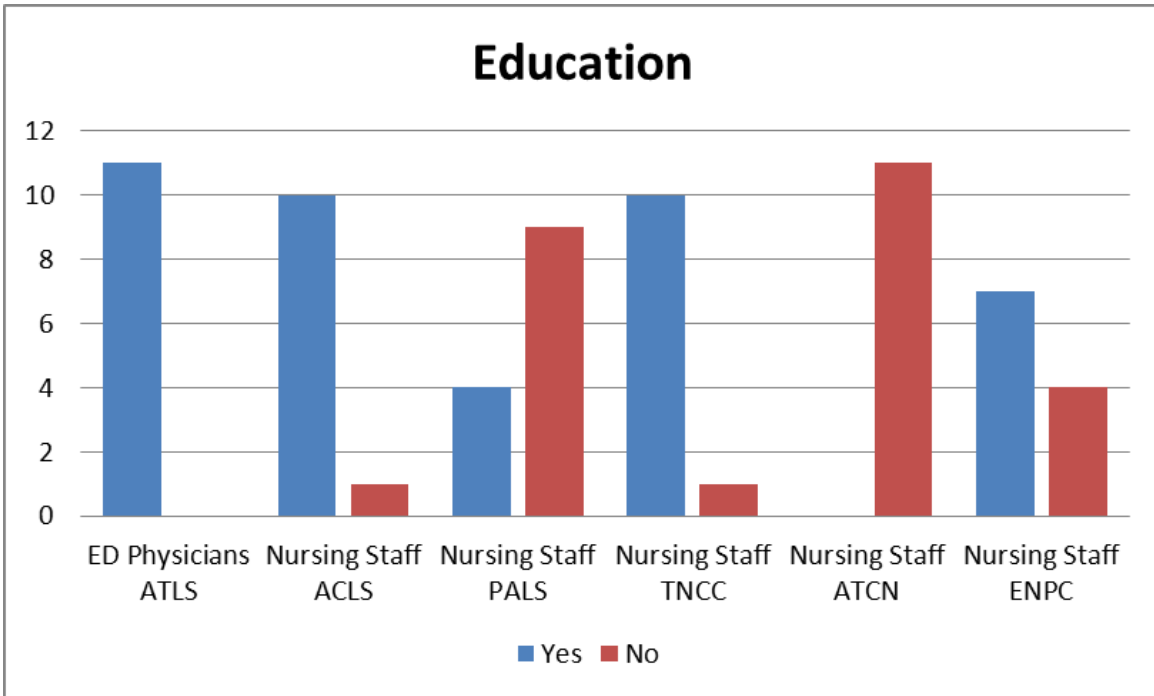
Region 3 Outpatient Rehabilitation Service Resources. Source: 2013 MDCH Hospital Survey.



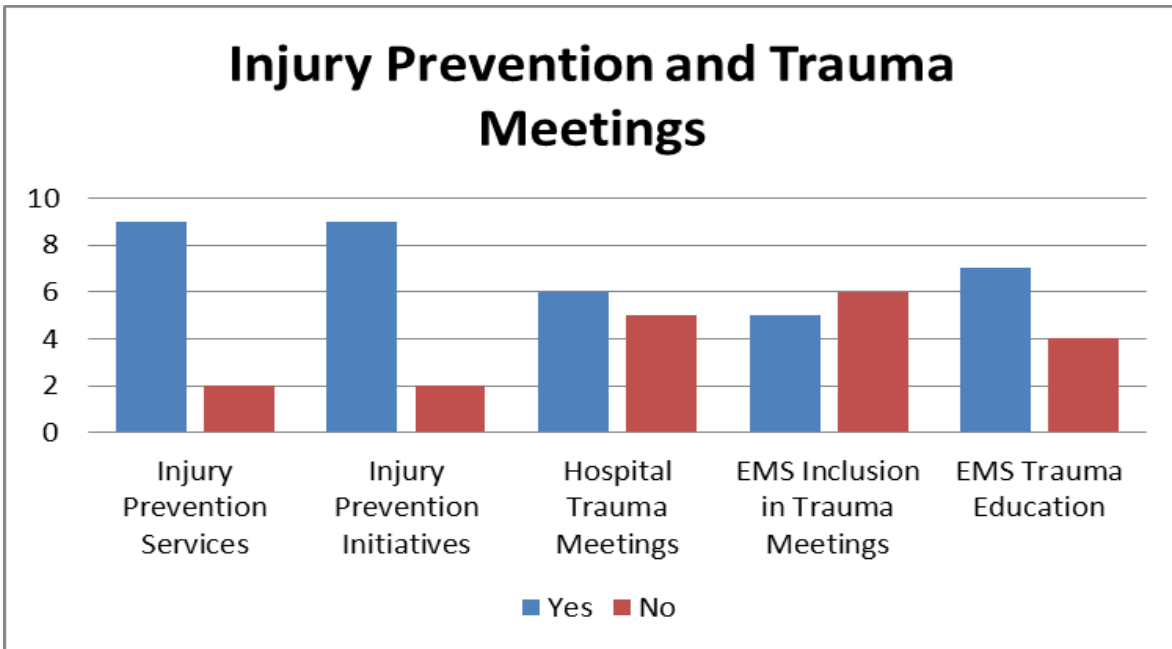
Region 3 Surgical and Anesthesia Service Resources. Source: 2013 MDCH Hospital Survey.



