

COVID-19 BREACH OF A RURAL FIRE PROTECTION DISTRICT

BRUCE EVANS, MPA, CFO, SPO, NRP

FIRE CHIEF

UPPER PINE RIVER FIRE PROTECTION DISTRICT



DEMOGRAPHICS

- Upper Pine Fire District 272 Square Miles
- Super Rural EMS Transport
- Chase Medic Supporting Two BLS Transports
- One ALS Transport
- Less 1000 Calls a Year
- High Risk Urban Intermix and Interface
- 8 Staff Daily/2 Chief Officers
- 2 Full Time Wildland/8 Seasonal Wildland
- 3 Support Staff (2)EMTs or (1)Paramedic



COVID-19 IMPACT 2020

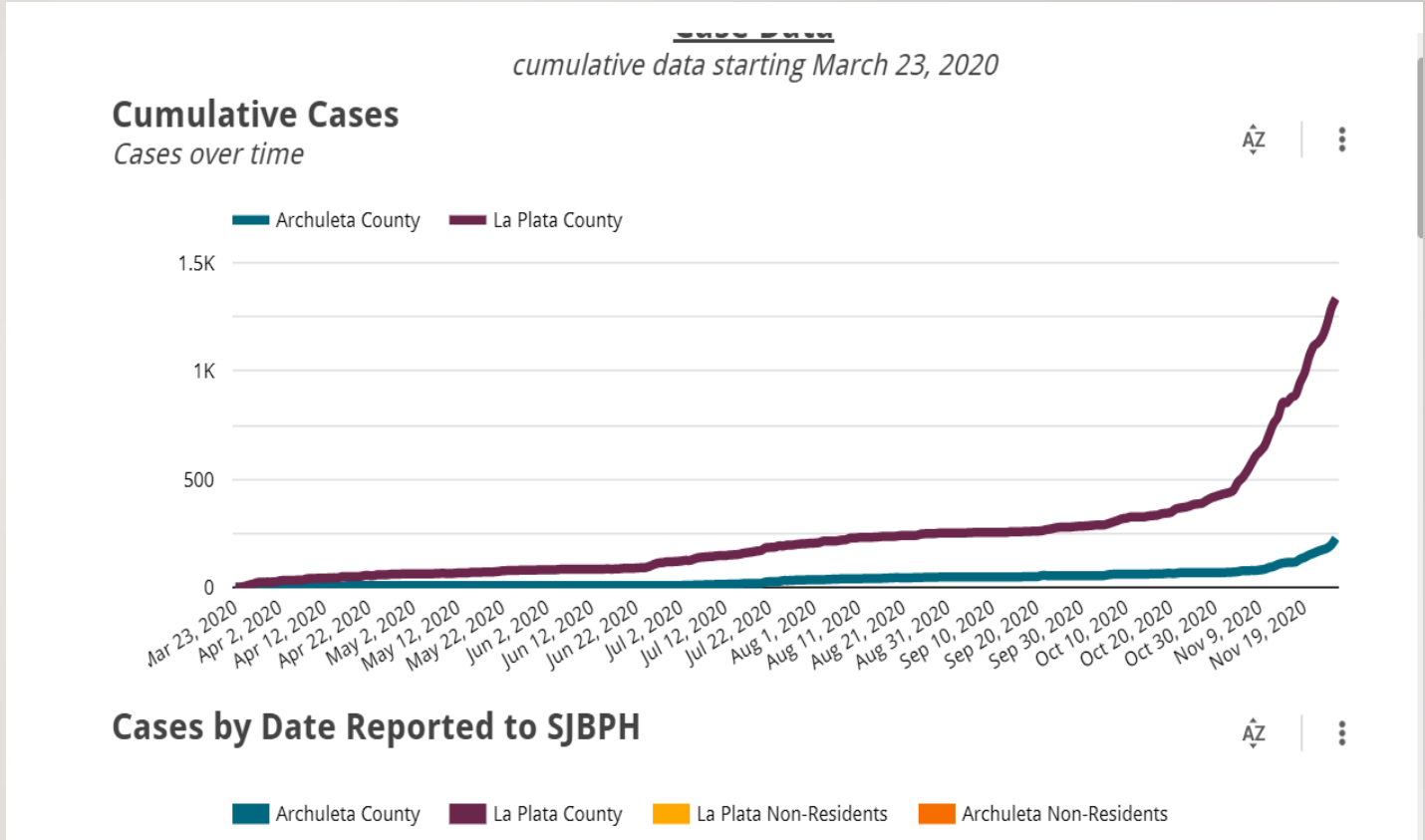
Super Fit Population

Few BMIs over 30%

Largely Untouched by COVID-19

Never Exceeded Hospital Capacity

No nursing home outbreaks until 11/25



BUILDING A DEFENSE

FIRE CHIEF RETURNS FROM NATIONAL ACADEMY OF SCIENCES BRIEFING

2/1/2020

IMMEDIATE ACTIONS

- Ordered UV Lighting systems for all manned stations
- Modification in new ambulance for UV lighting
- Crews begin CRM training with a one provider approach/PPE training
- Crews trained on symptoms and signs of COVID-19
- Health Care Coalition convinced to purchase PAPRs
- Temperate protocol every 12 hours
- Sent a crew to COVID FEMA Deployment
 - Del Rio Texas (30 Days)
 - Brought back experience
 - Best Practice
 - Added to the pandemic story
- N95s, Gloves, and Tyvek purchased before the runs on PPE
- All staff over 45 offered Prevenar or Pneumovax
- Sprayers and foggers supplied at stations with training on correct bleach mix
- Antigen/antibody test ordered from same supplier to CDC
- Co-mingled station training stopped
- Off going shift to decontaminate
- Reminders on social distancing
- Restrictions on training travel
- REVIEW WILDLAND NWCG COVID-10 Protocols

MEDICAL DIRECTOR

- Immediate Actions
 - Revision to protocols on ALS procedures
 - Intubation training in PAPR
 - Filters for BVM
 - Return to work policies
 - Blanket orders for Tamiflu and Relenza
 - (Based on Early Studies from Singapore)



BREACH OF FIRE WALL

- Three Employees within a week
 - Firefighter/EMT Patient I (AB- Blood Type)
 - Exposed 10/31 (Halloween Outing with Co-Workers)
 - Symptoms 11/3
 - Tested with Antigen/Antibody Cartridge 36 Hours after fever (Negative)
 - Given Relenza thought to be Flu A or B
 - Hospitalized 11/9 Desaturation to 80%/Pulmonary Emboli/Ground Glass Opacity
 - ODD Ground Glass in Pockets NOT blanketed Radiologist and Intensivist Note Atypical Not seen before pattern. Positive on Rapid PCR for COVID-19
 - 5 Days of Remdesivir/Decadron/Levenox
 - Discharged 11/16
 - Negative Test by 11/20



