

CDC's Injury Research Agenda: *Focus on the Residential Environment*

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Division of Unintentional Injury Prevention
National Center for Injury Prevention & Control
CDC



National Center for Healthy Housing Greetings from CDC



“Healthy people in a healthy world
through prevention”

Motto



Centers for Disease Control and Prevention

Department of Health and Human Services

NIH

CDC

FDA

National Center for
Chronic Disease
Prevention and
Health Promotion

National Center
for Environmental
Health

National Center
for Health
Statistics

National Center
for Infectious
Diseases

National Center
for Injury Prevention
and Control

National Center
for HIV, STD, and
TB Prevention

National Institute
for Occupational
Safety and Health

NCIPC

- Division of Unintentional Injury Prevention
- Division of Violence Prevention
- Division of Acute Care and Rehabilitation

Research Funds available \$48 Million/Year

- Suicide = 2 million
- Domestic Violence = 17 million
- Residential/Community = 4.4 million
- Sports = 0.9 million
- Transportation = 3 million
- Acute Care = 8.3 million
- Youth Violence = 12 million

Sources of Funds Awarded

Grants	26.6 million
Cooperative Agreements	16.6 million
Contracts	4.7 million
TOTAL	48.0

Injury Control research centers, RO1's, State Programs, new investigators, SBIR.,

Mission of Injury Center

To prevent premature death and disability and to reduce the human suffering and medical cost caused by injuries

Mission of CDC

To promote health and quality of life by preventing and controlling disease, injury, and disability.



10 Leading Causes of Deaths by Age Group - 1998

Rank	Age Groups										Total
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Congenital Anomalies 6,212	Unintentional Injuries 1,935	Unintentional Injuries 1,544	Unintentional Injuries 1,710	Unintentional Injuries 13,349	Unintentional Injuries 12,045	Malignant Neoplasms 17,022	Malignant Neoplasms 45,747	Malignant Neoplasms 87,024	Heart Disease 605,673	Heart Disease 724,859
2	Short Gestation 4,101	Congenital Anomalies 564	Malignant Neoplasms 487	Malignant Neoplasms 526	Homicide 5,506	Suicide 5,365	Unintentional Injuries 15,127	Heart Disease 35,056	Heart Disease 65,068	Malignant Neoplasms 384,186	Malignant Neoplasms 541,532
3	SIDS 2,822	Homicide 399	Congenital Anomalies 198	Suicide 317	Suicide 4,135	Homicide 4,565	Heart Disease 13,593	Unintentional Injuries 10,946	Bronchitis Emphysema Asthma 10,162	Cerebrovascular 139,144	Cerebrovascular 158,448
4	Maternal Complications 1,343	Malignant Neoplasms 365	Homicide 170	Homicide 290	Malignant Neoplasms 1,699	Malignant Neoplasms 4,385	Suicide 6,837	Liver Disease 5,744	Cerebrovascular 9,653	Bronchitis Emphysema Asthma 97,896	Bronchitis Emphysema Asthma 112,584
5	Respiratory Distress Synd. 1,295	Heart Disease 214	Heart Disease 156	Congenital Anomalies 173	Heart Disease 1,057	Heart Disease 3,207	HIV 5,746	Cerebrovascular 5,709	Diabetes 8,705	Pneumonia & Influenza 82,989	Unintentional Injuries 97,835
6	Placenta Cord Membranes 961	Pneumonia & Influenza 146	Pneumonia & Influenza 70	Heart Disease 170	Congenital Anomalies 450	HIV 2,912	Homicide 3,567	Suicide 5,131	Unintentional Injuries 7,340	Diabetes 48,974	Pneumonia & Influenza 91,871
7	Perinatal Infections 815	Septicemia 89	Bronchitis Emphysema Asthma 54	Bronchitis Emphysema Asthma 98	Bronchitis Emphysema Asthma 239	Cerebrovascular 670	Liver Disease 3,370	Diabetes 4,386	Liver Disease 5,279	Unintentional Injuries 32,975	Diabetes 64,751
8	Unintentional Injuries 754	Perinatal Period 75	Benign Neoplasms 52	Pneumonia & Influenza 51	Pneumonia & Influenza 215	Diabetes 636	Cerebrovascular 2,650	HIV 3,120	Pneumonia & Influenza 3,856	Nephritis 22,640	Suicide 30,575
9	Intrauterine Hypoxia 461	Cerebrovascular 57	Cerebrovascular 35	Cerebrovascular 47	HIV 194	Pneumonia & Influenza 531	Diabetes 1,885	Bronchitis Emphysema Asthma 2,828	Suicide 2,963	Alzheimer's Disease 22,416	Nephritis 26,182
10	Pneumonia & Influenza 441	Benign Neoplasms 53	HIV 29	Benign Neoplasms 32	Cerebrovascular 178	Liver Disease 506	Pneumonia & Influenza 1,400	Pneumonia & Influenza 2,167	Septicemia 2,093	Septicemia 19,012	Liver Disease 25,192

Source: National Center for Health Statistics, 2000.

