State Trauma Advisory Board Quarterly Meeting Minutes
2024 Quarter 3| July 12, 2024
Chair Ron Barbosa, MD | Vice Chair Amy Slater, RN

Appointed Board Attendance		
Present	Ron Barbosa, MD	Level 1 Trauma Surgeon
Absent	Mac Cook, MD	Level 1 Trauma Surgeon
Absent	Jonathan Kark, MD	Level 1 or 2 Orthopedic Surgeon or Neurosurgeon
Absent	Justin Sales, MD	Level 1 Emergency Medicine Physician
Present	Heather Wong, RN	Level 1 Trauma Program Manager Nurse
Present	Jennifer Serfin, MD	Level 2 Trauma Surgeon
Present	Amy Slater, RN	Level 2 Trauma Nurse Coordinator
Present	William Foster, MD	Level 3 Emergency Medicine Physician
Present	Judi Gabriel, RN	Level 3 Trauma Nurse Coordinator
Present	Timbra Burrup RN	Level 4 Trauma Nurse Coordinator
VACANT	VACANT	Urban Area Trauma Hospital Administration
VACANT	VACANT	Urban Area Emergency Medical Services Provider
Absent	April Brock, MSN	Rural Area Trauma Hospital Administration
Present	Diane Johnson, P	Rural Area Emergency Medical Services Provider
Present	Michelle Renault	Public Safety Answering Point Representative
Present	Aaron Ott	Public Member
Absent	Joel Carmody	Public Member
Present	Jim Cole, P	EMS Committee Representative

Oregon Health Authority Attendance
Robbie Edwards; Rachel Ford; Peter Geissert; David Lehrfeld, MD; Julie Miller; Laxmi Pallathadka; Madeleine Parmley; Nicole Perkins; Albert Ramon; Stella Scott; Dana Selover, MD

Public Attendance	
Alon Aharon (US Marshals Service)	Tracy Holliday (St Anthony Pendleton TNC)
Tiffany Anderson (Providence Hood River TPM)	Anthony Huacuja (Tillamook Adventist TC)
Natalie Booker (Legacy Emanuel)	Jonathan Jones (Prov Medford TC)
Rebecca Brown (OHSU)	Jonathan Lobell (US Marshals Service)
Jeremy Buller (St Charles Bend)	Ethan Lodwig (RiverBend TNC)

Ric Cole (Legacy Emanuel TMD)	Megan Lundeberg (Legacy Emanuel)
Brandon Cordell (Mercy trauma registrar)	Lisa Montgomery (Three Rivers)
Grace Dearborn (intern for Representative Travis Nelson)	Keith Quinlan (Willamette Valley)
Clif Dodson (Providence Hood River TNC)	Elizabeth Riutta (Portland State University student)
Matt Edinger (Asante Rogue TC)	Megan Sanders (Providence Seaside)
Leslie Engelgau (St Charles Redmond TC)	Linda Sheffield (Santiam TNC)
Sarah Evans (Grande Ronde TNC)	Jill Shipley (Randall Children's TPM)
Kim Fletcher (Samaritan Albany TNC)	Angie Short (Good Shepherd)
Jackie Fox (Adventist Tillamook)	Mindy Stinnett (Blue Mountain TC)
Brianna Fray (Portland State University student)	Kathy Tompkins (Salem PIPS coordinator)
Kathy Gantz (Providence Seaside NM)	Misty Wadzeck (Peace Harbor TPM)
Sarah Gold (OHSU Injury Prevention coordinator)	Michael Weimer (Life Flight Network)
Velda Handler (Adventist Tillamook trauma registrar)	Tami Wheeldon (Salem PIPS coordinator)
Katie Hennick (Good Samaritan Corvallis TPM)	Libby Windell (Salem TMD)
Zack Hittner (Willamette Valley TNC)	

Call to Order – Ron Barbosa

The meeting was called to order at 1:04 p.m.
Roll call was taken; quorum was met.
2024 Quarter 3 agenda was presented and no changes were requested.

