

## Ken Zafren, MD, FACEP, FAAEM, FAWM

### **CURRENT POSITIONS**

EMS Medical Director, State of Alaska  
Staff Emergency Physician - Alaska Native Medical Center (Level II Trauma Center)  
4315 Diplomacy Dr. Anchorage, AK 99508 USA +1.907.729.1729  
Clinical Assistant Professor and Staff Physician, Division of Emergency Medicine -  
Stanford University Medical Center (Level I Trauma Center)  
300 Pasteur Dr. Stanford, CA 94305 USA +1.650.725.9445  
Additional hospital privileges:  
Staff Emergency Physician - Providence Alaska Medical Center  
3300 Providence Dr. Anchorage, AK 99508 USA +1.907.261.3111

### **EDUCATION AND TRAINING**

Diplomate - American Board of Emergency Medicine 1995, recertified 2005  
Emergency Medicine Residency - Kern Medical Center (Bakersfield, CA) 1991-1994  
Transitional Internship - Presbyterian/St. Luke's Medical Ctr. (Denver, CO) 1985-1986  
M.D. - University of Washington (Seattle, WA) December 1984  
Graduate studies (Physiology) - University of Washington (Seattle, WA) 1979-1983  
Premedical studies - University of Colorado (Boulder, CO) 1977-1978  
Graduate studies (Geography) - University of Colorado (Boulder, CO) 1976-1978  
E.M.T. (Emergency Medical Technician) - University of Colorado (Boulder, CO) 1977  
B.A. (Mathematics) - New College (Sarasota, FL) 1975

### **MEDICAL ACTIVITIES AND INTERESTS**

Emergency medicine, environmental medicine, including high altitude medicine and physiology, frostbite, hypothermia, medical care in remote areas and mountain rescue  
Fellow of the Academy of Wilderness Medicine – awarded 2007 (charter group)  
Vice President for the Americas – International Commission for Mountain Emergency Medicine  
2001- present; United States Representative 1995-present  
Secretary-Treasurer – Alaska Chapter, American College of Emergency Physicians 2001-present  
President - Alaska Chapter, American College of Emergency Physicians 1997-1998  
Associate Medical Director - Himalayan Rescue Association 1993-present  
Medical Director - Lake Clark National Park 1997-present  
Medical Director - Alaska Mountain Rescue Group 1994-present  
Medical Director - Denali National Park Mountaineering Rangers 1997-2001  
Board of Directors - Wilderness Medical Society: 1991-1996; 1999-2006  
Co-chair, Program Committee – International Conference on Cold-Weather Medicine 2004  
Chair, Conference Planning Committee of the Wilderness Medical Society 1998-2002  
Co-chair, Program Committee - World Congress III on Wilderness Medicine 1999  
Advisory Committee - International Congress of Mountain Medicine 1997  
Chair, Program Committee - 7th Annual Winter Wilderness Medicine Conference 1997  
Co-chair, Program Committee - 2nd World Congress on Wilderness Medicine 1995  
Founding Editor, Wilderness Medical Society Educational Slide Sets (now Powerpoints)  
Participated in Southwest Alaska Hepatitis B screening program 1983

### **HONORS**

Service Award of the Wilderness Medical Society 2004  
Education Award of the Wilderness Medical Society 2003  
Hero of Emergency Medicine of the American College of Emergency Physicians – awarded 2008

**ONGOING EDITORIAL ACTIVITIES**

Editor, Images Section and Member Editorial Board - Wilderness and Environmental Medicine (Journal of the Wilderness Medical Society) 1998-present  
Author and Editorial Consultant – High Altitude Illness Module of the Physicians Information and Education Resource (PIER) – American College of Physicians 2004-present  
Journal Reviewer for Aviation, Space and Environmental Medicine, High Altitude Medicine and Biology, Journal of Travel Medicine, and Wilderness and Environmental Medicine

