MONTANA FWP

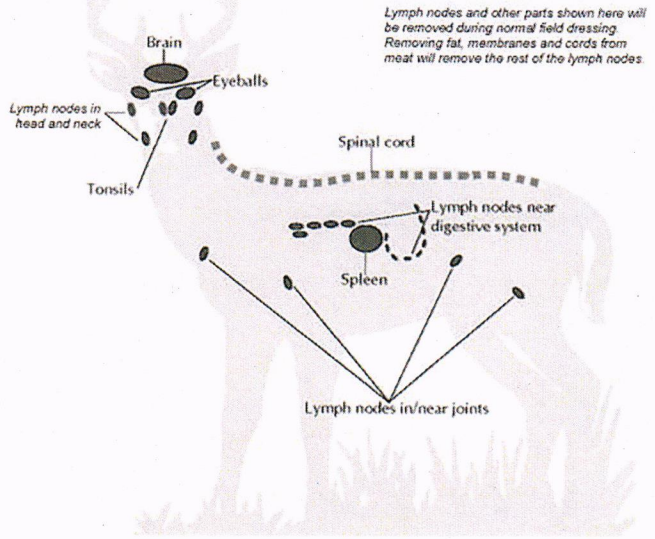
CWD MANAGEMENT

WHAT IS CWD

- Chronic Wasting disease (CWD) is a type of Transmissible Spongiform Encephalopathy
- Always fatal
- Transmittable to other cervids
- Not known to be transmissible to humans
- Infects moose, elk, and deer
- No known cure

WHERE DOES CWD OCCUR INSIDE AN ANIMAL?

- CWD is caused by misfolded prions proteins.
- These defunct prions cause other healthy prions to also misfold.
- The susceptible prions exist in the nervous system tissue: lymphatic system, spinal cord, brain, etc.
- However the "bad" prions can be found and transmitted to other deer in saliva, urine, feces and decomposing carcasses.
- It can stay viable in the environment for more than two years!

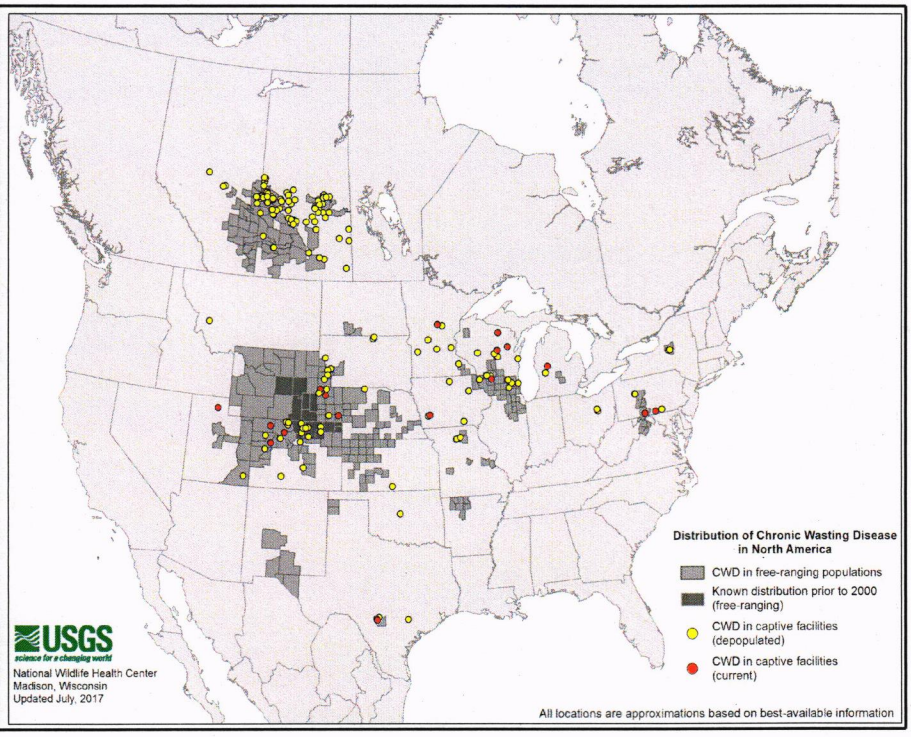


What are potential impacts of CWD in Montana if left unmanaged?

