HEALTH IMPACT PROJECT

ADVANCING SMARTER POLICIES FOR HEALTHIER COMMUNITIES

www.healthimpactproject.org

HIA in the Energy and Natural Resource Development Sectors

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A collaboration between Robert Wood Johnson Foundation and The Pew Charitable Trusts.

THE PEW CHARITABLE TRUSTS

Robert Wood Johnson Foundation

What's unique about this sector?

- High degree of politics and scrutiny:
  - Polarization and politicization common: jobs, national security, environmental concerns.
  - Threat of litigation may make context more challenging.
- Industry is an active stakeholder
- Mix of environmental health and socioeconomic risks and benefits. Health effects of pollutants can distract attention from other important effects.

Natural Resource Development HIA

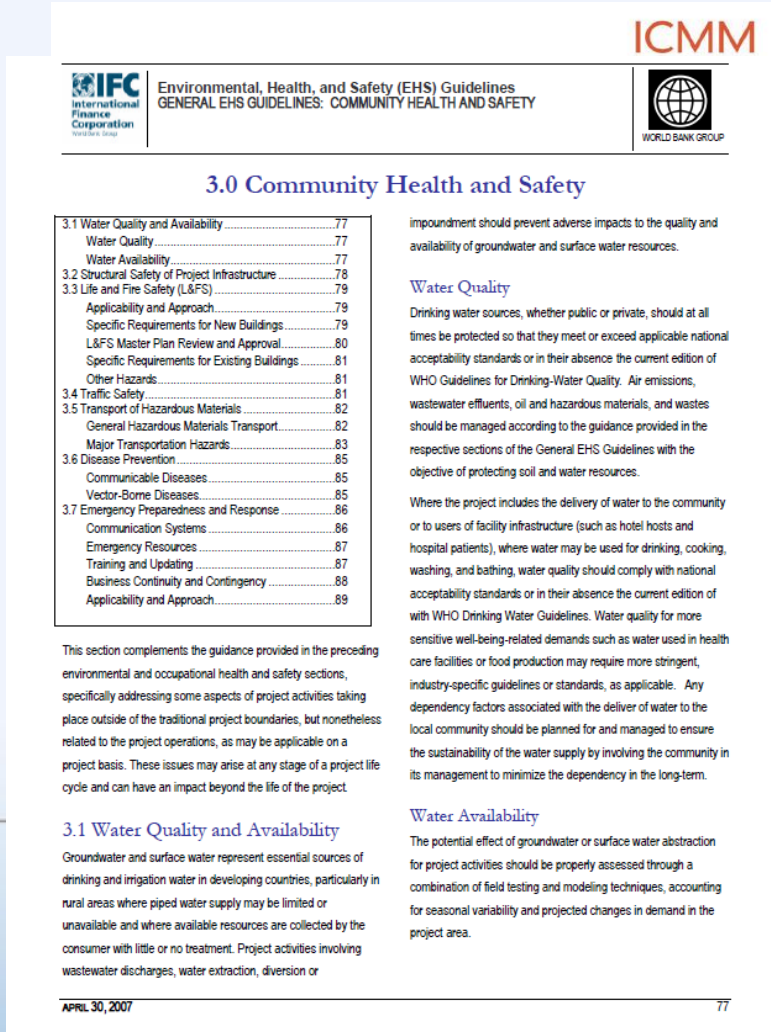
Industry and development banks lead the way

World Bank and IFC: part of evaluation standards for large development loans

Multinational Corporations: eg large oil and mining companies:

Business case for HIA

- Lower business costs
- Corporate social responsibility
- Healthy workforce
- Risk management



ICMM

IFC International Finance Corporation

Environmental, Health, and Safety (EHS) Guidelines
GENERAL EHS GUIDELINES: COMMUNITY HEALTH AND SAFETY

WORLD BANK GROUP

3.0 Community Health and Safety

This section complements the guidance provided in the preceding environmental and occupational health and safety sections, specifically addressing some aspects of project activities taking place outside of the traditional project boundaries, but nonetheless related to the project operations, as may be applicable on a project basis. These issues may arise at any stage of a project life cycle and can have an impact beyond the life of the project.

3.1 Water Quality and Availability

Groundwater and surface water represent essential sources of drinking and irrigation water in developing countries, particularly in rural areas where piped water supply may be limited or unavailable and where available resources are collected by the consumer with little or no treatment. Project activities involving wastewater discharges, water extraction, diversion or impoundment should prevent adverse impacts to the quality and availability of groundwater and surface water resources.

