

A Brief Overview of World Trade Center Health Program Research

Meeting of the World Trade Center Scientific and Technical Committee

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Overview

- Number of projects
- Project Focus Areas
- Project Population Focus
- Summary of Research Funding
- Summary of Current Projects
 - Primary Research Contribution
 - STAC Recommendation Addressed

WTCHP Research Funding Announcement

Current WTCHP Research Cooperative Agreements

- Announcement published: March 2012
- Applications received: 2012, 2013, 2014, 2015
- Announcement expired: December 2014

Future WTCHP Research Announcement

- Notice of Intent to be published in mid-2015

Number of Research Projects by Year Funded

2011—Eight projects funded

3-year projects

2012—Eleven projects funded

Five 2-year projects

Six 4-year projects (including renewal of the WTC Health Registry*)

2013—Six projects funded

Three 3-year projects

Three 2-year projects

2014—Ten projects funded

All are 2-year projects

2015—Seven recommended projects

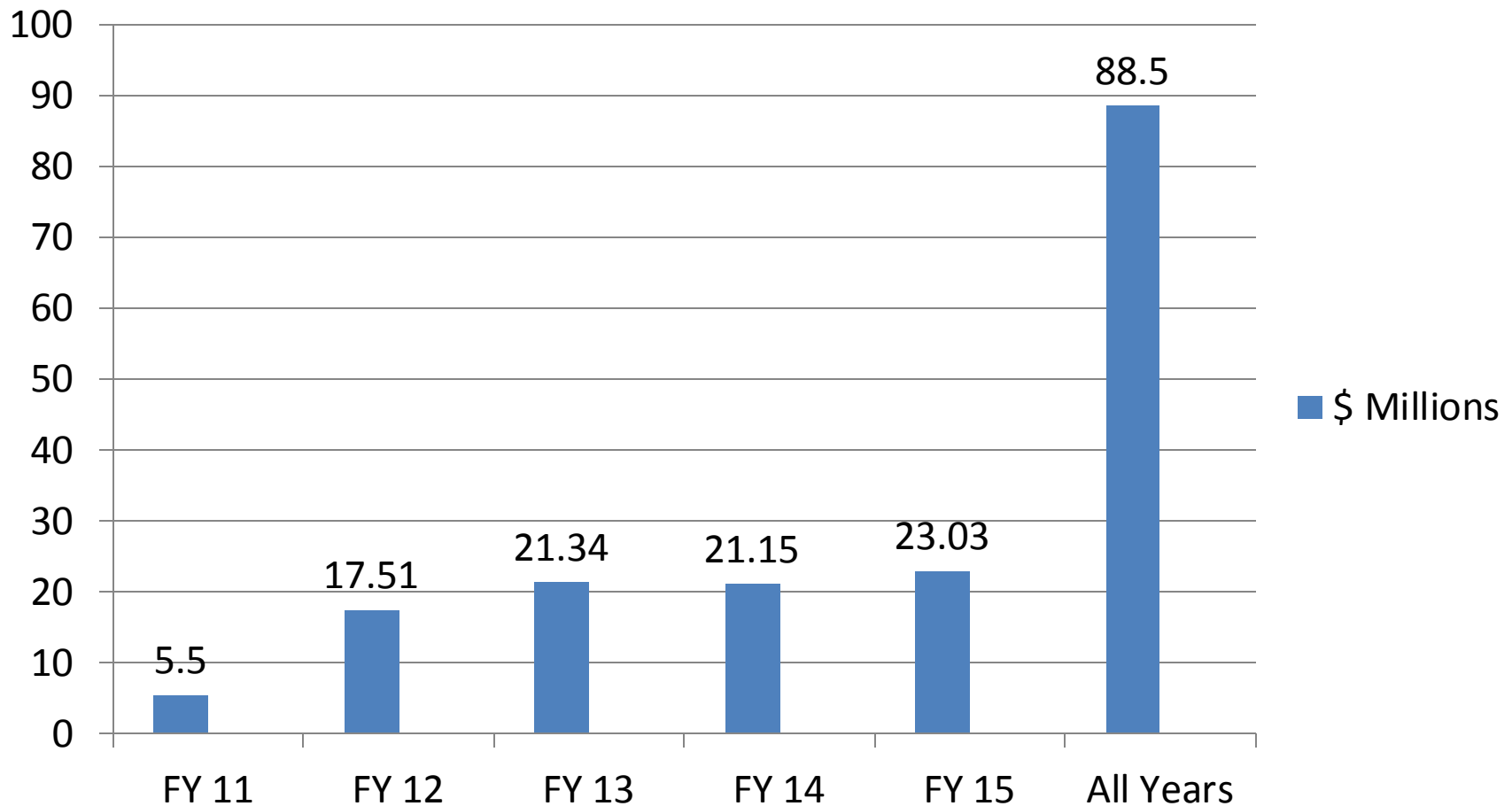
All are 1-year projects

42 total research projects

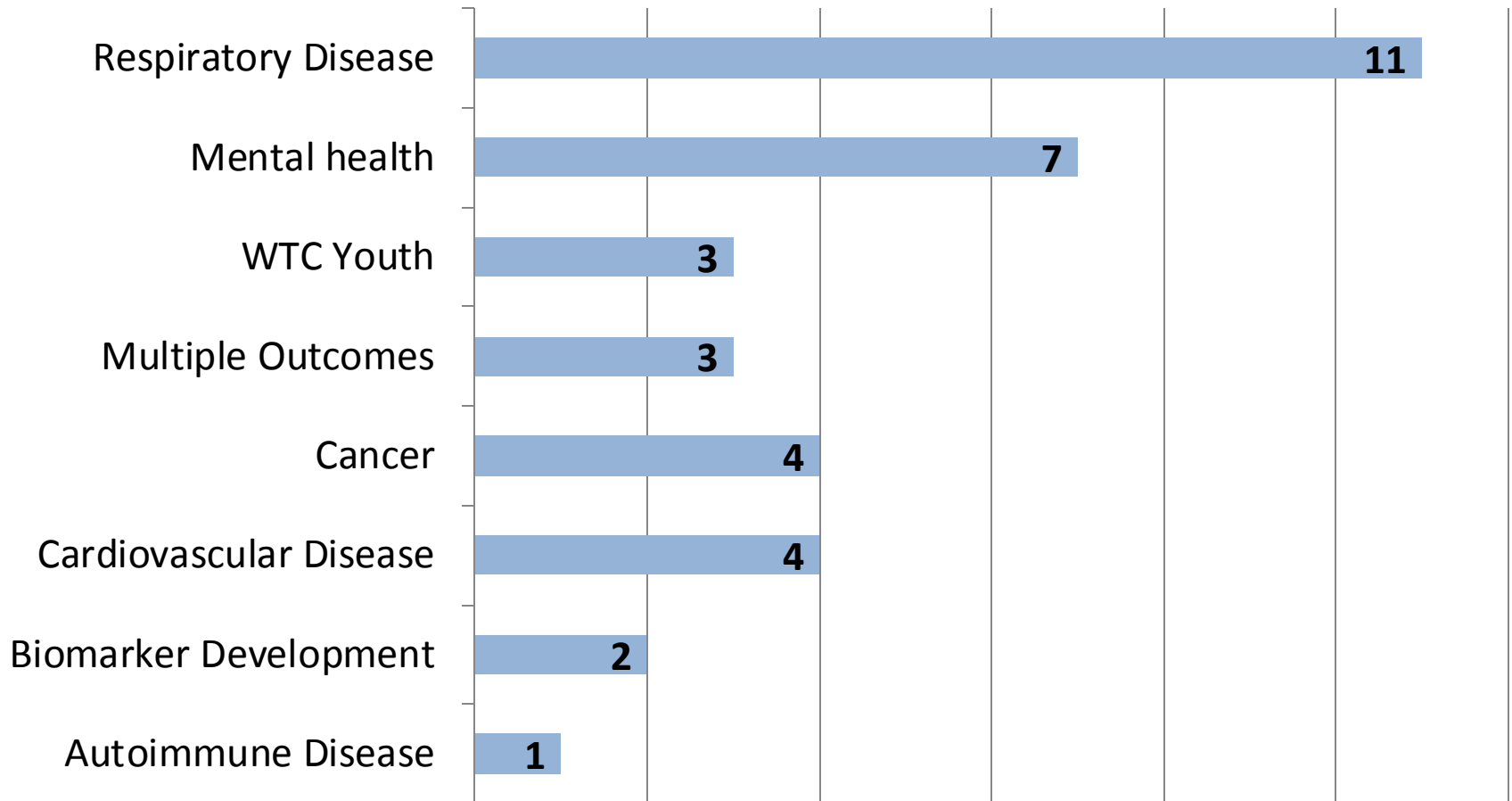
(35 awarded and 7 pending)

