

# MICHIGAN ANNUAL TRAUMA REPORT 2021

## REGION 5

**Statutory Reference:** R325.132 Rule 8 (3) (a) At least quarterly, a region shall submit evidence of ongoing activity, such as meeting notices, minutes to the department. Annually the regional trauma advisory council shall file a report with the department which describes progress toward system development, demonstrates ongoing activity, and includes evidence that members of the regional trauma advisory council are currently involved in trauma care.

### OVERVIEW AND ASSESSMENT OF RESOURCES

**Demographics:** The nine southwestern counties that make up Region 5 are Allegan, Barry, Van Buren, Kalamazoo, Calhoun, Berrien, Cass St. Joseph, and Branch. These counties are a mix of mostly smaller and rural farming communities and three urban areas: Kalamazoo, Battle Creek, and St. Joseph.

The Region is home to Western Michigan University, with Whirlpool Corporation and Stryker both having cooperate headquarters in the area. Region 5 enjoys a significant amount of tourism along the Lake Michigan shoreline and local wineries. The area also sees a large number of seasonal residents vacationing from the Chicago-land area. Population for the region is 948,000 with Kalamazoo County making up a quarter of that at 250,311 (2010 Census).

The region has 16 hospitals, 9 Medical Control Authorities, 93 EMS agencies and 7 Health Departments. The region has one Level I American College of Surgeons verified Trauma Center (Bronson Methodist) and one Level II (Borgess Medical Center). Bronson Hospital is the region’s American Burn Association (ABA) burn center and pediatric hospital. Pediatric beds are available at 9 of the 15 receiving hospitals.

**Medical Control Authorities:**

MCA Name	Medical Director
Allegan County Medical Control Authority	Joshua Mastenbrook, MD
Barry County Medical Control Authority	Matthew Scarff, MD
Berrien County Medical Control Authority	Jonathan Beyer, DO
Branch County Medical Control Authority	Michael DeGryse, DO
Calhoun County Medical Control Authority	Lindsey Rauch, MD

Cass County Medical Control Authority	Garrett Collins, DO
Kalamazoo County Medical Control Authority	William Fales, MD
St. Joseph County Medical Control Authority	Chris Milligan, DO
Van Buren County Medical Control Authority	Andrea Allman, DO

**Designation Status of Facilities in Region:**

Facility Name	Designated Yes or No	Level of Designation
Ascension Borgess Allegan Hospital	Yes	IV
Ascension Borgess Medical Center	Yes	II
Ascension Borgess Lee Hospital	No	Provisional-IV
Bronson Battle Creek Hospital	Yes	III
Bronson Lakeview Hospital	Yes	IV
Bronson Methodist Hospital	Yes	I
Bronson South Haven Hospital	Yes	IV
Oaklawn Hospital	Yes	III
ProMedica Coldwater Hospital	No	Provisional-IV
Spectrum Health Niles Hospital	Yes	IV
Spectrum Pennock Hospital	Yes	IV
Spectrum Health St. Joseph Hospital	Yes	III
Spectrum Health Watervliet Hospital	Yes	IV
Sturgis Hospital	No	Provisional-IV
Three Rivers Hospital	No	Provisional-IV

**Governance:**

**Regional Trauma Network (RTN) Board**

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	Name
Chairperson	Matthew Scarff
Vice Chairperson	Chris Milligan

**Regional Trauma Advisory Council (RTAC)**

	Name
Chairperson	Andrea Allman
Vice Chairperson	Oreste Romeo

**Regional Professional Standards Review Organization**

	Name
Chairperson	Matthew Scarff
Vice Chairperson	Chris Milligan

**Governance Activity Report:**

- Regional Trauma Network Board (RTN Board): The RTN Board met once in 2021. One meeting did not meet quorum and was held as an informational meeting only. Two meetings were cancelled due to lack of agenda items for the RTN board.
- Regional Trauma Advisory Council (RTAC): The RTAC held all meetings for 2021 with strong attendance. The RTAC continued to focus on the Region 5 Work Plan.
- Regional Professional Standards Review Organization (RPSRO): The RPSRO cancelled one meeting in 2021. The RPSRO meetings that were held had strong attendance and discussion of the RPSRO Inventory.

## Work Plan Objective Progress and Highlights

### Injury Prevention

<b>Indicator 306.2:</b> The RTN is active within the region in the monitoring and evaluation of regional injury prevention activities and programs.
<b>Regional Score:</b> 2017 workplan (1). 2020 workplan (1)
<b>Objective:</b> For the duration of the application period, the Injury Prevention/Education committee will report data into Injury Prevention tracker, available data presented at each scheduled RTN meeting and will remain a standing RTN agenda item beginning first quarter 2021.
<b>Progress:</b> The Injury Prevention and Education committee discussed the tracker document that contains all injury prevention and education activities throughout 2021. Due to the Covid environment the injury prevention and education activities were not held. The committee has discussed the feasibility of virtual activities but no movement forward on this yet.