**MOUNTAIN MEDICINE AND MOUNTAIN RESCUE**

Chair, Medical Committee - Mountain Rescue Association 1998-present  
Physician - Mount Vaughan Antarctic Expedition 1993  
Chairman of the Board of Directors - Alaska Mountain Rescue Group 1990-1991  
Mountain rescue 1975-present (Boulder, Seattle, Anchorage)  
Volunteer physician - Himalayan Rescue Association, Nepal 1989, 1992  
Expedition physician - Nepalese-American Ohmi Kangri Expedition 1989  
Medical expedition to Nepal 1980  
Board of Directors - Rocky Mountain Rescue Group (Boulder, CO) 1978-1979

**OTHER ACTIVITIES AND INTERESTS**

Climbs and treks in North and South America, Europe, and Asia 1972-present  
Elected to membership in the American Alpine Club 1977-present  
Board of Directors - Mountaineering Club of Alaska 1990-1991  
Grand Prize Winner in MD Magazine photo contest 1988  
Language skills: fluent in German; speak and read Spanish, French; speak Nepali

**MEMBERSHIPS**

American Alpine Club  
American Association for the Advancement of Science  
American Academy of Emergency Medicine  
American College of Emergency Physicians  
American Physiological Society  
International Society for Mountain Medicine  
International Society of Travel Medicine  
National Association of State EMS Directors  
National Association of EMS Physicians  
Wilderness Medical Society

**PREVIOUS FULL-TIME POSITIONS**

Acting Medical Director - Veco International (Exxon Valdez Oil Spill) Summer 1989  
Staff physician - North Care Medical Centers 1986-1990; Associate Medical Director 1990-1991  
Systems analyst - Institute for Behavioral Sciences (Boulder, CO) 1979