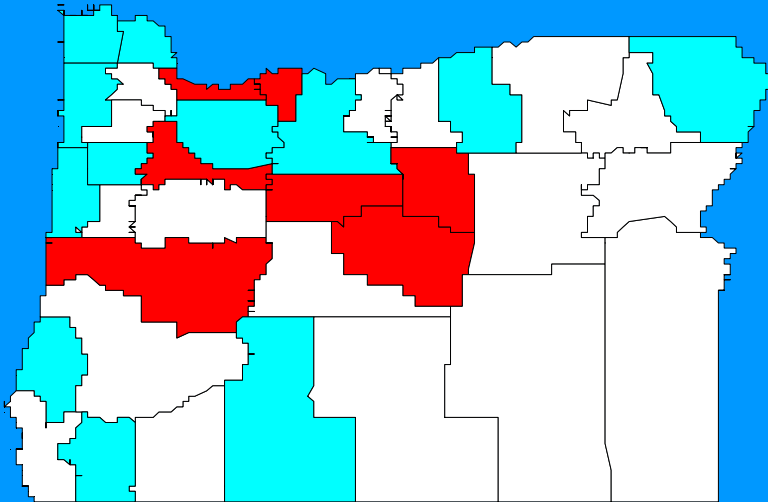
Chart developed by the National Center for Injury Prevention and Control, CDC.

Leading cause of injury death, by age

Under 1	1-4	5-9	10-14	15-24
Suffocation (472)	Drowning (490)	Drowning (192)	Drowning (177)	Poisoning (964)
Drowning (68)	Fire/Burn (308)	Fire/Burn (171)	Fire/Burn (92)	Drowning (647)
Fire/burns (44)	Suffocation (162)	Suffocation (54)	Suffocation (78)	
	Fall (55)	Fall (25)		

www.cdc.gov.injury/wisqars





Poisonings

133 Deaths/Year

U.S. 3.2

OR 4.3

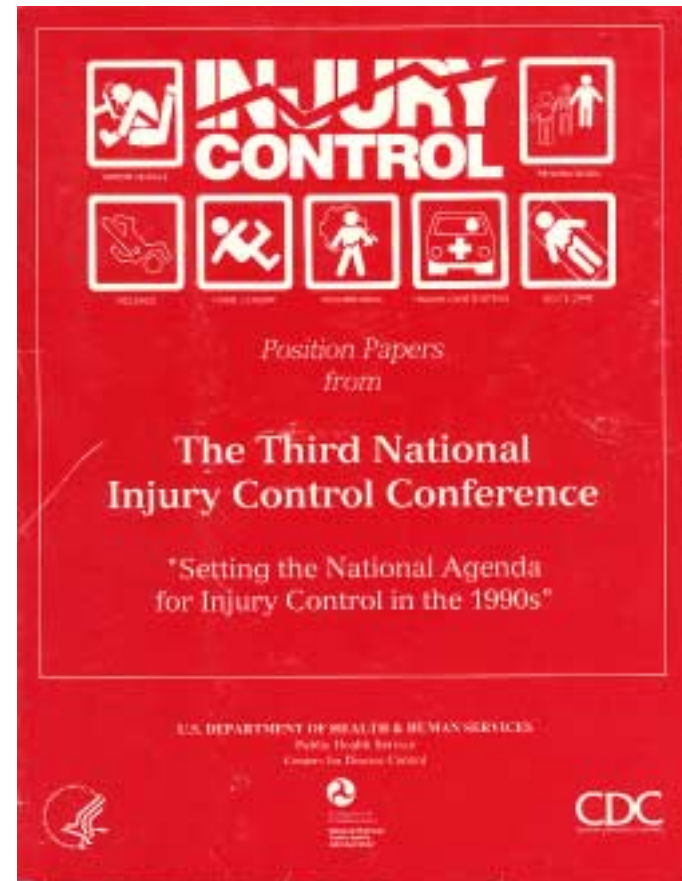
Excess Deaths/Year **33**

www.cdc.gov/injury/maps

Need for Research Agenda

1991 Injury Research Agenda

- Produced by a national committee
- Designed for the whole field of injury control
- 10-year agenda '90-00
- Grew the field-- seed new research