Dr. Dana Selover introduced Nicole Perkins, Administrative Specialist supporting committees, and Adam Wagner, new OHA EMS/TS Program Manager, who was unable to be present.

Review/Approve Minutes – Ron Barbosa

2024 Quarter 2 State Trauma Advisory Board minutes were reviewed. No changes were requested.
Amy Slater motioned to approve the minutes as presented; Jennifer Serfin seconded.
All members in favor, none opposed. Motion carried.

OHA Committee Updates – Rachel Ford, Jim Cole

EMS for Children Update – Rachel Ford

- Education session coming up on August 15th – pediatric seizures and emergency room visits for headache. Registration is open now.

- Newly posted Pediatric Data Dashboard includes data from 2022 and 2023. Covers all National EMS Quality Alliance (NEMSQA) measures specific to pediatrics, as well as transport and call volume numbers.
- Portland Police Bureau partnered with OHSU-Doernbecher to do a public service announcement (PSA) on child safety seats, which could be used in trauma programs or for community education: PPB and OHSU Child Safety Seat PSA.

EMS Committee Update – Jim Cole

- Penultimate meeting was this morning; final meeting will be in October.
- Presentation given by OHA EMS/TS staff on "EMS 2.0" modernization.
- Stella Scott presented data from the Cardiac Arrest Registry for Enhanced Survival (CARES).
- Nothing specifically trauma-oriented.

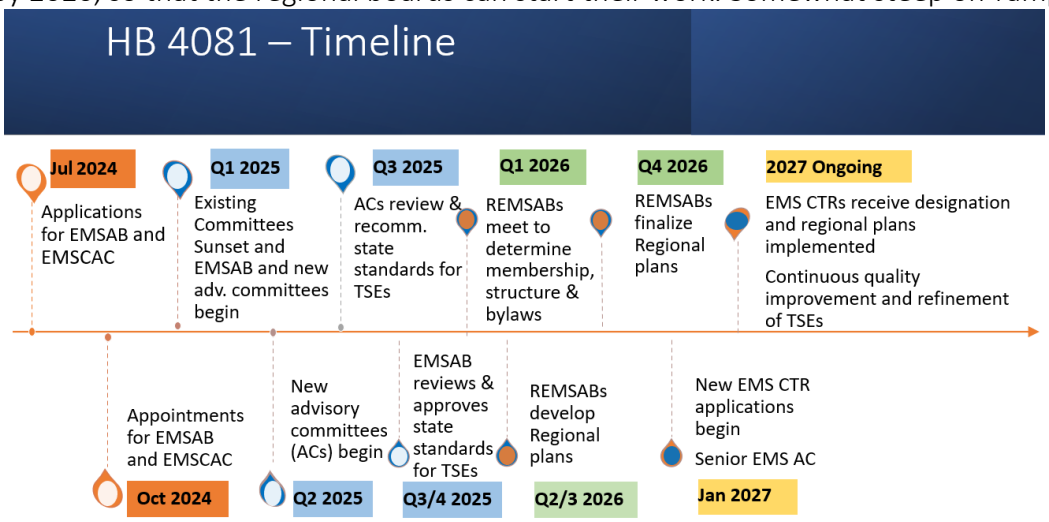
House Bill 4081 EMS Modernization – Dana Selover, David Lehrfeld, Stella Scott

Oregon House Bill 4081

Five pillars of EMS Modernization part 1:

1. Expansion of trauma statute to time-sensitive emergencies (stroke, cardiac, behavioral health). EMS/TS staff is preparing for the advisory committees to make recommendations.
2. Board and committee reorganization including regionalization. Different structures at both state and regional levels for boards and committees to get work done.
3. Integrated data systems – currently have trauma registry and EMS patient care database; would like them to talk to each other and for other future databases to be as connected as possible. Intentionally plural, to serve different purposes.
4. Incentive structure for time-sensitive emergencies and regional plans – still needs to be discovered. Will be dependent on conversations at both umbrella advisory board and individual advisory committee levels.
5. Biennial reports to the legislature.

