

COAL'S ASSAULT *on* HUMAN HEALTH

By

Alan H. Lockwood, MD FAAN

Kristen Welker-Hood, ScD MSN RN

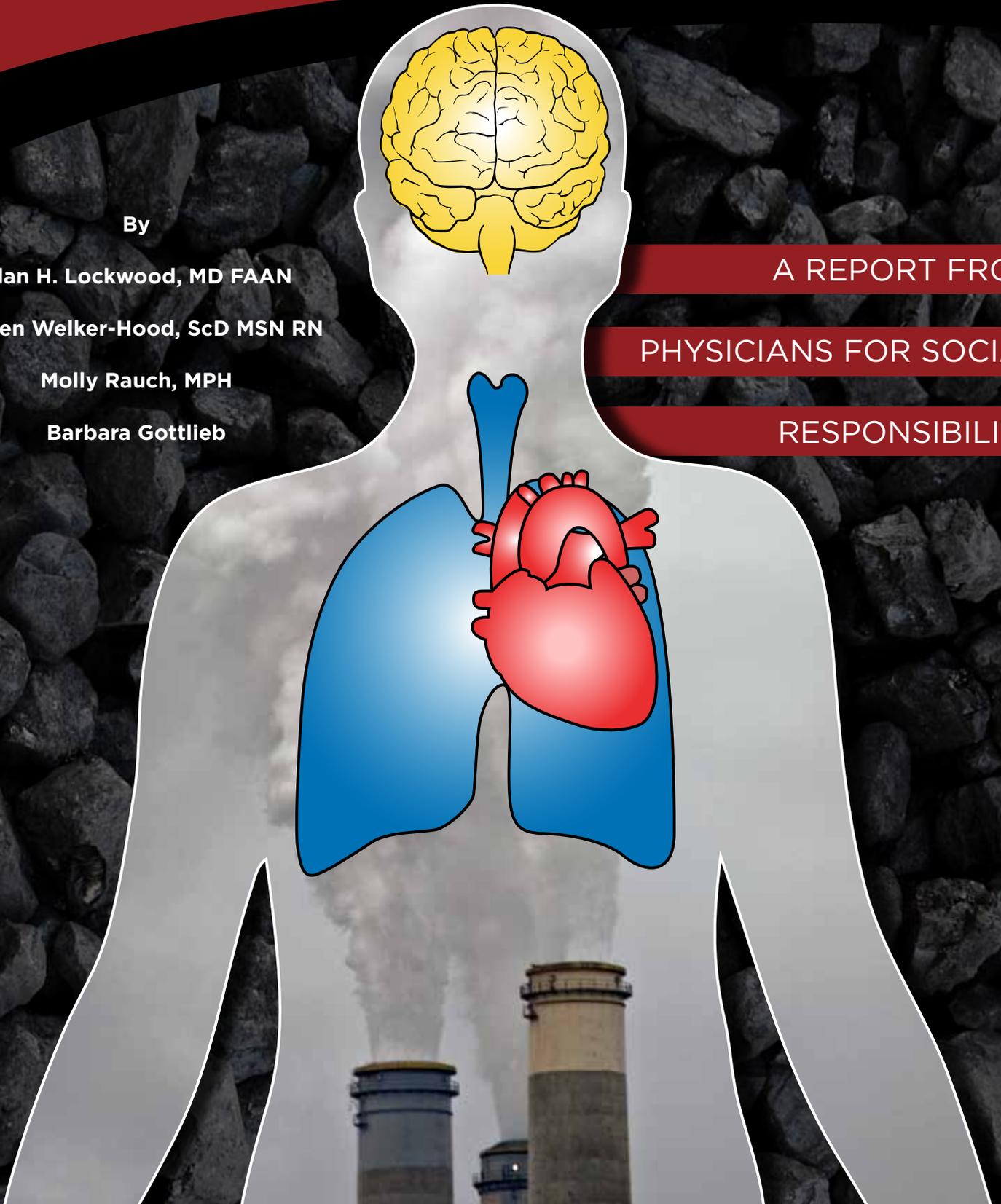
Molly Rauch, MPH

Barbara Gottlieb

A REPORT FROM

PHYSICIANS FOR SOCIAL

RESPONSIBILITY



COAL's ASSAULT *on* HUMAN HEALTH

A REPORT FROM
PHYSICIANS FOR SOCIAL
RESPONSIBILITY

By

Alan H. Lockwood, MD FAAN

Kristen Welker-Hood, ScD MSN RN

Molly Rauch, MPH

Barbara Gottlieb

ACKNOWLEDGMENTS

The authors gratefully acknowledge the following experts who reviewed drafts of this report, sharing their insight and comments:

Paul Epstein, MD MPH
Howard Hu, MD MPH ScD
Philip Landrigan, MD MSc
Michael McCally, MD PhD
Cindy Parker, MD MPH
Jonathan Patz, MD MPH
Katherine Shea, MD MPH

Any remaining errors are entirely our own.

This report was made possible through the generous financial support of the Energy Foundation and the Compton Foundation.

Production was generously underwritten by PMG, a division of The Production Management Group, Ltd.

For an electronic copy of this report, please see **www.psr.org/coalreport**.

ABOUT PHYSICIANS FOR SOCIAL RESPONSIBILITY

PSR has a long and respected history of physician-led activism to protect the public's health. Founded in 1961 by a group of physicians concerned about the impact of nuclear proliferation, PSR shared the 1985 Nobel Peace Prize with International Physicians for the Prevention of Nuclear War for building public pressure to end the nuclear arms race. Today, PSR's members, staff, and state and local chapters form a nationwide network of key contacts and trained medical spokespeople who can effectively target threats to global survival. Since 1991, when PSR formally expanded its work by creating its environment and health program, PSR has addressed the issues of global warming and the toxic degradation of our environment. PSR presses for policies to curb global warming, ensure clean air, generate a sustainable energy future, prevent human exposures to toxic substances, and minimize toxic pollution of air, food, and drinking water.

NOVEMBER 2009

Contents



EXECUTIVE SUMMARY	iii
1. INTRODUCTION	1
2. COAL'S LIFE CYCLE	5
3. COAL'S EFFECTS ON THE RESPIRATORY SYSTEM	13
4. COAL'S EFFECTS ON THE CARDIOVASCULAR SYSTEM	21
5. COAL'S EFFECTS ON THE NERVOUS SYSTEM	27
6. COAL, GLOBAL WARMING, AND HEALTH	35
7. POLICY RECOMMENDATIONS	43