## PUBLICATIONS

- Zafren K, Hlastala MP. Gas exchange during acute hypoxia in dogs. Abstracts of the Third Banff International Hypoxia Symposium, 1983
- Zafren K. More on tetracycline and ticks. *New Engl J Med* (308) 7: 403-404, 1983
- Zafren K, Hackett P. High altitude medicine. Educational slide set. Wilderness Medical Society, 1992
- Zafren K, Purcell T. Open and closed peritoneal lavage. *Ann Emer Med* (21) 10:1298, 1992
- Zafren K, Purcell T. Base deficit as a diagnostic test for abdominal injury. *Ann Emer Med* (21) 11: 1406, 1992
- Reeves J, Wagner J, Zafren K, et al. Seasonal variation in barometric pressure and temperature in Summit County: effect on altitude illness. In: Sutton JR, Houston CS, Coates G (editors) *Hypoxia and Molecular Medicine* : 275-281, 1993
- Zafren K, O'Malley J, Mills WJ. Frostbite and Other Cold Injuries. Educational slide set. Wilderness Medical Society, 1995
- Zafren K, Reeves J, Schoene RB. Treatment of High Altitude Pulmonary Edema by bed rest and supplemental oxygen. *Wilderness Environ Med* 7 (2):127-132, 1996
- Zafren K. Warning! Long commute. *Science* (272): 1726, 1996
- Zafren K. Use and abuse. *The Economist* (Nov 30, 1996):8, 1996
- Zafren K. Outcome assessments and air ambulance services. *Lancet* 347:1843, 1996
- Forster H, Zafren K. Thoracostomy at the scene of an accident in the mountains. Guideline of the Commission for Mountain Emergency Medicine (International Commission for Alpine Rescue), St. Jean, Switzerland, 1996
- Forster H, Zafren K. Treatment of dislocations and fractures. Guideline of the Commission for Mountain Emergency Medicine (International Commission for Alpine Rescue), St. Jean, Switzerland, 1996.
- Zafren K. Epidemiology of Himalayan trekking. Proceedings of the International Congress of Mountain Medicine, Interlaken, Switzerland: 23-25, 1997
- Zafren K, Honigman B. High altitude medicine. *Emer Med Clin N Amer* (15) 1:191-222, 1997
- Zafren K, Storrow AB, Schmidt JC, Stack LB. Environmental Conditions. In: Knoop KJ, Stack LB, Storrow AB (editors) *Atlas of Emergency Medicine*. McGraw-Hill: New York, 451-480, 1997
- Zafren K. Re: Prevention and management of cardiovascular events during travel. *J Travel Med* (4) 4:152, 1997
- Forster H, Zafren K. State of art of surgical techniques in mountain rescue. Proceedings of the International Congress of Mountain Medicine, Interlaken, Switzerland: 34-36, 1997
- Zafren K. Hyponatremia in a cold environment. *Wilderness Environ Med* 9 (1): 54-55, 1998
- Zafren K. Mountain Rescue in North America. *Progress in Mountain Medicine and High Altitude Physiology*. Japanese Society of Mountain Medicine: Torokorozawa, 279-282, 1998
- Zafren K. Himalayan Rescue Association. *Progress in Mountain Medicine and High Altitude Physiology*. Japanese Society of Mountain Medicine: Torokorozawa, 283-284, 1998
- Zafren K. Telemedicine revisited. *Ann Emer Med* (31) 6: 790, 1998
- Zafren K. Rescue on Ptarmigan Peak. *Alaska Med* (40) 2: 36-37, 1998
- Zafren K. Migratory pain in appendicitis. *Amer Jour Emer Med* (16) 4: 437-438, 1998
- Zafren K. Gamow bag for high-altitude cerebral oedema. *Lancet* 352: 325-326, 1998
- Zafren K, Butler F. Wilderness medicine and military medicine. *Wilderness Environ Med* 9 (2): 62-63, 1998
- Butler F, Zafren K (editors). Tactical management of wilderness casualties in special operations. *Wilderness Environ Med* 9 (2): 64-117, 1998
- Zafren, K. Scenario 9: altitude sickness. In: Butler F, Zafren K (editors). Tactical management of wilderness casualties in special operations. *Wilderness Environ Med* 9 (2): 108-111, 1998
- Zafren K. Tragedy on Ptarmigan Peak. *Wilderness Environ Med* 9 (3):188-190, 1998
- Zafren K. Brown recluse spider bite. *Wilderness Environ Med* 9 (4) 211-212, 1998