Water Quality

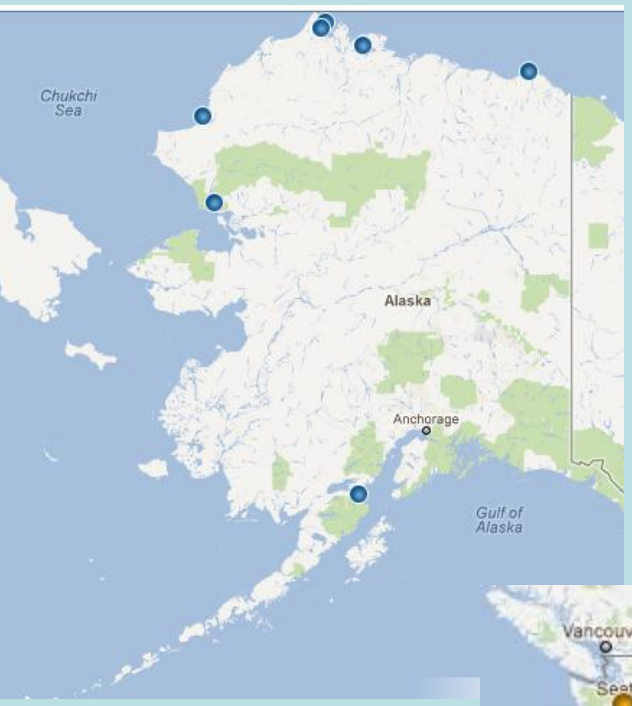
Drinking water sources, whether public or private, should at all times be protected so that they meet or exceed applicable national acceptability standards or in their absence the current edition of WHO Guidelines for Drinking-Water Quality. Air emissions, wastewater effluents, oil and hazardous materials, and wastes should be managed according to the guidance provided in the respective sections of the General EHS Guidelines with the objective of protecting soil and water resources.

Where the project includes the delivery of water to the community or to users of facility infrastructure (such as hotel hosts and hospital patients), where water may be used for drinking, cooking, washing, and bathing, water quality should comply with national acceptability standards or in their absence the current edition of with WHO Drinking Water Guidelines. Water quality for more sensitive well-being-related demands such as water used in health care facilities or food production may require more stringent, industry-specific guidelines or standards, as applicable. Any dependency factors associated with the deliver of water to the local community should be planned for and managed to ensure the sustainability of the water supply by involving the community in its management to minimize the dependency in the long-term.

Water Availability

The potential effect of groundwater or surface water abstraction for project activities should be properly assessed through a combination of field testing and modeling techniques, accounting for seasonal variability and projected changes in demand in the project area.

Energy and natural resource development HIAs



Examples

- Biomass (poultry litter, wood) (MA, OR, CA, VA)
- Oil and gas leasing, development (AK, CO)
- Mining (AK)
- Wind energy (OR)

Policies:

- LIHEAP
- Utility Regulation (AMI in Chicago)

Natural resource development, power generation projects

Typical Health Determinants Addressed

Air—criteria pollutants and air toxics

Water—discharges, eg. metals, organic pollutants

Noise

Traffic—wear and tear on roads; injuries

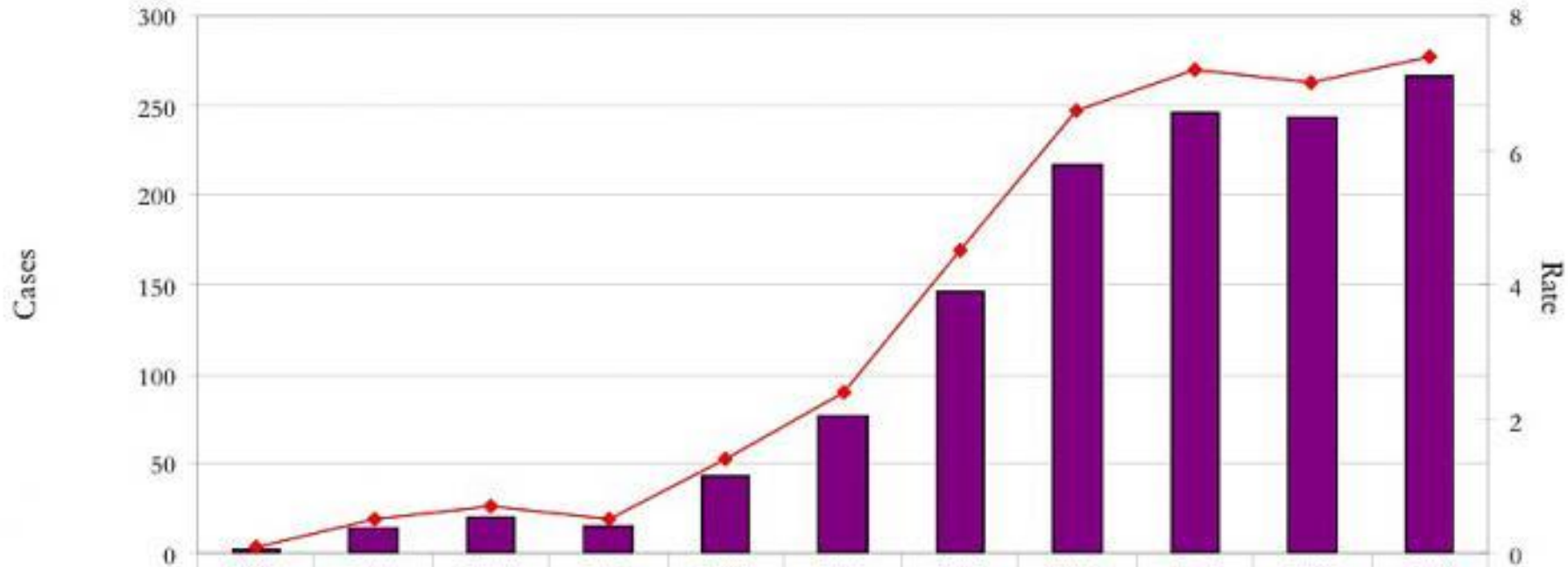
Demographic change/influx of workers—stress/social change; increased demands on local services, infrastructure