  

<b>Indicator 203.5:</b> The RTN has developed a written injury prevention plan. The injury prevention plan is data driven and targeted programs are developed based upon high injury risk areas. Specific goals with measurable objectives are incorporated into the injury prevention plan.
<b>Regional Score:</b> 2017 workplan (2). 2020 workplan (1)
<b>Objective:</b> Looking at the top three MOI, The Injury Prevention/Education committee will provide a regional action plan for facilities to follow, addressing one of the top three MOI for the region by second quarter of 2021.
<b>Progress:</b> The Injury Prevention and Education committee has completed an injury prevention workplan and discussed the three highest MOI for Region 5. Due to the inability to provide activities related to the three MOI during 2021 the committee tabled this objective. The committee will discuss this objective once activities can be resumed or virtual activities are developed.

  

<b>Indicator 207.4:</b> A trauma system public information and education plan exists that heightens public awareness of trauma as a disease, the need for a trauma care system and the prevention of injury. The RTN will promote evidenced based primary injury prevention activities and projects.
<b>Regional Score:</b> 2017 workplan (2). 2020 workplan (1)
<b>Objective:</b> The Injury Prevention/Education committee will write a trauma system public information and education plan by second quarter of 2021.

**Progress:** The Injury Prevention and Education committee has completed the Injury Prevention workplan. The committee has also developed a link/page on the 5DMRC website. The Injury Prevention workplan can be found on this page.

### Communications

**Indicator 302.10:** There are established procedures for EMS and trauma system communications for major EMS events or multiple jurisdiction incidents that are effectively coordinated with the overall regional response plans.

**Regional Score:** 2017 workplan (4). 2020 workplan (1).

**Objective:** Region 5 hospitals will follow MedCom regional protocol for disaster communications. The RTN will provide education to all Region 5 hospitals of MedCom by November 1, 2021.

**Progress:** A communications committee was formed in 2021. This committee has focused on communication workplan objectives. The committee has focused on dispersing the MedCom regional protocol for disaster communications, including contact information throughout the region.

**Indicator 302.9:** There is a procedure for communications among medical facilities when arranging for inter-facility transfers including contingencies for radio or telephone system failure.

**Regional Score:** 2017 workplan (1). 2020 workplan (1).

**Objective:** The RTN will distribute laminated cards to all Region 5 facilities citing the resources (MedCom and EMresource as identified in 302.10) available in the event of a failure in hospital communication systems by November 1, 2021. The laminated card will contain the MedCom contact number and disaster communications protocol, EMResource information.

**Progress:** The Communication subcommittee has discussed this objective. This objective remains open and on the agenda for 2022 meetings.

**Indicator 105.7:** An assessment of the needs of the general medical community, including physicians, nurses, pre-hospital care providers, and others concerning trauma system information, has been conducted.

**Regional Score:** This is a new indicator. 2020 workplan (2).

**Objective:** By December 31, 2021, The RTN will develop an educational needs assessment regarding education/topics/programs related to the trauma system. The internal form will be placed on the Region 5 website.

**Progress:** The Injury Prevention and Education committee has developed a needs assessment form for the website trauma page. Due to a turnover in staff (the position that oversees the 5DMRC website) this form has not been placed on the trauma page yet. A meeting is planned to complete this.

### Infrastructure

**Indicator 208.2:** The incident management and trauma systems have formal established linkages for system integration and operational management.

This is directed at the Trauma Network's collaboration with the Regional Healthcare Coalition

**Regional Score:** This is a new indicator. 2020 workplan (1).

**Objective:** The RTN will provide education to all Region 5 hospitals of MedCom by November 1, 2021. Education- Region 5 hospitals will be provided with the following:

- MedCom 1-800 contact number
- MedCom disaster communication protocol
- Use of EMresource

**Progress:** The Communications subcommittee has focused on this objective. Education for the region will continue into 2022.

**Indicator 302.1:** There is well- defined regional trauma system medical oversight integrating the needs of the trauma system with the medical oversight of the overall EMS system.

**Regional Score:** 2017 workplan (1). 2020 workplan (3).

**Objective:** Ongoing through 2023, The RPSRO will have EMS and MCA director representation as per the Region 5 Bylaws.

**Progress:** Attendance logs are maintained which documents the attendance of EMS directors as well as MCA directors on the RPSRO.