* The WTC Health Registry includes multiple projects and research focus areas, and has published 58 research articles

Research Funding FY2011 – FY2015



Study Focus Areas



Research Population Focus

- **Responders**
27 of 35 projects
- **Survivors**
3 of 35 projects (WTC Youth)
- **Responders and Survivors**
5 of 35 projects

Project Monitoring and Communication Methods

- Bi-Annual Grantee Meetings
 - Published Meeting Proceedings
 - Updated Summary of Study Findings
- Study Impact Videos
- Relevant WTCHP
 - WTC Health Program Website
<http://www.cdc.gov/wtc/index.html>
 - WTC Health Research Website
<http://www.cdc.gov/wtc/wtcresearch.html>

Primary Research Contribution of the Current WTCHP Projects

- **Disease Burden**
14 of 35 projects
- **Disease Progression (examination of changes in individual disease status over time)**
19 of 35 projects
- **Biomarker Development (development of disease or exposure biomarkers)**
2 of 35 projects
- **Projects with a Treatment Impact Component**
11 of 35 projects

WTCHP Research Studies Addressing 2014 STAC Recommendations

STAC Recommendations	# Studies*
1) Investigate emerging conditions among WTC populations.	14
2) Examine patterns of health care utilization & delivery & the value and efficacy of the medical monitoring.	9
3) Evaluate & improve the utility & use of WTCHP data.	8
4) Determine the value of biomarkers for early detection of pre-cancerous conditions, early cancers, or other WTC associated diseases.	8
5) Develop Methods of diagnosing disaster-related psychopathology.	4
6) Assess the effect of WTC exposure on gestation & early life.	4

*Ten studies address multiple recommendations

Mental Health Studies

PI Funded	Study Title	Research Contribution (STAC Recommendation)
Feder (2011)	Trajectories of Psychological Risk and Resilience in WTC Responders	Disease Progression; Treatment Impact (#4, #5)
Bromet (2011)	Burden of Mental-Physical Co-morbidity in WTC Responders	Disease Progression (#5) Treatment Impact
Bromet (2011)	Enhanced Smoking Cessation Intervention for WTC Responders	Disease Progression; Treatment Impact (#2)
Feder (2012)	Biomarkers of Psychological Risk and Resilience in World Trade Center Responders	Disease Progression; Mechanistic (#4, #5)
Hoven (2012)	The impact of 9/11 on Youth: Mental Health, Substance Use & Other Risk Behaviors	Disease Burden (#6)
Hoven (2012)	Service Need and Use among Youth Exposed to the WTC Attack	Disease Burden (#6)

Mental Health Studies

(Continued)

PI (Funded)	Study Title	Research Contribution (STAC Recommendation)
Gonzalez (2013)	Mind body Treatment for WTC Responders with Comorbid PTSD and Respiratory Illness	Disease Progression; Treatment Impact (#2)
Kotov (2014)	The Daily Burden of PTSD and Respiratory Problems in WTC Responders	Disease Burden (#5)
Kung (2014)	Mental Health Impact & Service Use among Asian Survivors Exposed to the WTC Attack	Disease Burden (#2)