- Long term population decline in infected herds
  - In some states wildlife managers have seen more than 40% decline.
- Increased prevalence and likelihood of spread
- Decreased wildlife related recreation opportunities
- Potential decline in property value
- Broader impacts to hunter enthusiasm, predator management and Montana's hunting and outdoor legacy

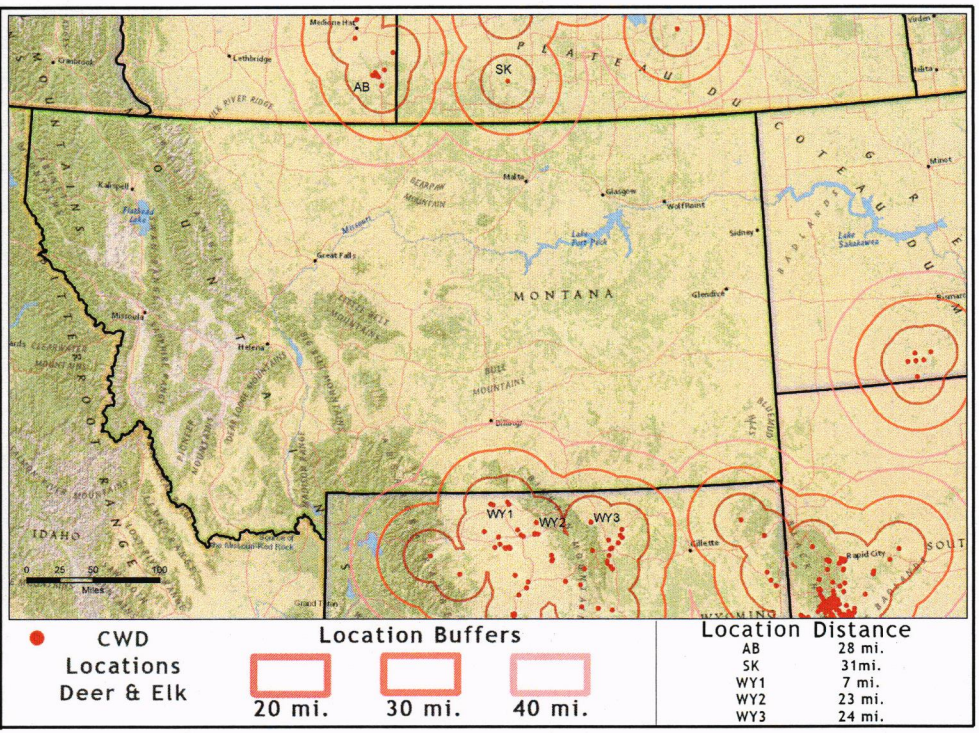
WHERE IS CWD?

- The first known case of CWD in North America was in found in a mule deer at a research facility in Colorado.
- First detected in wild deer, elk and moose in Colorado, Wyoming and Ontario in the 1990s.
- Now in captive or free-ranging herds in 24 states, 3 Canadian provinces, Norway and South Korea.



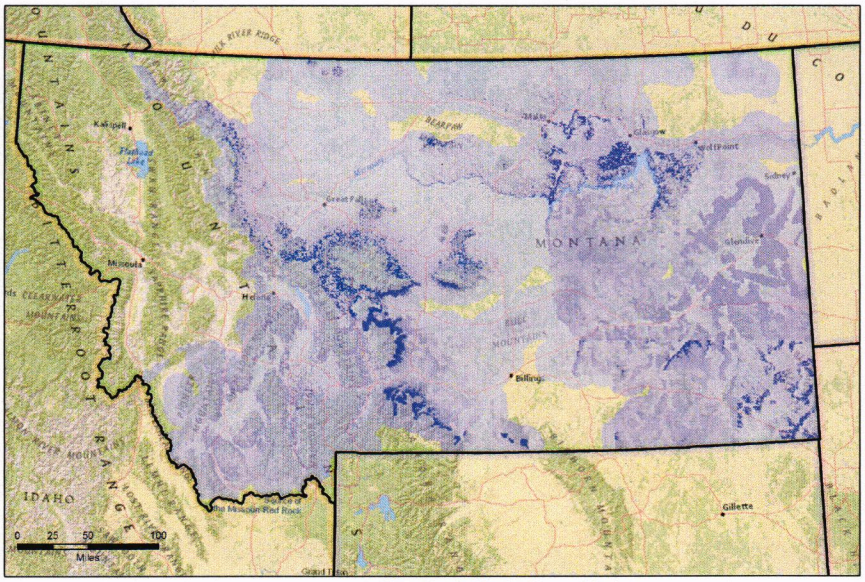
HOW CLOSE IS IT TO MONTANA?