Pretty tight timeline. Need to be done with basic starter recommendations for the statewide systems by 2026, so that the regional boards can start their work. Somewhat steep on-ramp.



"EMS centers" = hospital specialty services, to be discussed and recommended in 2025. Trauma is a voluntary system; the others will be as well. Some regions are already engaging in voluntary cardiac and stroke initiatives, so this will formalize those. National standards will continue to be preferred where available. There will be state standards and regional plans. State standards go into Oregon Administrative Rules throughout 2025. There will be flexibility for hospitals to implement, starting in 2026. The existing trauma system will continue its good work.

Boards and committees: more to come later in the presentation, but highlighting the drafting of rules, to clarify relationships and decision-making between the advisory committees and the umbrella board. Much of the activity will be in the bylaws, which are more flexible than rules, which in turn are more flexible than statute, allowing for updates and changes without going all the way up to the legislature. OHA EMS/TS staff hope to have draft rules to show the board in October.

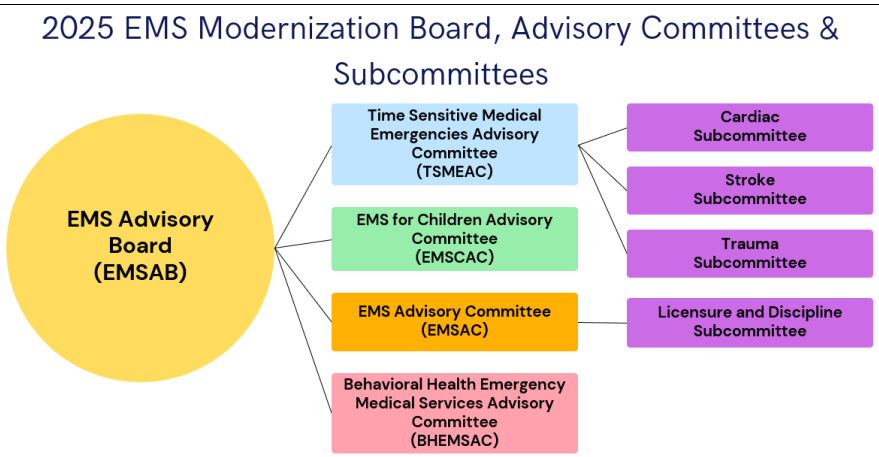
Integrated data systems: trauma registry transition is in progress; other specialty systems may require their own registries, which may not be entirely analogous to trauma. In order to determine which registries to use, the committees may form workgroups, going through a process similar to what has been done for trauma. There will also be rules and requirements around data reporting.

The Time-Sensitive Medical Emergencies Advisory Committee is going to have trauma, cardiac, and stroke subcommittees, so the trauma community will continue to have a designated place for their work. OHA EMS/TS wants to avoid having the modernization implementation interfere with the ongoing work of the trauma system and Area Trauma Advisory Boards (ATABs), especially throughout 2025 (ATABs will sunset by 2026).

Communication and outreach: versions of this presentation have been and will be given to different stakeholders (ATABs, specialty societies, fire chiefs, ambulance association, etc.). OHA EMS/TS is also working on 'menu' of data system options to prepare advisory committees for decision-making.

EMS Modernization part 2: Representative Grayber's office has been working on informational interviews, focus groups, written questions – they received feedback from 70-90 individuals and are doing the same thing now to prepare for the 2025 legislative session (starting January/February) and are working on getting agreement on bill language and elements. EMS mobilization and workforce are the biggest priorities for part 2. They will also need to address how to fund what was in the 2024 part 1 bill – need resources to increase scope of work, so funding will be needed for expansion of state systems and staff for the state EMS/TS office.

Administrative rule changes for the trauma exhibits should be done before the 2025 transition so that the state-level subcommittee and regions/ATABs will be able to focus on performance and quality improvement. OHS EMS/TS does not anticipate any major hiccups for the trauma system.