Respiratory Disease Studies

PI (Funded)	Study Title	Research Contribution (STAC Recommendation)
Berger (2011)	Evaluation of Distal Airway Injury Following Exposure to WTC Dust	Disease Progression (#1)
Aldrich (2012)	Bronchial Reactivity and the Course of Lung Function after WTC Exposure	Disease Progression; Treatment Impact (#1)
Hall (2012)	For How Long is WTC Exposure Associated with Incident Airway Obstruction	Disease Progression; Treatment Impact (#1)
de la Hoz (2012)	Pulmonary Diseases in WTC Workers: Symptoms, Function, & Chest CT Correlates	Disease Burden (#3)
Sunderram (2012)	Obstructive Sleep Apnea in WTC Responders: Role of Nasal Pathology	Disease Progression; Treatment Impact(#2, #4)
Wisnivesky (2012)	Prognosis and Determinates of Asthma Morbidity in WTC Rescue and Recovery Workers	Disease Progression; Treatment Impact (#2)
Luft (2012)	Epigenetic Linkage between PTSD and Respiratory Disease in WTC Responders	Disease Progression; Mechanistic (#4)

Respiratory Disease Studies

(Continued)

PI (Funded)	Study Title	Research Contribution (STAC Recommendation)
Reibman (2013)	Uncontrolled Lower Respiratory symptoms in the WTC Survivor Program	Disease Progression; Treatment Impact (#1, #2)
Trasande (2013)	Early Identification of WTC Conditions in Adolescents	Disease Burden (#6)
Luft (2014)	Deciphering Biological Linkages between PTSD and Respiratory Disease in WTC Responders	Disease Progression; Mechanistic (#4)
Weiden (2014)	Evolution of Risk Factors for Sinusitis in WTC Exposed Firefighters	Disease Progression (#2)
Hall (2014)	For How Long is WTC Exposure Associated with Chronic Rhinosinusitis	Disease Progression (#2)

Cancer Studies

PI (Funding)	Study Title	Research Contribution (STAC Recommendation)
Boffetta (2011)	Cancer among WTC Responders: Enhanced Surveillance, Exposure Assessment, and Cancer Specific Risks	Disease Burden (#1, #3)
Prezant (2011)	Cohort Studies of Incident Cancers in the FDNY WTC Responder Population	Disease Burden (#1)
Webber (2014)	Post 9/11 Cancer Incidence in FDNY Firefighters	Disease Burden (#1, #3)
Taioli (2014)	Biorepository of Cancer Tissue Samples from WTC Responders	Disease Progression; Mechanistic; Treatment Impact (#4)

Cardiovascular Disease (CVD) Studies

PI (Funding)	Study Title	Research Contribution (STAC Recommendations)
Morabia (2011)	CVD Health Impact & Prediction of Incident CVD Events among WTC Responders	Disease Burden (#1)
McLaughlin (2011)	Pulmonary Function Abnormalities, Diastolic Dysfunction and WTC Exposure	Disease Progression; Mechanistic (#1)
McLaughlin (2014)	Renal and Cardiovascular Impairment in WTC Responders	Disease Progression; Mechanistic (#1, #3)
Morabia (2014)	A Cohort Study of Heart Diseases in WTC Responders	Disease Burden (#1, #3)

Biomarker and Surveillance Studies

PI (Funding)	Study Title	Research Contribution (STAC Recommendations)
Biomarker Projects		
Taioli (2013)	Prostate Cancer Risk and Outcome in WTC Responders	Biomarker Development (#1, #4)
Marmor (2013)	Trace elements in Autopsy Tissues from WTC Decedents	Biomarker Development; Treatment Impact (#4)
Surveillance and Multiple Outcomes		
Farfel (2012)	Extension of the World Trade Center Health Registry	Disease Burden (#1, #2,#3, #4, #5, #6)
Kim (2012)	Health and Socioeconomic Sequelae of the WTC Disaster among Responders	Disease Burden (#3)
Kim (2014)	Assessing the impacts of Epidemiologic biases in WTC Health Studies	Disease Burden (#3)

Autoimmune Studies

PI (Funding)	Study Title	Research Contribution (STAC Recommendation)
Webber	Post-9/11 Incidence of Systemic Autoimmune Diseases in the FDNY Cohort *	Disease Burden (#1)

***There is one additional autoimmune project being conducted by the WTC Health Registry**

NIOSH Office of Extramural Programs

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behalf of all workers



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the best science possible.
Thank you!