Region 3 Hospitals with Adult Patient Written Transfer Agreements and Guidelines. Source: 2013 MDCH Hospital Survey.



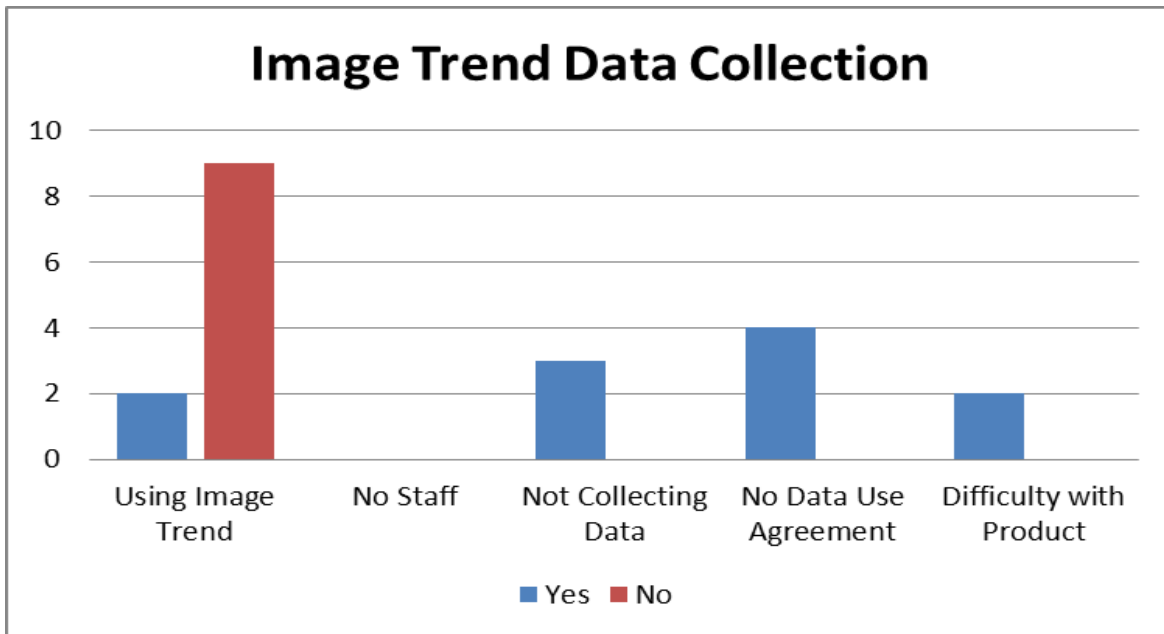
Region 3 Hospital Emergency Department Trauma Education Requirements. Source: 2013 MDCH Hospital Survey.



Region 3 Hospital Injury Prevention and Trauma Meeting Participation\* . Source: 2013 MDCH Hospital Survey.

\* Questions asked for this figure:

- Do you provide any injury prevention services/programs in your community?
- Do you participate in injury prevention initiatives in your community?
- Does your hospital have meetings to address trauma related issues?
- Do you include EMS providers in your trauma meetings?
- Do you include EMS providers in your trauma education opportunities?



Region 3 Hospital State Trauma Data Base Submissions\* . Source: 2013 MDCH Hospital Survey.

\*Questions asked for this figure:

- Are you submitting data quarterly to the state data base (Image Trend)?
- If you are not submitting data, what are the reasons you are not?

## Summary

The goal of each trauma network and advisory committee is to implement an “all-inclusive” trauma system in their region. This system will allow for the care of all injured patients in an integrated system of health care in both the pre-hospital and healthcare facility environments, and will include personnel that are well trained and equipped to care for any injury severity. Each healthcare facility can participate in the system to the extent or level that it is willing to commit the resources necessary for the appropriate management of the trauma patients. This will ensure that all trauma patients are served by a system of coordinated care, based on the degree of injury and level of care required.

This regional resource overview is intended to be a “living document” providing the partners and stakeholders in trauma care a common understanding of the assets and resources available in Region 2 South. It is expected that this report will continue to evolve as the regional trauma system develops and matures.