Main umbrella EMS Advisory Board (EMSAB) gathers recommendations from the committees in order to make recommendations to the OHA EMS/TS office for programs, services, data, etc. The Time-Sensitive Medical Emergencies Advisory Committee will have three specialty subcommittees for cardiac, stroke, and trauma. The EMS Advisory Committee is a new version of the current State EMS Committee, including its Licensure and Discipline subcommittee. The behavioral health committee will be a new addition. In 2026, regional boards start, and in 2027, the Senior EMS Advisory Council (currently at Oregon Department of Human Services) sunsets and will evolve into the Long-Term Care and Senior Care EMS Advisory Committee (to be housed at OHA EMS/TS). Representatives from each of the committees will sit on the board and serve as liaisons to convey the discussions and intentions behind their recommendations.

The appointment process is similar to the current STAB application. Everyone is eligible to serve on the board: fresh slate, even if completing terms on STAB. Applications will be submitted through a new portal. Requires resume or CV and a letter of interest. Eligible for two consecutive four-year terms, but EMSAB terms will be staggered for continuity. All positions are appointed by the OHA Director. Equal opportunity questions may change. Board membership must reflect geographic, linguistic, cultural, and economic diversity, and must have representation from all ATABs.

Committee schedule: moving to February / May / August / November to avoid scheduling conflicts. Also gives the opportunity to look at quarter data to have a full snapshot of the preceding quarter. EMSAB will be meeting in February 2025 because it is required to approve positions for the

subordinate advisory committees and subcommittees; the other committees will start meeting in May once EMSAB sets the seats. EMS for Children has a federal grant requirement to meet four times per year, so they will meet in February as well. Meetings will be Tuesday through Friday; the idea is that all the committees meet then bring their recommendations to the EMSAB on Friday. EMSAB will meet in person in February 2025. Moving forward, May and August meetings will be in person, then November and February (after 2025) will be hybrid.

Existing board and committee members will receive communication about these changes on Monday. The information will go through many channels so everyone is aware and can apply.

Oregon Trauma Registry Data – Peter Geissert, Albert Ramon

Announcements:

- ImageTrend offered a patient registry product tour. This is the platform that will be used for the new state trauma registry. There is a recording of the webinar accessible through ImageTrend's website.
- PeaceHealth SacredHeart is holding an Abbreviated Injury Scale (AIS) 2015 Course.

Oregon Trauma Registry (OTR) Data Migration Plan:

Data migration is often the most challenging part of any platform change: given the same basic set of facts, there are near-infinite different ways of encoding and storing them. Migration requires mapping what is being pulled, from where, where it goes, and the transformations along the way. Albert has been comparing data elements from the legacy system and new patient registry system, which is painstaking work. The goal is to have a rich, machine-readable specification document, and to develop scripts that extract the information and transform it. This is using metadata-driven data science: document data sources well and let documentation do the work when developing projects. The scripts and functions are generic, could be used with any data system, but the information about the specific fields is coming from the documentation in the data dictionary, creating a crosswalk between the two data systems.

2024 data dictionary is the starting point: What are all the data elements in the state data set for 2024? What should migrate across? Where is that information pulled from? Knowing where elements are stored now in the database, they can be dropped into standardized formats using Structured Query Language (SQL). The information came from data dictionary rather than being hard-coded into a script, then is used mapping a data element in Trauma One to a data element in the ImageTrend Patient Registry, to ensure it goes to the right place. The transformations in-between require functions that pull in a values 'crosswalk' from the mapping to implement rules so the information matches the correct destination format. Some situations and elements have more complicated mapping, so staff need to identify those and give them special attention, discussing with ImageTrend to ensure the information will go to the right place. The goal is to, with maximum fidelity, get data from the old system into the new system. Yet the process will be setting groundwork for new system while also working on the current system. This will support future reporting projects, dashboards, research requests, etc.