Infectious Disease—”men, money, mobility” – STIs, TB

"Rate of syphilis jumps in McMurray"

Posted 2009
By LAUREN CUTLER
Today staff Fortmcmurraytoday.com

Figure 1: Number of infectious syphilis cases and rates per 100,000 by year in Alberta, 2009.



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cases	2	15	21	16	43	77	146	217	246	244	267
Rate	0.1	0.5	0.7	0.5	1.4	2.4	4.5	6.6	7.2	7.0	7.4

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Economy

- **Revenues:** community or state-level taxes, PILT, industry agreements)
- **Costs:** increased demand on roads, police, EMS, schools, hospitals,

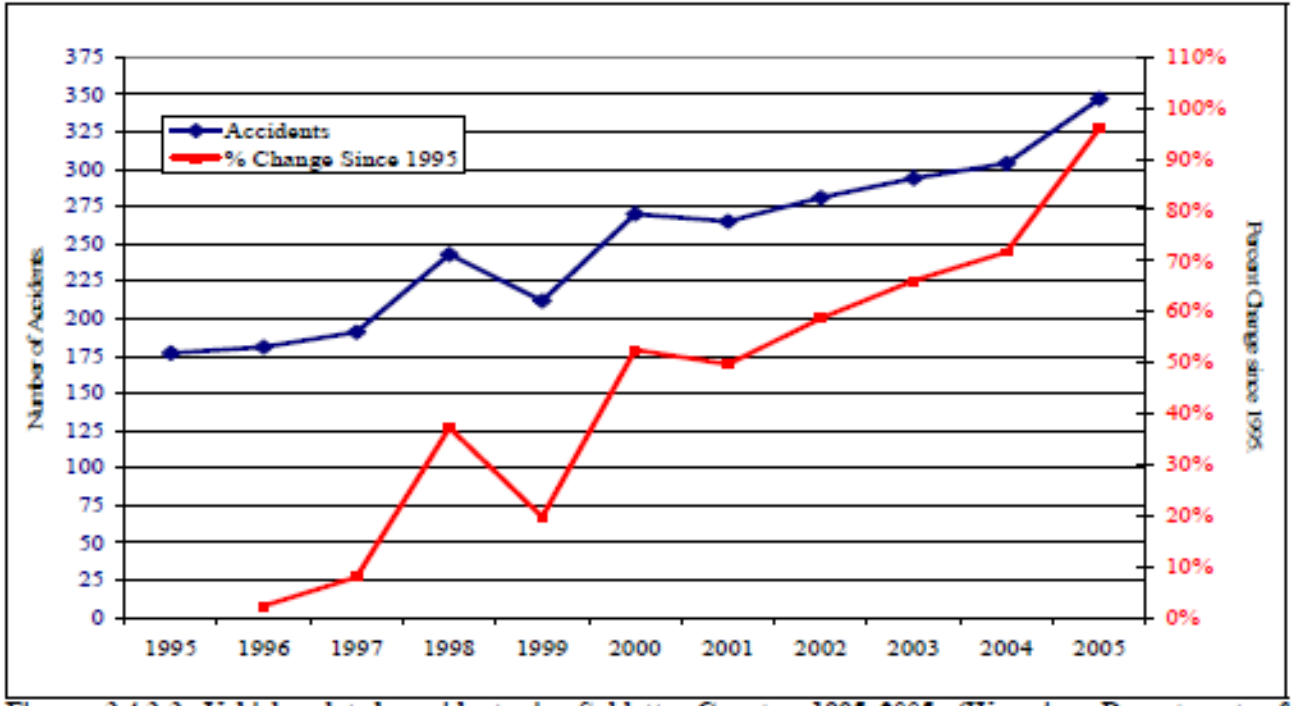

Figure 3.4.3-3 Vehicle-related accidents in Sublette County, 1995–2005 (Wyoming Department of Transportation 2007)