**Indicator 302.2:** There is a clearly defined, cooperative, and ongoing relationship between regional trauma physician leaders and the EMS system medical directors in the region.

**Regional Score:** 2017 workplan (3). 2020 workplan (2).

**Objective:** The RPSRO and RTAC committee meeting minutes and attendance log will reflect the participation of Trauma Medical Directors, Trauma Surgeons, and Emergency Medical Directors by December 2021.

**Progress:** Attendance logs for RPSRO and RTAC meetings are maintained reflecting the participation of the trauma medical directors, trauma surgeons, and emergency medical directors.

**Indicator 302.6:** There are mandatory system-wide prehospital triage criteria to ensure that trauma patients are transported to an appropriate facility based on their injuries. These triage criteria are regularly evaluated and updated to ensure acceptable and system-defined rates of sensitivity and specificity for appropriately identifying the major trauma patient.

**Regional Score:** 2017 workplan (4). 2020 workplan (4).

**Objective:** The Region 5 Trauma Network partners will implement the EMS report form for radio reports throughout the region (hospitals and EMS agencies) by second quarter 2021

**Progress:** An EMS radio report form was developed by the Infrastructure subcommittee. The subcommittee will continue to monitor the compliance of this form throughout 2022.

**Indicator 303.1:** The regional trauma plan has clearly defined the roles, resources and responsibilities of all acute care facilities treating trauma, and of facilities that provide care to specialty populations (burns, pediatrics, other).

**Regional Score:** 2017 workplan (2). 2020 workplan (1).

**Objective:** Ongoing through December 2023, the RTN will continue to update roles, resources and responsibilities of all acute care facilities treating trauma including specialty populations to share with regional partners.

**Progress:** This objective has not been formally addressed during 2021.

**Indicator 303.2:** The regional trauma network plan should ensure that the number, levels, and distribution of trauma facilities are communicated to all partners and stakeholders. The RTN should develop procedures to ensure that trauma patients are transported to an appropriate facility that is prepared to provide care.

**Regional Score:** 2017 workplan (3). 2020 workplan (3).

**Objective:** The RTAC will develop a map of region 5 which includes each hospital, designation level and expiration of designation by fourth quarter of 2021.

**Progress:** The Infrastructure subcommittee has developed an interactive google map identifying the regional level trauma facilities. This interactive map will be place on the 5DMRC trauma page as well.

**Indicator 303.4:** When injured patients arrive at a medical facility that cannot provide the appropriate level of definitive care, there is an organized and regularly monitored system to ensure the patients are expeditiously transferred to the appropriate, system defined trauma facility.

**Regional Score:** 2017 workplan (1). 2020 workplan (1).

**Objective:** Each hospital in Region 5 will monitor interfacility transfers and report this data to the RPSRO quarterly, beginning first quarter of 2021.

**Progress:** This objective has been discussed at the RPSRO meetings. The discussion continues regarding identifying gaps monitoring process.

### Regional Performance Improvement

**Indicator 206.1:** The RTN generates data reports to evaluate and improve system performance.

**Regional Score:** 2017 workplan (2). 2020 workplan (1).

**Objective:** The RPSRO will identify regional system gaps, supported by available data, beginning with the first quarter 2021.

**Progress:** The RPSRO met throughout 2021. Each meeting consisted of evaluating and discussing the RPSRO Inventory. The RPSRO is currently focusing on ED dwell times to transfer times.

**Indicator 302.5:** The retrospective medical oversight of the EMS system for trauma triage, communications, treatment, and transport is closely coordinated with the established performance improvement processes of the trauma system.

**Regional Score:** This is a new indicator. 2020 workplan (1).

**Objective:** For the duration of the application period the RPSRO will monitor the RPSRO Inventory and available data to monitor trauma triage, communication, and treatment.

**Progress:** The RPSRO continues to review and discuss the RPSRO Inventory. The RPSRO will focus on gaps, action plans, and the process to communicate the action plans to all regional stakeholders.

<b>Indicator 303.4:</b> When injured patients arrive at a medical facility that cannot provide the appropriate level of definitive care, there is an organized and regularly monitored system to ensure the patients are expeditiously transferred to the appropriate, system defined trauma facility.
<b>Regional Score:</b> 2017 workplan (4). 2020 workplan (4).
<b>Objective:</b> For the duration of the application period the RPSRO will develop a process to monitor bypass of an acute care facility. Education and training will be considered based on identified gaps.
<b>Progress:</b> The RPSRO has not developed a process to monitor bypass of an acute care facility. This objective will be worked on in 2022.