- 3 neighboring states
- 2 provinces
- Yet to be found in Montana
- Closest positive -7 miles across border in Wyoming



WHAT'S THE RISK?

- Montana's highest densities of mule deer are in areas with CWD near the border
- We expect to find it first in these areas
- Still a lot of unknowns
  - Does our hunting season structure protect deer herds from CWD?
  - Does the fact many of our herds don't move around seasonally help?
  - Other factors



High
Low

Scaled Relative Mule Deer Density
(Max of summer & winter models, 2015 population estimate)

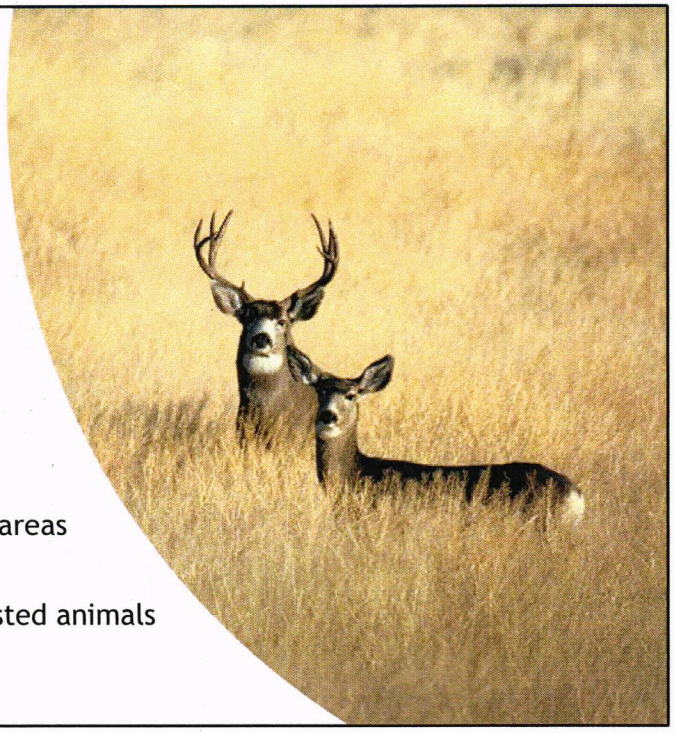
WHAT ARE WE DOING TO PROTECT OUR HERDS?

PREVENTION

- Transportation restrictions
- Urine legislation
- Feeding laws

SURVEILLANCE

- Rotating efforts annually through risk areas
- Salvage permit holders
- Targeted surveillance of hunter harvested animals
- Symptomatic animals