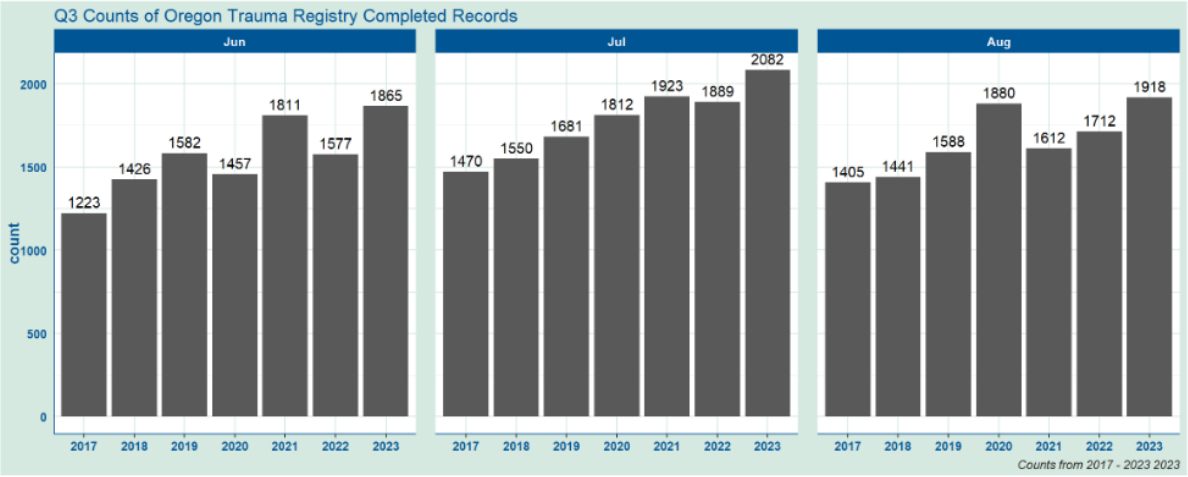
Comments/Questions:

- Matthew Edinger via chat: Confirming that the ImageTrend registry will contain accessible data from previous years from TraumaOne. Will end users be able to run end reports using historical data?
    - Peter answered yes, goal is to move all data from the old system to the new system.
- Amy Slater: Clarification on the slide showing 'Alcohol screen' as a data element being pulled from a table named "BLOODGAS" – those lab tests are not the same, alcohol screening is not processed as part of blood gas testing.
    - Peter answered that this is probably an artifact of when it was initially created.
    - David Lehrfeld added that this is more reflective of the old Lancet database's internal structure and less to do with the National Trauma Data Standard. When poking around in the back ends of databases, there is a lot of junk/shenanigans.
    - Peter further elaborated that this is one of many possible ways of encoding the same information and it will look different when it reaches the ImageTrend system.

<u>Summer Injuries Dashboard:</u>

Summer injuries from Quarter 3 of OTR data, 2017-2023. The dashboard is an HTML file that can be opened with any browser; Albert recommends opening it in full screen on a regular desktop for the best resolution, and it may not work on some mobile devices. The dashboard has five pages with topics on the tabs across the top.

1. "OTR records" (home page) has total counts of OTR records for the months of June, July, and August, then distributions by age/sex, ethnicity, and race. The 'missing' category shows the year's count and percent that did not include a specific data element.



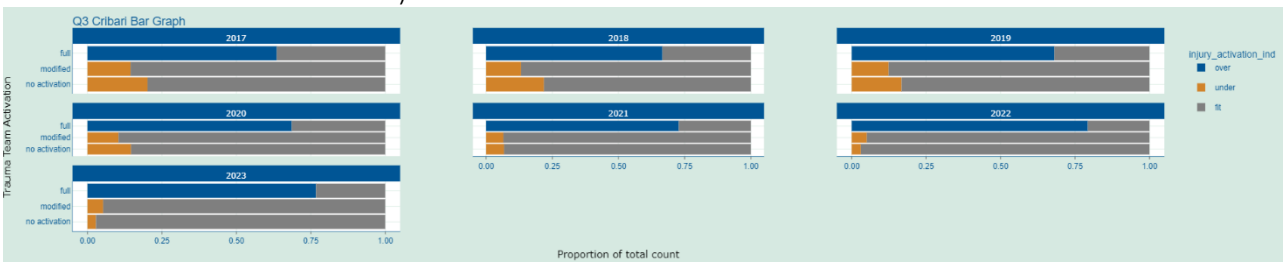
2. "Injury Counts" has top and bottom tables for injury mechanisms and specific injuries (ICD10 codes). The injury mechanism table on top has breakouts by year, and the specific injuries table are total counts over the seven-year period for Q3 records grouped by ISS scores with the percentage of high ISS out of the total number of occurrences (missing + low + high). On these tables, users can use pagination, organize by count, rank sort, and search.