2002 Research Agenda

- CDC Agenda with expert/field input
- Outlines specific research needed by CDC
- Tilted toward applied research
- Will drive funding for 5-10 years
- Dynamic Process



The Process We Used

- Steering Committee oversees process
- 7 Expert Groups met
- Priorities selected
- Draft priorities posted on on Web and in Federal Register
- Public Meetings and Conferences
HHS Advisory Committee approves
- Published by CDC, June 2002

Purpose of the Research Agenda

- Focus research priorities
- Guide extramural funding (RFP, ICRC, etc)
- Guide CDC scientific research
- Foster research partnerships with others
- Attract new funding for priorities

Criteria for Prioritizing Research Themes

- Relevant to CDC's mission
- Large public health burden
- Preventable
- Timely
- Broad application
- Accessible population

Phases of Prevention Research

From Discovery to Delivery

Foundational

Causal models

Developmental

Risk factors

Efficacy

Interventions

Dissemination

Adoption

Topical Areas For Research

- Suicide
- Partner Violence and Abuse
- Home and Community Safety
- Sports, Recreations and Exercise
- Transportation and Mobility
- Acute Care, Disability and Rehabilitation
- Youth Violence



Home and Community Safety

Southside Park (Sacramento, CA)

Residential Drownings

- Study of drowning prevention & education programs
- Definition & measures of child supervision
- Dissemination of effective interventions (Isolation pool fencing)
- Unproven interventions (PFD, pool alarms, covers, CPR training, swim lessons)



Residential Fire Research

- Interventions to prevent fire injuries
- Barriers to adoption of safe fire practices
- Survey of fire risks
- Behavioral responses to fire and evacuation
- Mass trauma events



Dog Bite Research

Responsible for 4.7 million injuries annually

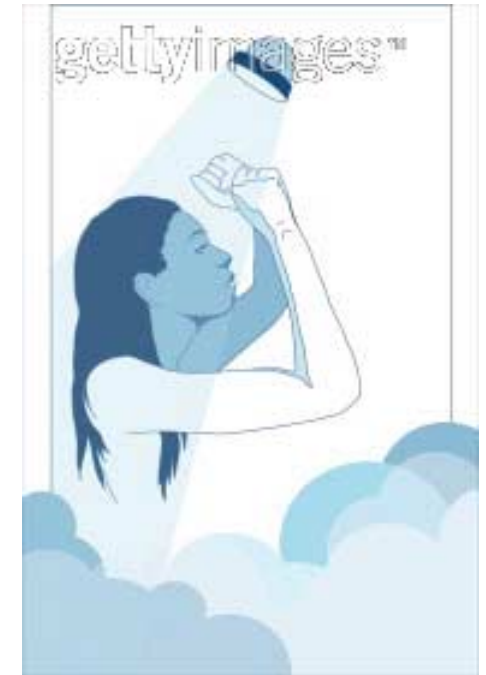
800,000 persons seek medical care (half were children)

- Risk factor research (dogs and people)
- Community research (leash laws, neutering, education)
- Outreach programs (homes, vets, schools)



Scalds, Non-fire burns, Poisonings

- Interventions to prevent scalds, electrical and chemical burns
- Hot water regulators and regulations (H₂O heaters)
- Household chemical storage
- Poison Control Centers
- Kitchen designs and furnishings



Childhood Falls Research

Discovering causes and consequences of childhood falls



Testing indoor and outdoor playground

Biomechanics of falls



Built Environment and injury

Land Use changes

Housing stock

Neighborhood Amenities
(sidewalks, bike paths)

Environmental Policy
(inside and outside)

Urbanization/crowding



Cross-Cutting Research Priorities

- Develop and improve injury surveillance
- Identify costs and long-term consequences
- Identify cross-cutting risks (e.g. alcohol, depression, child abuse)
- measure impact of legislation, regulation, litigation
- Rapidly assess emerging hazards
(e.g. choking, poisonings, home products)

Benefits of the CDC Research Agenda to NCHHousing

- Provides a breadth of topics and research questions for the future
- Help Align NCHH research priorities with CDC's
- Guide selection of new research projects
- Foster collaborative relationships
- Help you advocate for research dollars in priority areas within your organizations & outside

For More Information on the Research Agenda

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www://cdc.gov/injury



