TOXICOLOGICAL PROFILE FOR THORIUM

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DISCLAIMER

The use of company or product name(s) is for identification only and does not imply endorsement by the Agency for Toxic Substances and Disease Registry.

FOREWORD

The Superfund Amendments and Reauthorization Act (SARA) of 1986 (Public Law 99-499) extended and amended the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA or Superfund). This public law directed the Agency for Toxic Substances and Disease Registry (ATSDR) to prepare toxicological profiles for hazardous substances which are most commonly found at facilities on the CERCLA National Priorities List and which pose the most significant potential threat to human health, as determined by ATSDR and the Environmental Protection Agency (EPA). The lists of the 250 most significant hazardous substances were published in the <u>Federal Register</u> on April 17, 1987, on October 20, 1988, on October 26, 1989, and on October 17, 1990.

Section 104(i)(3) of CERCLA, as amended, directs the Administrator of ATSDR to prepare a toxicological profile for each substance on the list. Each profile must include the following content:

- (A) An examination, summary, and interpretation of available toxicological information and epidemiological evaluations on the hazardous substance in order to ascertain the levels of significant human exposure for the substance and the associated acute, subacute, and chronic health effects.
- (B) A determination of whether adequate information on the health effects of each substance is available or in the process of development to determine levels of exposure which present a significant risk to human health of acute, subacute, and chronic health effects, and
- (C) Where appropriate, an identification of toxicological testing needed to identify the types or levels of exposure that may present significant risk of adverse health effects in humans.

This toxicological profile is prepared in accordance with guidelines developed by ATSDR and EPA. The original guidelines were published in the <u>Federal Register</u> on April 17, 1987. Each profile will be revised and republished as necessary, but no less often than every three years, as required by CERCLA, as amended.

The ATSDR toxicological profile is intended to characterize succinctly the toxicological and adverse health effects information for the hazardous substance being described. Each profile identifies and reviews the key literature (that has been peer-reviewed) that describes a hazardous substance's toxicological properties. Other pertinent literature is also presented but described in less detail than the key studies. The profile is not intended to be an exhaustive document; however, more comprehensive sources of specialty information are referenced.

Foreword

Each toxicological profile begins with a public health statement, which describes in nontechnical language a substance's relevant toxicological properties. Following the public health statement is information concerning significant health effects associated with exposure to the substance. The adequacy of information to determine a substance's health effects is described. Data needs that are of significance to protection of public health will be identified by ATSDR, the National Toxicology Program (NTP) of the Public Health Service, and EPA. The focus of the profiles is on health and toxicological information; therefore, we have included this information in the beginning of the document.

The principal audiences for the toxicological profiles are health professionals at the federal, state, and local levels, interested private sector organizations and groups, and members of the public.

This profile reflects our assessment of all relevant toxicological testing and information that has been peer reviewed. It has been reviewed by scientists from ATSDR, the Centers for Disease Control, the NTP, and other federal agencies. It has also been reviewed by a panel of nongovernment peer reviewers and is being made available for public review. Final responsibility for the contents and views expressed in this toxicological profile resides with ATSDR.

William L. Roper, M.D., M.P.H.