Comments/Questions:

- Jennifer Serfin via chat: Is there a way to capture patients who expire on scene since they won't be entered into the trauma database?

- David Lehrfeld responded that it was a great question that OHA has been considering for a long time. He has not done an extensive literature search to see if this has been done elsewhere, and this may be a future project for the program after the basic work is completed. There could be a study design combining multiple databases, looking hierarchically at vital statistics data – all death certificates in the state which coded traumatic injuries as cause of death – and then sequentially at (1) found dead and left dead on scene, (2) found and resuscitation attempted by EMS but not transported, (3) transported but died in the ED at a trauma hospital, (4) transported but died in the ED at a non-trauma hospital, and (5) transported and died sometime during hospital admission. Theoretically, one would also need to pull Medicaid data to see if people died within a month after their injury, etc. It would be a landmark study if done. It would require IRB permissions to access vital statistics data, discharge data, NEMSIS data, trauma data. It would be a huge project. Or one could look at a more limited set of the vital statistics data, or just the EMS data set, though of course there are cases in which people are obviously dead and EMS was never called. If one were to do it and title a paper "Where We Die," that would be how.

3. "Triage" has upper graphs showing triage indicators by color, and lower tables, the left with rates of over- and under-triage for each year and the right with the injury mechanisms in the under-triage cases (negative percent change indicates an improvement in the under-triage rate for the mechanism).



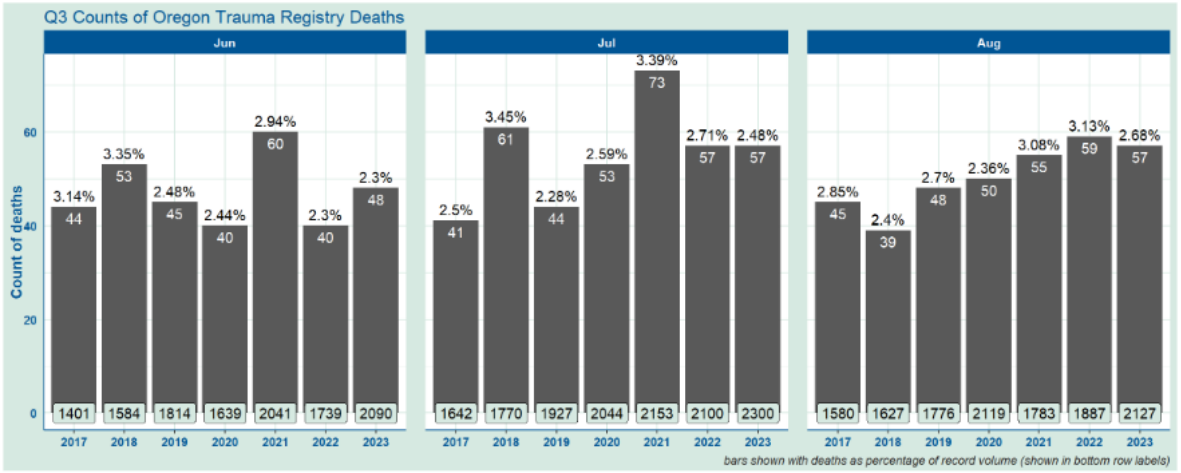
Comments/Questions:

- Jeremy Buller via chat: Is under-triage only using the Cribari method for now?
  - Albert answered that as of now, yes, it is only using Cribari. He is going to work on further developing the analysis.
- Kathy Tompkins via chat: Will it align with the activation criteria in the future?
  - David Lehrfeld replied that of the various ways of doing triage, Cribari is relatively simple, using only two variables (ISS score and activation level). Assessing triage by the field triage criteria could be done but is a much more extensive project (mapping ICD10 codes to text, pulling prehospital and ED vital signs). It is possible, a methodology could be developed, but again, it would be seminal: if it were easy, someone would have already done it. That work is far in the future as nationally-accepted indicators are built out. Need for Trauma Intervention (NFTI) could also be done as well, would have to be built out. Not unlike what Peter was discussing in his mapping, would have to figure out what the corresponding part(s) are.