BREECH & SPREAD

- Firefighter/Paramedic (O+ Blood Type)
 - Wife works with Indian Health Service
 - Outbreak at Clinic in NM, Exposed to wife 10/28-31
 - At Work 11/1, Notified wife positive 11/2
 - PCR Test positive 11/2, No symptoms
 - Retested by District PCR 11/9 positive No symptoms
 - Negative PCR test 11/20 results 6 days later
 - Hospital testing 6-day lag time in his community

BREECH & SPREAD

- Firefighter/ EMT Patient 3 (O+ Blood Type)
 - Worked with Patient 2 on 11/1
 - In Station open air dorm
 - Tested Positive PCR 11/6, Mild symptoms
 - Tested Negative PCR 11/20
 - Results Received 11/24 Returned to Work

IMPACT

- 17 Shifts of overtime in a small fire district
- Closure of an outlying station
 - Fortunately, a resort area seasonal calls down dramatically
 - Lucky no long responses to this area or life-threatening calls
 - Browned out station's district received only one call when not staff (Lift assist)
- Minimum staffing occasional daily of 5 verses 8
- Command staffing backing up crews
- Workers comp denials on time off for quarantine
- Remdesivir (\$2500 per dose)
- High deductible health plans with \$3200 out of pocket on health care cost.

AFTER ACTION

- NOT Patient related exposures in well disciplined crews
- Spouses, Kids, and Relatives Surveillance Issues
- Socialization of Peers
- Holiday Traditions Outweighing the Risk
- Open air dorms in older station design
- Delays in testing impacting budget
- Clearing Firefighters and EMT's due to communal living and randomness of seeing an immunocompromised patient

COVID FATIGUE

- Fatigue Factors
 - Regional declines and no peak created false sense of security
 - Socializing with people they work with thinking clear at work and home=clear to congregate
 - Crews has not had a confirmed COVID patient since March 23, 2020
 - Hospital not notifying crews of COVID positives transported by our agency
 - Infection Control Nurses not failure with Ryan White Law and HIPPA hysteria
 - Hospital sanitizing numbers giving a false sense of security
 - Mavin conspiracy people in community and neighbors
 - Low number of deaths
 - Heavily prepared

LESSON LEARNED

- Supervision/Chief Officers
 - On routine calls
 - In the stations observing procedures
 - Demonstrating behavior
- Change Up the Medium
 - Training & Training on Tools
 - On Going Information
- Financial Impacts
 - Hospital cost
 - Loss of work time
 - Denials on workers compensation claims
- Institute Testing
 - Supplement health departments
 - Use the right sequence of testing