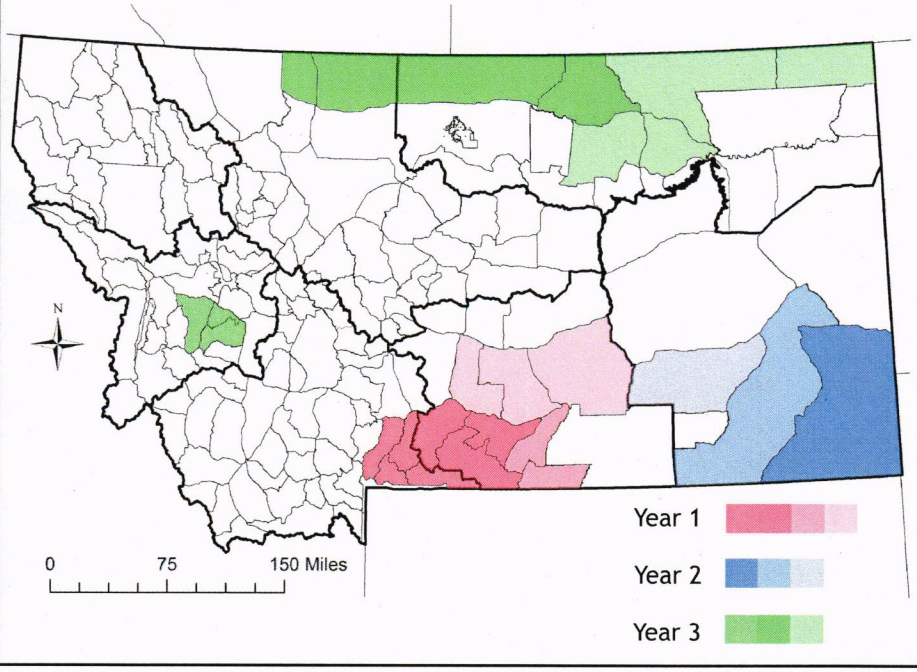


TESTING

- Live animal testing is unreliable
- Samples collected are from retropharyngeal lymph nodes
- These can be collected from the heads of dead animals
- Heads will be collected from hunters, road kill and symptomatic animals within the surveillance area

CWD SURVEILLANCE

- Focus surveillance on high priority areas each year
- 3-year rotation
- Focus areas selected because of proximity to positives outside of Montana and mule deer densities.



WEIGHTED SURVEILLANCE

- Focus surveillance on high risk demographic groups
- 300 "point" system
- Symptomatic, road kill, and adult bucks are most valuable

Group	Weight
Suspect female	13.6
Suspect male	11.5
Other mortalities (road-kill, predation, other unexplained in adults and yearlings)	1.9
Harvest-adult males	1
Harvest-adult females	0.56
Harvest-yearling females	0.33
Harvest-yearling males	0.19
Harvest-fawns	0.001

Samples, testing, reporting

- Samples collected
  - Retropharyngeal lymph nodes (or obex)
  - Incisor tooth for aging
  - Genetic sample
- Information collected
  - Precise location
  - Species
  - Age
  - Sex
- Testing
  - Colorado State Veterinary Diagnostic Laboratory
  - Hunter will be notified if their sample tests positive
- Communication
  - Annual surveillance report will be published by March 1st
  - Press releases as soon as all test results have been received

MONTANA'S RESPONSE

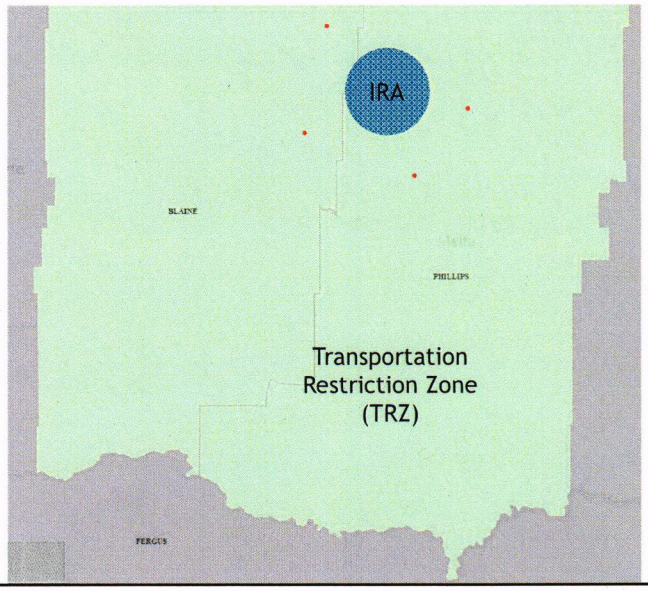
Objective: Manage CWD, not eradicate it

Response Plan:

- Minimize effects of CWD on ungulate populations
- Maximize recreational opportunities
- Minimize health risks of CWD for humans
- Maintain public trust and support
- Increase understanding of CWD impacts on cervid populations and human health
- Use Adaptive Management to evaluate management effectiveness
- Minimize cost

INITIAL RESPONSE AREA (IRA)