4. "Readmits" has a top table showing initial triage on readmitted patients with proportional percentages for over/under/fit, and bottom bar charts that separate by age, sex, ethnicity,

and race, using NTDB elements. A correction was made to the top table from previous versions of the dashboard to remove empty readmit rows.

5. "Deaths" does not include all those from traumatic injury but only those who enter the trauma system, receive evaluation and/or care at a trauma center, and subsequently die of their traumatic injury. The top shows plots with the total volume records at the base of each bar to give the denominator for the percentage calculation. Higher counts do not necessarily correlate to the highest percentage values. The tab for racial demographics combines several NTDB values into a single BIPOC category due to small numbers (less than five). The frequency of missing data for deaths is much higher than seen in the overall record volume. The bottom half of the "Deaths" page has tables showing (a) death-related injury mechanisms with the percentage as the change from 2017 to 2023. and (b) top death-related ECODEs using totals from all years of data.



Key points from the dashboard:

- Assault and self-harm had the highest-severity injuries in the "cut/pierce," "struck by or against," and "firearm" categories.
- Motorcycles and ATVs had the highest-severity injuries in the "motor vehicle-related" and "other transport mechanisms" categories.
- Consistent patterns from 2017-2023:
    - Falls +75% as cause of injury, +69% as death-related mechanism.
    - Firearms +88% as cause of injury, +25% as death-related mechanism.
    - Natural/environmental +73% as cause of injury.
    - Motor vehicles -17% as cause of injury, -27% as death-related mechanism.
- 2021 had highest counts of deaths in every summer month.

Comments/Questions:

- Jeremy Buller via chat: How many of the deaths in 2021 were COVID-positive?
    - Peter answered that he was not sure because COVID test results are not visible from dashboard output, but said it would be interesting to look at.
    - David Lehrfeld stated he would not interpret too much from the data because every hospital and healthcare system had different testing policies, so the data would be highly variable and one should avoid overinterpretation.

Rules Advisory Committee Update – Madeleine Parmley

History of Exhibit 4 Rules Advisory Committee (RAC). Oregon largely aligns with the American College of Surgeons (ACS) publication Resources for the Optimal Treatment of the Injured Patient. New ACS standards ("Gray Book") came out in 2022 and were revised November 2023. Currently revising state rules to match standard of practice. Previous RAC meetings were held 06/10/24, 06/25/24, and 07/01/24. The next and final meeting is 07/15/24; public members interested in attending who are not RAC members can join in listen-only mode.

Proposed updates are a collaborative effort of Trauma Program Managers, Medical Directors, and other interested parties. Enjoyable to work together to find the best practices for Oregon.

Chapter 2:

- Differentiated between caring for pediatric trauma patients versus admitting them.
- Changed from 'essential' to 'recommended' for Level II and III Trauma Medical Director membership in trauma organizations and attending at least one meeting.

Chapter 4:

- Because Gray Book did not address Level IV facilities at all, a lot of language said "all trauma centers" so changed all language in those standards to specify requisite trauma levels.
- Spelled out Orthopedic Trauma Association instead of using OTA.
- For the section on surgical expertise and ophthalmology, added information from Gray Book to clarify that sporadic gaps in coverage must be addressed with a contingency plan.
- Replaced National Trauma Data Standard (NTDS) with OTR inclusion criteria, specifically around staffing requirements. New requirement for at least one registrar to be a current certified AIS specialist, changed to only Level I or others seeking ACS verification.