Source:
Sublette County Socioeconomic Study
Draft Report
Ecosystem Research Group
http://www.sublettewyo.com/DocumentCenter/Home/View/363

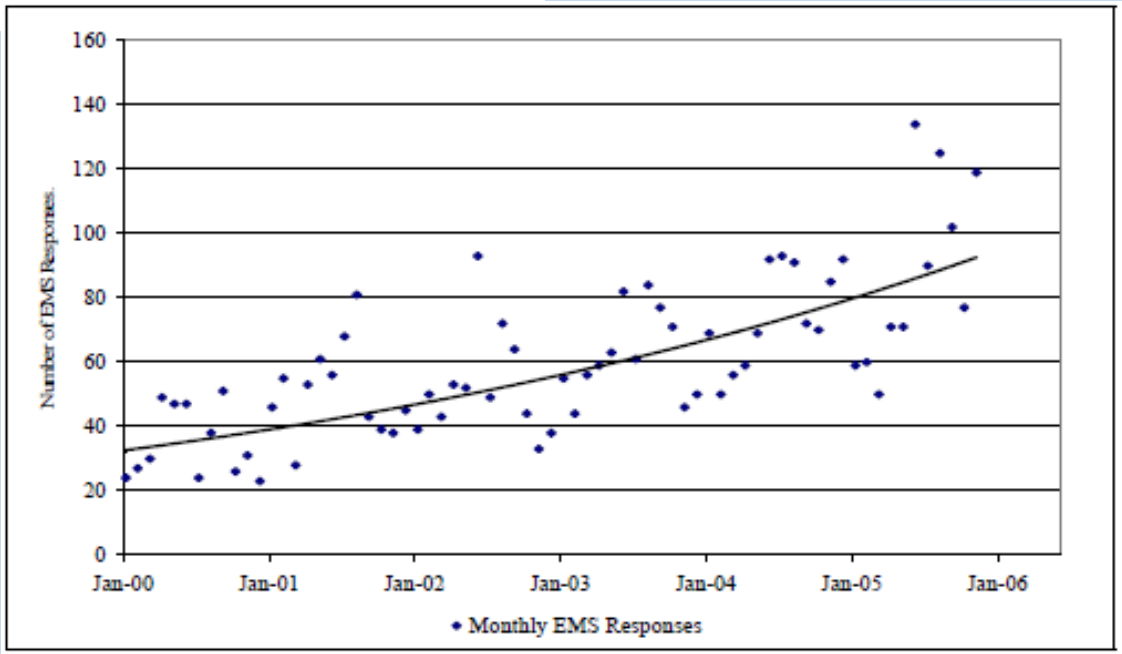

Figure 3.4.5-2 Number of EMS responses (Sublette County Rural Health Care District 2007)

Natural resource development, power generation projects

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Economy

- **Revenues:** community
- **Costs:** increased dema

Employment—increased p

Occupational health—jobs

Food system—disturbance of agricultural land, fish, game

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Examples of Recommendations

Influence on Health	Sample Recommendations
Air	• Monitoring & adaptive management: developing site-specific, tailored monitoring programs based on local meteorological conditions and population vulnerability
Water	• Identification and monitoring for sensitive receptors • Address unique pathways (e.g. subsistence consumption)
Economy—Revenues and Costs	• Monitoring system to identify costs important to health(road wear, EMS calls, school population, policy staffing ratio, etc), and guide use of tax revenues • Impact-benefit agreements with industry • Financial management courses and support for workers

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Consumer Energy Policies (LIHEAP, AMI, for eg)

Typical Health Determinants Addressed

Energy costs—”Fuel poverty”

- Unsafe heat sources (ovens, space heaters)
- Tradeoffs between buying medications, food, and fuel
- Unsafe exposure to heat or cold

Unique Issues/Challenges for HIA and Energy

- Integrating within environmental impact statement processes
- Engaging polarized stakeholders: building common ground between industry, community groups, local, state and federal government, and other interests
- Mitigation can be undertaken by many parties: government regulators, local zoning or stipulations, new impact-benefit agreements with industry.

Resources

Health Impact Project interactive map:

www.healthimpactproject.org/hia/us

-search by sector: “natural resources and energy”

Alaska Health Impact Assessment Program

http://www.epi.alaska.gov/hia/

- Technical guidance for HIA in Alaska: http://www.epi.alaska.gov/hia/AlaskaHIAToolkit_Intro.pdf

International Council on Mining and Metals:

HIA Guidance: http://www.icmm.com/library/hia

Thank you

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