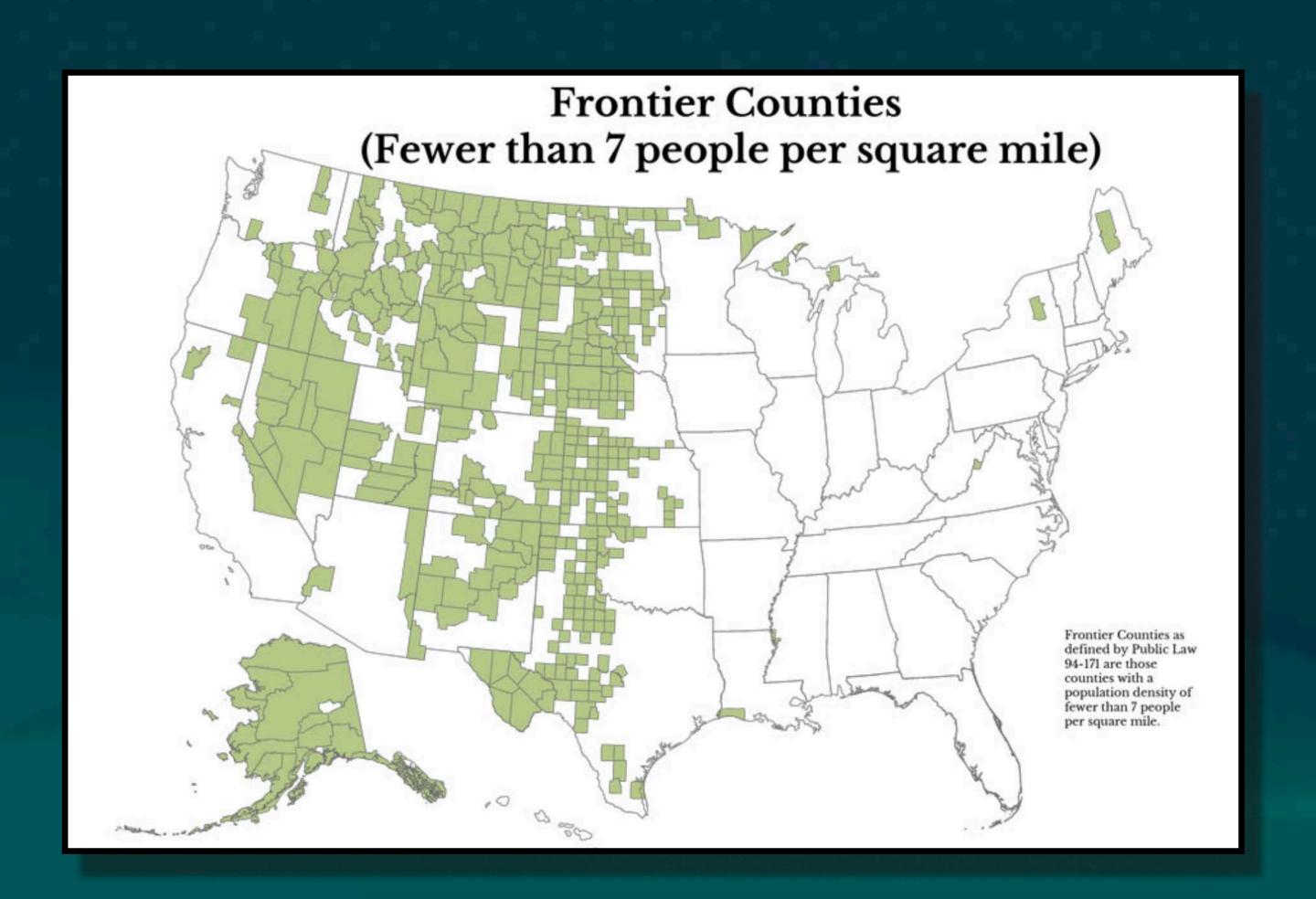


MSK Trauma: in a Rural Facility

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What are we talking about?

- Early Care Irrigate, Antibiotics and Tetanus
 - Antibiotic selection: Urban vs Rural?
- Early Reduction make it look better, not perfect!
 - Favored Procedural Sedation Medications
- Start with....



Don't Get Distracted!



Small Hospital Trauma Resuscitation

1 Doc, 2 RN's, a couple volunteer EMT's and a Housekeeper

- Control obvious hemorrhage.
- Airway yes or no. But will it stay that way?
- **B**reathing what's the work of breathing?
- Circ IV Access? Do I need blood at the bedside?
- Disability GCS. Moving all 4? Posturing?
- Expose and Warm 92. Content = Hbg X % Sat
- Follow-up.
- <u>Get Help or Get Out of Here!</u>

MSK Trauma: Early Care in the Resus Bay

- Keep it simple!
- Irrigate copiously and remove obvious chunks, but don't debride.
- Stablize impaled objects.
- Give TDap and if no vaccines (immigrant population) give TIG.
- Early antibiotics!
 - But which ones? Urban vs Rural Wounds...