Chapter 5:

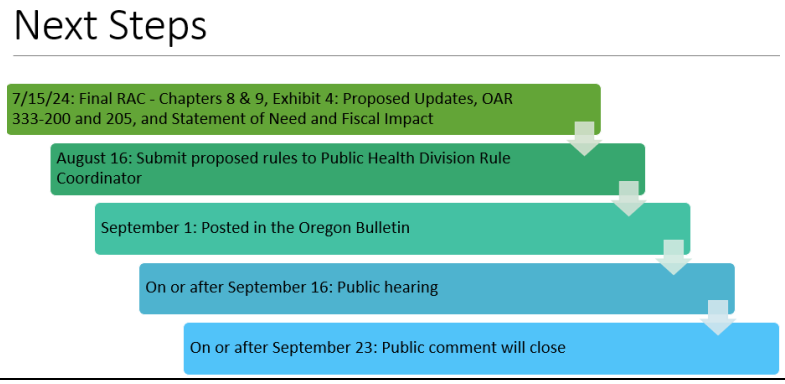
- Added protocols for care of the injured older adult – felt they were standard of care so added for trauma centers at Levels III and IV, not just I and II.
- Added that Level IV centers that provide surgical services must have an operating room booking policy that specifies targets for timely access based on level of urgency.

Chapter 6:

- Related to inclusion criteria, replaced NTDS with OTR criteria and applied to all centers. For Levels I and II, removed TQP Data Center and retained National Trauma Data Bank.

Chapter 7:

- Part of standard around TQUIP – removed risk-adjustment for benchmarking, just stated need to use benchmarking in performance improvement.



Final RAC meeting for Exhibit 4 will be held on Monday, July 15th. The meetings have finished early so far in case people try to join late. Goal is to submit to OHA's Public Health Division rule coordinator by August 16th.

OHA EMS/TS Director & Medical Director Update – Dana Selover, David Lehrfeld

OHA EMS/TS Quarter 2 Report is attached below.

Governor's signing of the EMS Modernization bill. Many notable folks present. Very excited to have this finally cross the governor's desk, at least part one. Looking forward to the trauma system becoming the "older sibling" of other specialty systems. Many people worked hard on this bill and gave input, and will continue to give input for future parts and as implementation proceeds.

Ambulance agency and vehicle RAC will be conducted before the end of the year. Education and trauma rules are both being finalized. There will be rules for new boards and committees that will likely be highlighted at the meeting in October.

Legislation updates:

- Senate Bill 1552, prequalification determinations for licensing. The Professional Standards Unit will be hiring someone to help with this.
- House Bill 4136, innovation bill for Lane County. This may be adjacently interesting for the trauma system. Trying to keep up with resource needs to get patients care in the right place at the right time, which sometimes does not need to be an emergency department. They are going to try out nurse triage lines, experimenting with triage processes and destinations. Functioning as a bit of a laboratory for other counties and regions.

Adoption of new field triage criteria: the state will need a couple years to see how that affects volume and destination. To the extent that there is some movement within EMS to look at "alternate response" models and "alternate destinations," it is unlikely to affect trauma though hard to say how they will affect emergency department volumes because they are small pilot projects.

ATAB Updates – Ron Barbosa

1: Megan Lundeberg. No updates, meeting next Friday at the coast.
2: Amy Slater. Meeting next week. Have been working on updating ATAB plan; will review edits and approve.
3: William Foster. Continue to work on ATAB plan. Interesting case presentations including semi-mass casualty incidents at smaller hospitals.
5: Matt Edinger. Next meeting in August. Focused on updating ATAB plan and bylaws.
6: no response.
7: no response.
9: no response.

Public Comment - Ron Barbosa
No comments.

Meeting was adjourned at 3:03 p.m.

Next Meeting: October 11, 2024
Location: Portland State Office Building Room 177, 800 NE Oregon St, Portland, OR, 97232 (Zoom hybrid option)

October's meeting will be STAB's final meeting. OHA EMS/TS is encouraging everyone to attend in person; appointed committee members will be reimbursed for travel. STAB projects will be finalized for handoff transition to new committees in 2025.

These minutes have been approved by the State Trauma Advisory Board.