

# Using Physician Assistants for Health Education in Schools



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## Outline

- Reasons for starting program
- Scope and design of first year program
- Topics covered the first year
- Response of students and faculty
- Problems with program
- Plans for the future



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## Scope and Design of program

- Scope
  - 2 schools
  - Older students, 5<sup>th</sup> grade and up
  - 4 Days a month during entire school year.
- Design
  - Input from schools on topics
    - Covered school suggested topics as much as possible
    - Chose additional topics that were related or considered core material
    - Try to modulate presentations to grade level



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## Topics Covered This Year

- Physiology
- Anatomy
- First Aid
- Nutrition
- Wilderness Survival and Medicine
- Orthopedics
- Common Disorders of Early Childhood
- Common Chronic Illness of Childhood and adolescence
- Acute Mountain Sickness and Avalanche Safety
- Health Careers
- Mental Health
- Exercise



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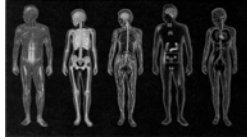
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## Basic Physiology

- Definition- How the body works
- Review of body systems
- Cardiovascular (circulatory)
  - Respiratory
- Endocrine (metabolic)
- Musculoskeletal
  - Integumentary (skin)
- Gastrointestinal (digestive)
  - Urinary
- Immune
- Lymphatic
- Nervous



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## Some Disorders of Early Childhood

- Why learn about disorders?
- Down Syndrome
- Autism
- Asperger's Syndrome
- Fetal Alcohol Syndrome
- ADD/ADHD, ODD



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## Basic Nutrition

- Why we eat
- Food Groups
- Vitamins
- Minerals
- Water
- Fiber
- Balance
- Calorie Quiz- popular restaurants, compare menu items



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## Nutrition-Special topics

- Dietary needs for sports and active living
  - Nutrition for Fitness
- Special Diets
  - Diabetes
  - Heart Disease
  - Gluten free diets
  - Food allergies
- Nutrition when dieting
- Eating Disorders
- Bottled water
- Food additives



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## Common Chronic Illnesses of Childhood and Adolescence

- Why learn about these diseases?
- Asthma
- Diabetes, Hypoglycemia
- Allergies
- Dental, Ears, Urinary Tract Infections
- Cancers: Skin, Lymphoma, Leukemia, Brain
- Benign Diseases
- Trauma?



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## Acute Mountain Sickness and Avalanche Safety

- Acute Mountain Sickness
  - How do you get it?
  - Mild Symptoms
  - High Altitude Cerebral Edema
  - High Altitude Pulmonary Edema
  - Treatment
  - Prevention
- Avalanche Safety
  - Avalanche Hazards
  - Safe Practices
  - Safety Equipment
  - Rescue and Resuscitation



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## Wilderness Survival

- Definition of wilderness
- Survival Tools
- Survival Techniques
  - Shelter
  - Fire
  - Water
  - Food
- Getting Help



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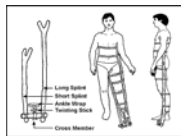
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## Wilderness Medicine

- Wilderness medicine uses techniques to assess and treat a variety of conditions and injuries, including:
  - Wounds and Burns
  - external and internal bleeding
  - cardiac arrest
  - head injuries
  - spinal cord injuries
  - Fractures and dislocations
  - Altitude Sickness
  - problems from cold and heat
  - allergic and anaphylactic reactions
  - lightning strikes
  - near drowning
  - insect, reptile and animal bites
  - poisoning
  - emergency child birth



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## Health Careers

- Doctor, surgeon
- Dentist, hygienist, assistant
- Pharmacist, Pharmacy technician
- Mid level provider
- Nursing
- EMT, Paramedic
- Therapists- PT, OT, Respiratory, Massage
- Imaging Careers
- Office careers
- Cardiac Specialties
- Dietician/Nutritionist
- Lab and phlebotomy
- Medical Assistant
- Gerontologist



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## Response

- Students
  - Better response with older students, younger students have a hard time staying on topic with advanced material.
  - Good questions
  - Questions after class
  - A few came into clinic for care, not unnecessarily
  - Informal Poll after Health Careers class:
    - Apx 60% would consider a career in Health Care
    - Most popular fields were (in order): Nursing, Physical Therapy, Doctor, Psychology, Imaging, Physician Assistant, EMT
    - Kids zeroed in on what had the most salary or the least schooling



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## Response

- Faculty
  - Supportive at the beginning, but unsure
  - More supportive with time
  - Many compliments when they watched presentations
  - Faculty often asked questions during and after class.
  - Sometimes helped with controlling kids

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## Problems with Program

- New
- Cancellations
- Software
- Students missing (sports etc.)
- Integration with current classes (overlap)

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## Questions?



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