<b>Indicator 205.2:</b> Collected data from a variety of sources are used to review the appropriateness of all-inclusive regional trauma performance standards, from injury prevention through rehabilitation.
<b>Regional Score:</b> 2017 workplan (1). 2020 workplan (1).
<b>Objective:</b> The RPSRO will evaluate data identifying regional processes and system gaps by the fourth quarter of 2021 or as data becomes available.
<b>Progress:</b> The RPSRO met throughout 2021. The committee has reviewed and continues discussion. As the committee moves forward gaps will be identified. Along with identifying gaps the performance improvement process will be developed during 2022.

### Continuum of Care

<b>Indicator 308.1:</b> The regional work plan addresses the integration and participation of rehabilitation services within the continuum of care for trauma patients.
<b>Regional Score:</b> 2017 workplan (1). 2020 workplan (1).
<b>Objective:</b> Rehabilitation case manager(s), and/or physician (s) will have representation on the RTAC and Injury Prevention/Education committee by first quarter of 2021.
<b>Progress:</b> A rehabilitation physician from region 5 now sits on the RTAC committee. A rehab representative does not sit on the Injury Prevention and Education committee yet. The Injury Prevention committee has discussed the need for a discharge planner to join the committee. This will be addressed in 2022.

## Trauma Education

<p><b>Indicator 310.3,4,6:</b> The regional trauma network establishes and ensures that appropriate levels of EMS, nursing and physician trauma training courses are provided on a regular basis.</p>
<p><b>Regional Score:</b> 2017 workplan (0). 2020 workplan (1).</p>
<p><b>Objective:</b> The Injury Prevention/Education committee will develop an education calendar for Region 5 and place this on the 5DMRC website by fourth quarter of 2021.</p>
<p><b>Progress:</b> The Injury Prevention and Education committee has drafted an educational calendar. This will be finalized and placed on the 5DMRC trauma page in 2022.</p>

<p><b>Indicator 310.10:</b> As new protocols and treatment approaches are instituted within the regional trauma system; structured processes are in place to inform or educate all personnel of those changes in a timely manner.</p>
<p><b>Regional Score:</b> 2017 workplan (1). 2020 workplan (1).</p>
<p><b>Objective:</b> The RTAC will develop a process to disseminate all educational material, protocols, treatment approaches to personnel by second quarter of 2021. This process must include a method to monitor compliance.</p>
<p><b>Progress:</b> The RTAC has not developed a process to disseminate all educational material, protocols, treatment approaches to personnel and stakeholders. The RTAC will review and discuss this objective throughout 2022.</p>

**Regional Summary:** The RTN identified the challenges the COVID environment presented for committee members in early 2021. Despite the turnover of staff, shifting workloads, and work priorities the committee members persevered and made the commitment to move forward with the regional trauma objectives. Attendance to all trauma meetings remained stable, and subcommittees were formed to focus on the workplan objectives. Significant progress was made in completing the objectives and bringing many to near completion. The focus for 2022 will be to finalize as many objectives as possible and identify new objectives/goals for the 2023 RTN application. It is reasonable to anticipate that Region 5 may have to carry over some workplan objectives from 2020 workplan to the 2023 workplan due to the many challenges encountered throughout the past two years. The Region 5 trauma leadership acknowledges that progress towards completing our objectives will be slow, but all are committed to maintaining a forward movement.

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**Regional System Evaluation in accordance with Administrative Rule Requirements:**

- Applicable regional trauma network meetings have taken place in accordance with the Open Meetings Act.
- Schedule and information regarding RTN Board and RTAC posted on the trauma website.
- Annual confirmation that members of the RTAC are currently involved in trauma care completed.
- All MCA's are participating in the RTN.
- All hospitals in the trauma network are participating in:
  - Regional Injury Prevention
  - Regional Performance Improvement
  - Submission of registry data to ImageTrend®
- Regional trauma plan status:

Regional Injury Prevention	<input checked="" type="checkbox"/> completed	<input type="checkbox"/> in process
Regional Trauma Education	<input type="checkbox"/> completed	<input checked="" type="checkbox"/> in process
Regional Performance Improvement	<input type="checkbox"/> completed	<input checked="" type="checkbox"/> in process
- Regional PI process in place; Inventory data reviewed, and trends (if noted) are being monitored. PI process that includes two levels of review is place (as needed). RPSRO corresponds annually (at a minimum) with RTN regarding PI. Minutes, materials stored by RTC.

Comments: The RPSRO committee began meeting consistently in early 2021, with formal membership. This committee has begun the process of reviewing, and discussing the Inventory data. A formal PI process has not been completed yet but will be discussed and formulated in 2022.

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Board Chairperson: \_\_\_\_\_ Date: \_\_\_\_\_

Regional Trauma Coordinator: \_\_\_\_\_ Date: \_\_\_\_\_