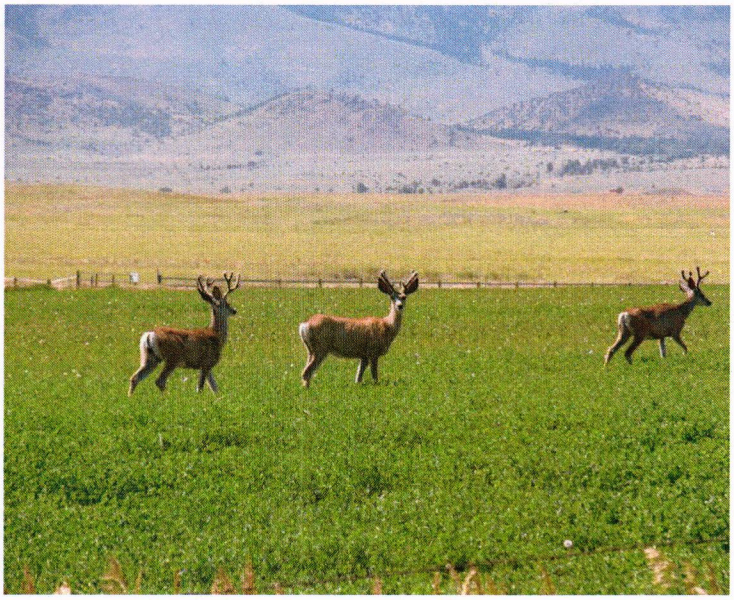
- The IRA will be an area within a 10-mile radius of where the positive animal was harvested.
- The IRA will likely contain a mixture of landownership - public, private and various agencies both federal and state.
- The TRZ will be established, based on county boundaries, to help reduce the risk of disease spread and allow for hunters to have access to game processing services.
- Establish check stations to collect samples from animals harvested during the CWD hunt



CWD HUNT

Goal: Determine disease prevalence and distribution

- Hunters will be allowed up to 7 permits for deer in addition to general license
- All hunters will be required to check their harvests at CWD check stations and report exact location of kills
- All deer will be tested and result will be sent to hunter as soon as possible
- Specific rules on what portion of the animal will be allowed outside the TRZ
- Hunters still must obtain permission to hunt on private land



COMMUNICATION

- Public meetings
- Outreach to landowners, community officials
- Outreach to hunters and other interested public
- Frequent news releases
- Online resources including story maps, fact sheets, FAQs, etc.
- Social media posts