Administrator

Agency for Toxic Substances and Disease Registry

CONTENTS

FORI	EWORI	·				•		٠	iii
LIST	OF	TABLES							хi
1.		LIC HEAL	TH STATEM	CNT					1
	1.1	I TAHW	S THORIUM						1
	1.2	HOW MI	GHT I BE	XPOSED TO THORIUM?					2
	1.3	HOW CA	N THORIUM	ENTER AND LEAVE MY BODY?					3
	1.4	HOW CA	N THORIUM	AFFECT MY HEALTH?					3
	1.5	WHAT L	EVELS OF	XPOSURE HAVE RESULTED IN HARMFUL HEALT	'H				
		EFFECT	'S?						4
	1.6	IS THE	RE A MEDI	CAL TEST TO DETERMINE WHETHER I HAVE BE	EN				
		EXPOSE	D TO THOR	UM?					4
	1.7	WHAT R	ECOMMENDA	TIONS HAS THE FEDERAL GOVERNMENT MADE T	' O				
		PROTEC	T HUMAN H	ALTH?					4
	1.8	WHERE	CAN I GET	MORE INFORMATION?					4
2.	HEAI	TH EFFE	CTS						9
	2.1								
	2.2	DISCUS	SION OF H	ALTH EFFECTS BY ROUTE OF EXPOSURE					9
		2.2.1		n Exposure					
		,,_		Death					
			2.2.1.2	Systemic Effects	•	•	•	•	11
			2 2 1 3	Immunological Effects	•	•	•	•	17
			2 2 1 4	Neurological Effects	• •	•	•	•	17
				Developmental Effects					17
			2.2.1.6	Reproductive Effects					17
			2.2.1.7	Genotoxic Effects					17
			2.2.1.8	Cancer					17
		2.2.2		sure		•	•	•	18
		2.2.2	2 2 2 1	Death		•	•	•	18
			2.2.2.1	Systemic Effects		•	•	•	
			2.2.2.3	Immunological Effects	• •	•	•	•	23
			2.2.2.4	Neurological Effects	• •	•	•	•	23
			2.2.2.3	Developmental Effects	• •	•	•	•	23
			2.2.2.0	Reproductive Effects		•	•	•	
			2.2.2.7	Genotoxic Effects					24 24
		2 2 2		Cancer					
		2.2.3		posure					24
			2.2.3.1	Death					24
			2.2.3.2	Systemic Effects					24
			2.2.3.3	Immunological Effects					26
			2.2.3.4	Neurological Effects					26
			2.2.3.5	Developmental Effects					26
			2.2.3.6	Reproductive Effects			•	•	26
			2.2.3.7	Genotoxic Effects					27
			2.2.3.8	Cancer				•	27

		2.2.4	Other Ro	utes of E	xposur	e			•	•								27
			2.2.4.1	Death .														27
			2.2.4.2	Systemic														
		•	2.2.4.3	Immunolo	gical	Effec	ts											29
			2.2.4.4	Neurolog														
			2.2.4.5	Developm	ental	Effec	ts		•	•			•	•			•	
			2.2.4.6	Reproduc	tive F	ffect		• •	•	•		•	•	•	•	•	•	30
			2.2.4.7	Genotoxi														
			2.2.4.7															
	2.3	TOVICO	KINETICS.															
	2.3																	
		2.3.1		on														
			2.3.1.1	Inhalati														
			2.3.1.2	Oral Exp														
			2.3.1.3	Dermal E														
		2.3.2		tion														
			2.3.2.1	Inhalati	on Exp	osure												33
			2.3.2.2	Oral Exp	osure													35
			2.3.2.3	Dermal E														
			2.3.2.4	Other Ro	utes o	f Exp	osu	ıre.										36
		2.3.3	Metaboli	sm														
		2.3.4		n														
				Inhalati														
				Oral Exp														
			2 3 4 3	Dermal E	vnosur	· · ·	•	•	•	•		•	•	•	•	•	•	
			2.3.4.4	Other Ro	ntosui utos o	f Evr	•		•	•		•	•	•	•	•	•	30
	2.4	DELETA	2.3.4.4 NCE TO DIII	OCHEL KO	utes o	T EXP	osc	ile.	•	•		•	•	•	•	•	•	1.0
		RELEVA	NCE TO PU	DLIC REAL	II No ede		•		•	•		•	•	•		•	•	40
	2.5		KERS OF E	XPOSURE A	ND EFF	ECI.	•		•		٠	•	•	•		•	•	43
		2.5.1		rs Used t														
			to Thori	um			. •	٠.		٠	• _ •	•	•	•		•	•	46
		2.5.2		rs Used t														
			by Thori	um			•		•	•		•					•	47
	2.6	INTERA	CTIONS WI	TH OTHER	CHEMIC	ALS .												47
	2.7	POPULA	TIONS THAT	r are unu	SUALLY	SUSC	EPI	IBL	Ε.									47
	2.8	ADEQUA	CY OF THE	DATABASE														47
		2.8.1	Existing	Informat	ion on	Heal	th	Eff	ect	ts (of	The	ori	um.				48
		2.8.2		cation of														
		2.8.3		Studies														
		-,-,-	66				•		•	-		•	•			•	•	
3.	CHEM	TCAL AN	D PHYSICAL	I. INFORMA	TTON													5 5
٠.			AL IDENTI:															
			AL AND CHI															
	J.Z	IIIIDIO.	AL AND OIL	EMICAL IN	OFEKII	ES	•	• •	•	•	• •	•	•	•	•	•	•	٠,٠
4.	DDOD	HOTTON	TMDODE I	TOP AND	D T C D C C	A T												()
4.			IMPORT, U															
	4.1		TION															
	4.4	DISPOS.	AL						•							•	•	65
5.			OR HUMAN I															
	5.1	OVERVI	EW															67