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- Zafren K. Chilblains (pernio). *Wilderness Environ Med* 10 (1):25-6, 1999
- Zafren K. Prognostic indicators in frostbite. *Wilderness Environ Med* 10(2):115-6, 1999
- Zafren K., Kercher E. Erythema nodosum. *Wilderness Environ Med* 10 (3):171-173, 1999
- Zafren K. Response to safety of rescuers letter. *Wilderness Environ Med* 10(3):204-205, 1999
- Zafren K. Lightning injuries. *Wilderness Environ Med* 10(4):253-255, 1999
- Basnyat B, Savard GK, Zafren K. Trends in the workload of the two high altitude aid posts in the Nepal Himalaya. *J Travel Med* 1999; 6:217-222, 1999
- Zafren K, Storrow AB, Schmidt JC, Stack LB. Environmental Conditions. In:Knoop KJ, Stack LB, Storrow AB (editors) *Pocket Atlas of Emergency Medicine*. McGraw-Hill: New York, 303-314, 2000
- Zafren K. Short haul release assembly - "3-ring circus." *Wilderness Environ Med* 11 (2):109-111, 2000
- Zafren K. Unusual presentation of a fracture and possible early compartment syndrome. *Wilderness Environ Med* 11 (3):199-200, 2000
- Zafren K. Understanding medical problems associated with high altitude. *Emerg Med* 32 (9): 90-98, 2000
- Zafren K. Immersion injury. *Wilderness Environ Med* 11 (4):269-271, 2000
- Zafren K, Hackett P. High altitude medicine (revised edition). Powerpoint presentation); Wilderness Medical Society, 2001
- Zafren K, O'Malley J, Mills WJ. Frostbite and Other Cold Injuries (revised edition). Powerpoint Presentation; Wilderness Medical Society, 2001.
- Zafren K. Poison oak dermatitis. *Wilderness Environ Med* 12(1):39-40, 2001
- Zafren K. Warnings in the wilderness: preventive search and rescue. *Wilderness Environ Med* 12(2):129-133, 2001
- Zafren K. Wound care in the wilderness. *Wilderness Environ Med* 12(3):201-203, 2001
- Zafren K. How useful is on-mountain sonography? *Wilderness Environ Med* 12(1):230-231, 2001
- Rammlmair G, Zafren K, Elsensohn F. Qualifications for emergency doctors in mountain rescue operations. In:Elsensohn F (Ed.) *Consensus Guidelines on Mountain Emergency Medicine and Risk Reduction*. International Commission for Mountain Emergency Medicine, 2001
- Rammlmair G, Zafren K. Immobilization and use of the vacuum mattress in organized mountain rescue. . In: Elsensohn F (Ed.) *Consensus Guidelines on Mountain Emergency Medicine and Risk Reduction*. International Commission for Mountain Emergency Medicine, 2001
- Zafren K. Prehospital diagnosis and staging of hypothermia. In: Brugger H, et al. (Eds.) *Jahrbuch 2001. Österreichische Gesellschaft für Alpin- und Höhenmedizin*: Innsbruck, 11-15, 2001
- Zafren K, Thurman RJ, Storrow AB. Environmental Conditions. In: Knoop KJ, Stack LB, Storrow AB (editors) *Atlas of Emergency Medicine* (second edition). McGraw-Hill: New York, 513-563, 2002
- Zafren K. Effect of insurance on admission for head injury. *Am J Emer Med* 19:460, 2002
- Zafren K. Management of blunt trauma victims with significant hemoperitoneum with normal examination. *Am J Emer Med* 21:513, 2003
- Zafren K. Thrombotic complications at altitude. *Wilderness Environ Med* 15: 155, 2004
- Sacco F, Zafren K, Brown, K et al. Guidelines for the management of head injuries in remote and rural Alaska. *Alaska Med* 46(58-62), 2004

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- Zafren K. Hypothermia. In: Mahadevan SV, Garmel GM (Eds.) *An introduction to Clinical Emergency Medicine*, Cambridge University Press, New York: 626-632, 2005
- Zafren K. Lightning injuries. In: Mahadevan SV, Garmel GM (Eds.) *An introduction to Clinical Emergency Medicine*, Cambridge University Press, New York: 633-638, 2005
- Zafren K. Near drowning. In: Mahadevan SV, Garmel GM (Eds.) *An introduction to Clinical Emergency Medicine*, Cambridge University Press, New York: 639-643, 2005
- Zafren, K, Durrer B, Herry, J-P, Brugger H, Lightning injuries: prevention and on-site treatment in mountains and remote areas. *Resuscitation* 65:369-372, 2005
- Zafren K, Lim IT. Hypothermia: a cold weather hazard. *Trauma Reports* 6(6):1-12, 2005
- Zafren K. Too high too fast: experiences at high altitude, In Smith AW, Schwartz E, Shaw M (editors) *Travel Medicine: Tales Behind the Science*. Elsevier, Amsterdam 177-181, 2007
- Zafren K. Pilgrimages in the high Himalayas. In Smith AW, Schwartz E, Shaw M (editors) *Travel Medicine: Tales Behind the Science*. Elsevier, Amsterdam 279-283, 2007.
- Zafren K. A reference correction. *Wilderness Environ Med*. 18:322, 2007
- Zafren K., Ngo J. High altitude illness. *Trauma Reports*. *Trauma Reports* 9(2):1-12, 2008.
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- Winterberger E, Jacomet H, Zafren K, et al. The use of extrication devices in crevasse accidents. *Wilderness Environ Med* 19:108-110, 2008.
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