Town Hall Meeting

PRESS RELEASE

MONTANA FWP

YouTube

MONTANA FWP

CWD MANAGEMENT

For more information, go online to fwp.mt.gov

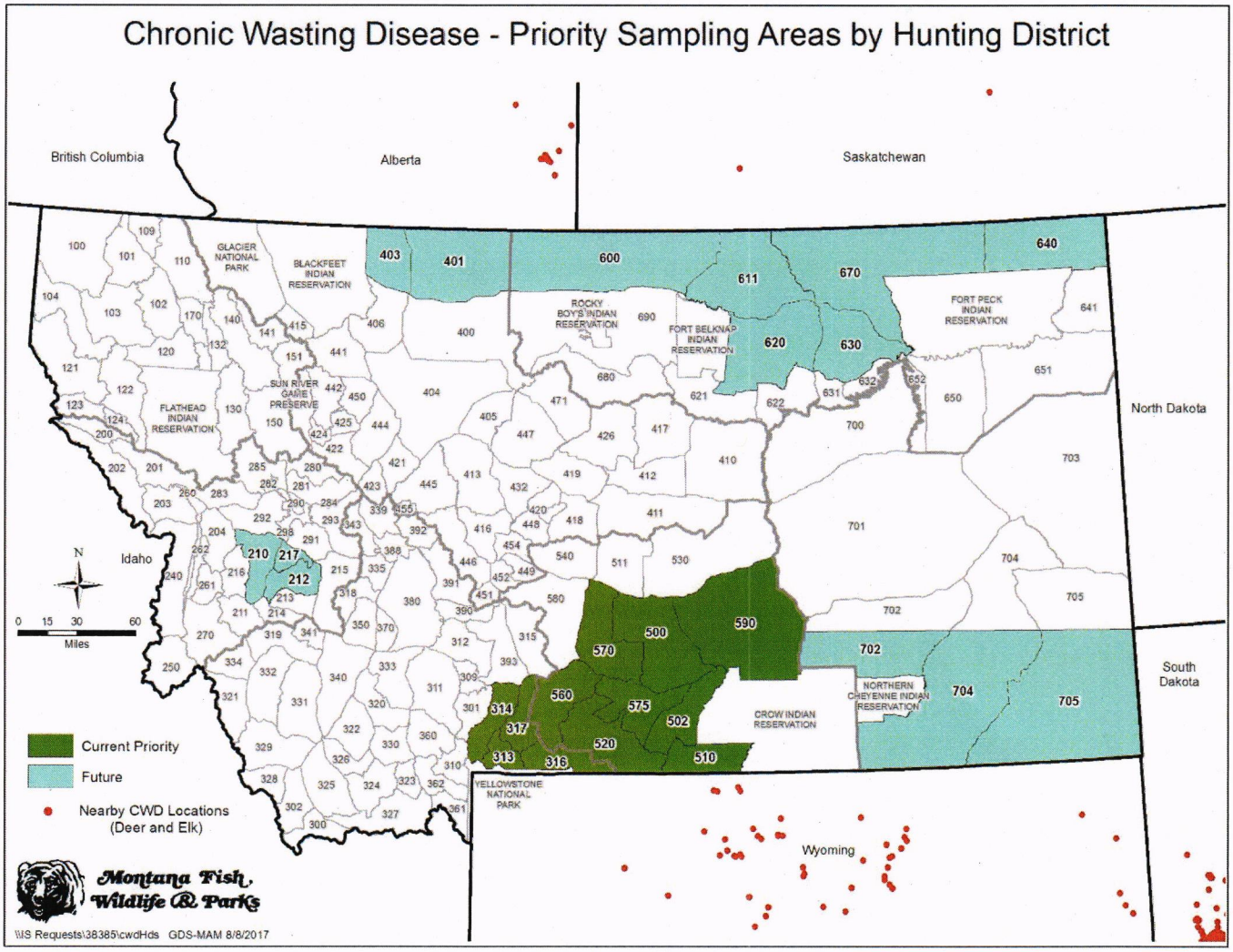


Figure 1. High priority chronic wasting disease (CWD) surveillance areas for mule deer in Montana. Priority surveillance areas were identified based on proximity to known CWD cases in neighboring states/provinces (red dots) and high relative mule deer densities based on the work of Russell et al. (2015). The surveillance area encompassing Hunt Districts 210, 212, and 217 surrounds the approximate location of the captive elk facility that tested positive for CWD in 1999. Mule deer hunt districts are displayed.

CWD Citizen Advisory Panel Members

Bret Barney, Wyola, Region 5, Sunlight Ranch Manager

Ed Bukoskey, Rosebud, Region 7, Served on Brucellosis, Private Land Public Wildlife & Elk Archery Working Groups

Joe Cohenour, East Helena, Region 3, Active sportsman, helped draft 2 CWD bills

Dr. Richard Douglass, Butte, Region 3, Emeritus professor of biology at MT Tech, serves on Brucellosis Working Group

Tim Feldner, Helena, Region 3, Retired FWP Commercial Wildlife Permit Manager, wrote 2005 CWD Plan

Dr. Tom Geary, Miles City, Region 7, Research Animal Scientist USDA Animal Research Services

Henry Gordon, Chinook, Region 6, Former Citizen Advisory Council member, Landowner & Rancher

James Haggerty, Belt, Region 4, Rancher, RMEF & BCHA member

Chad Klinkenborg, Bozeman, Region 3, Mule Deer Foundation Montana Regional Director

Dr. Charles Noland, Worden, Region 5, Former Citizen Advisory Council member, Landowner, Livestock Veterinarian

Dr. Brent Race, Corvallis, Region 2, Research veterinarian at Rocky Mountain Lab working on prions

Dr. Ben Rossetto, Kalispell, Region 1, Physician, Hunter, non-consumptive user, former Chief of Staff Kalispell Regional Medical Center