	5.2	RELEASI	ES TO THE	ENVIR	ONME	CNT																		69
		5.2.1	Air																					69
		5.2.2	Water																					
		5.2.3	Soil																					7:
	5.3	ENVIROR	NMENTAL FA																					7:
	- • -	5.3.1	Transport																					7:
		5.3.2	Transform																					74
		3.3.2	5.3.2.1	Air .																				74
			5.3.2.2																					74
			5.3.2.3																					74
	5.4	PIEWEIS	MONITORE																					74
	J.4	5.4.1	Air																					74
		5.4.2	Water																					76
		5.4.3	Soil																					7.
		5.4.4																						7
	5.5		L POPULATI																					80
																								8.
	5.6		TIONS WITH																					
	5.7	ADEQUA	CY OF THE	DATABA	ASE.					٠	٠	٠	٠	٠	•	•	•	٠	٠	٠	•	٠	٠	84
			Identific																					84
		5.7.2	On-going	Studie	es .	•		•	٠	٠	٠	٠	•	٠	•	•	•	٠	٠		٠	٠	٠	8
6.	ANAL	TICAL N	METHODS .																					8
-	6.1		ICAL MATE																					8
	6.2		NMENTAL SA																					90
	6.3	ADEQUA	CY OF THE	DATAB	ASE.	·		·	·		Ĭ.		Ĭ.	Ċ	i			i	i	i	Ċ			9(
	0.5	6 3 1	Identific	ration	of	Dat	a N	ee.	ds	•	•	•	•	•	•	•	•	•		•			•	-
		6.3.2																						
7.	REGUI	LATIONS	AND ADVIS	SORIES																				9:
8.	REFE	RENCES						•							•		•			٠	٠	٠		10
9.	GLOSS	SARY .																					•	13
APPI	ENDIX	Α																						15
APPI	ENDIX	В																						15.

LIST OF FIGURES

2-1	Levels of Significant Exposure to Thorium - Inhalation	14
2-2	Levels of Significant Exposure to Thorium - Oral	21
2-3	Existing Information on the Health Effects of Thorium	49
3-1	Uranium and Thorium Isotope Decay Series Showing the Sources and Decay Products of the Two Naturally-Occurring Isotopes of Thorium	58
5-1	Frequency of Sites With Thorium Contamination	68

LIST OF TABLES

1-1	Human Health Effects from Breathing Thorium	5
1-2	Animal Health Effects from Breathing Thorium	6
1-3	Human Health Effects from Eating or Drinking Thorium	7
1-4	Animal Health Effects from Eating or Drinking Thorium	8
2-1	Levels of Significant Exposure to Thorium - Inhalation	12
2 - 2	Levels of Significant Exposure to Thorium - Oral	20
2-3	Levels of Significant Exposure to Thorium - Dermal	25
2 - 4	The Median Concentrations of Thorium Isotopes in Autopsy Samples from Grand Junction, Colorado, and Washington, DC (in pCi/kg wet weight)	34
3-1	Chemical Identity of Thorium	56
3 - 2	Physical and Chemical Properties of Thorium and Compounds	57
3 - 3	Percent Occurrence and the Energies of the Major Alpha and Beta Particles Emitted by Thorium Isotopes with Atomic Masses Ranging from 223 to 234	59
4-1	United States Companies with Thorium Processing and Fabricating Capacity	64
5-1	Thorium-232 Content in Fresh Fruits, Vegetables, and Tea	78
5 - 2	Thorium Levels in Bones of Colorado and Pennsylvania Residents	79
5 - 3	Thorium Isotopic Concentration in Three Occupational Cases and the General Population of Grand Junction, Colorado (pCi/kg)	81
6-1	Analytical Methods for Determining Thorium in Biological Materials	88
6-2	Analytical Methods for Determining Thorium in Environmental Samples	91
7-1	Regulations and Guidelines Applicable to Thorium	96