Antibiotics

- 2020 Atwan et.al. Rural Canada. Open LE Fx's. Who got infected?
 - Early surgery didn't matter!
 - Early Antibiotics
 - For each hour of delay, an increase of 3%
 - Optimally, within 3 hours of injury.
- And so, which ones?

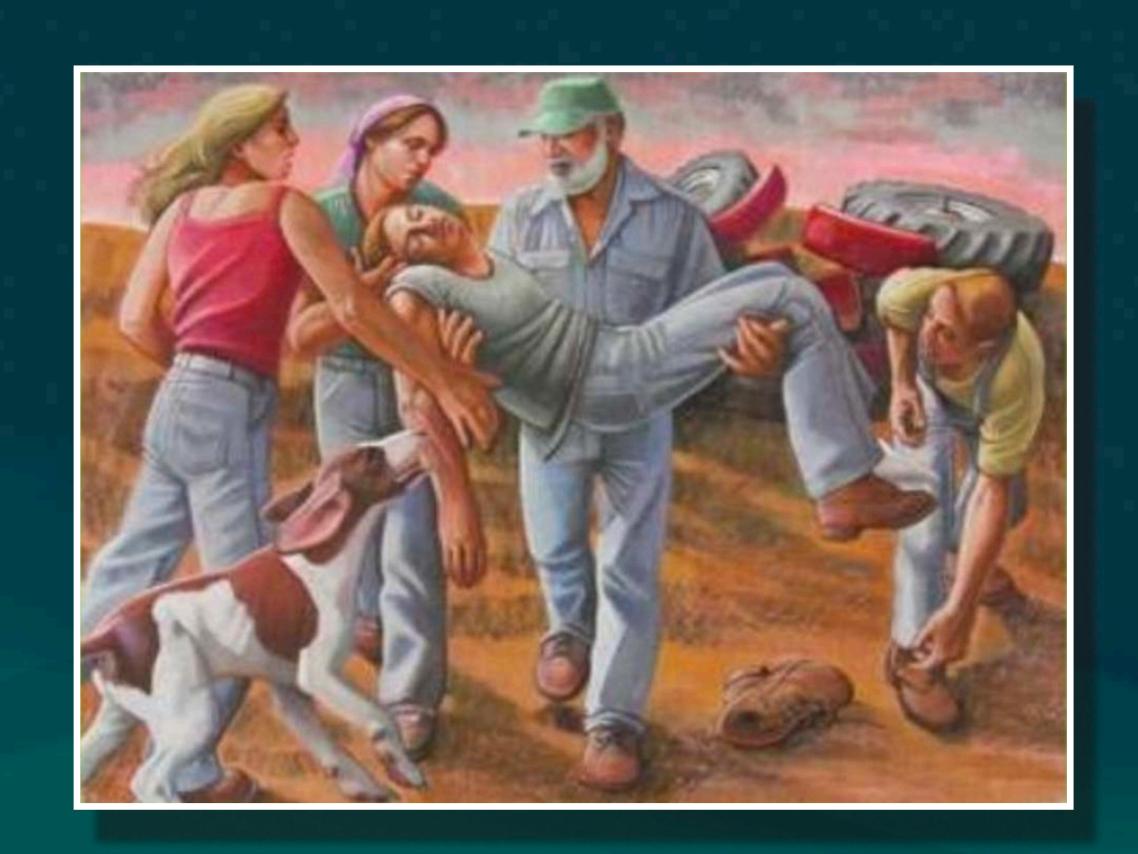


Antibiotics

- 2022 Wynn, et.al, J. Of Ortho Trauma
- University of Iowa & Mississippi
- Retrospective Study 2003-2018
- Agriculture vs. NON-Agriculture
 - Table One: More men in AG group
 - 75% Farm machinery 15% Animals
 - 55% foot and leg
 - Deep space infection 2x as common!
- The culprit...

Agriculture = Anaerobic Organisms!

- 44% of Agricultural Wounds
 - < 5% of non-ag wounds
- Enterococci
- Pseudomonas aeruginosa
- Clostridium perfringens
- 15-20% also had Gram Negatives...
- Zosyn, Vanco and Clinda



Early Reduction is a Good Thing!

- Again, don't be distracted!
- "Give me something viable to work on Jeff!"
 - Goal: Make it look better, not perfect.
- It's a two person job
- They want to go in, but fall off.
- Damp dressing not circumferential
- Pad your Splints
- Think about your medevac plan.



Procedural Sedation

Ketamine HCI
Injection, USP

500 mg/10 mL (50 mg/mL)
For slow intravenous or intramuscular
Distributed by
Hospira, Inc., Lake Forest, IL 60045 USA

Depth and Duration should drive your decision making.

e.g. Forearm Fx vs. Ankle Fx/Dislocation

Become friends with Ketofol - my go to in pseudo-stable poly trauma.

Propofol: 200mg in 20ml

Ketamine: 500mg in 10ml

Recipe: 80-100mg of Ketamine in 200mg of Propofol

Dose: Based on your Propofol dosing (0.5mg/kg, then aliquots)

Beware respiratory depression if prior narcotics on board!

Questions?

- Don't be distracted!
- Irrigate, Tetanus, Abx
- Just make it look better
- Pad your splints
- Become comfortable with Procedural Sedation



Questions?