



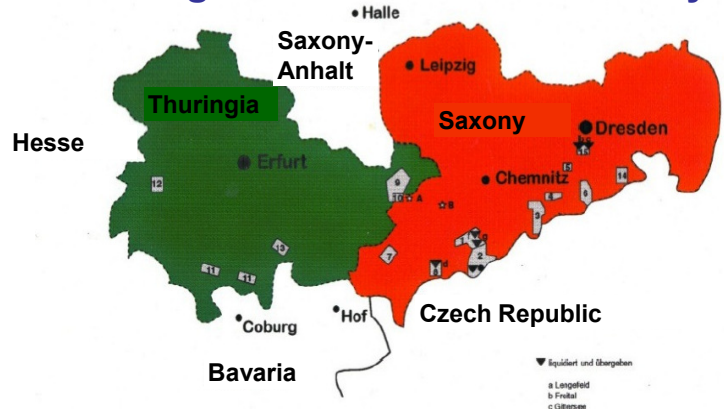
1949-1989

The German Uranium Miners Biobank – current status and perspectives in radiation research

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Mining facilities in East Germany



Introduction

The German uranium miners of the former Wismut mining company with about 400,000 employees are the largest radiation exposed miner population worldwide. 59,000 of them are included in the Wismut Cohort Study. Here we present the current status of the BfS initiated sampling of various biological materials from healthy controls and lung cancer cases of former Wismut workers.

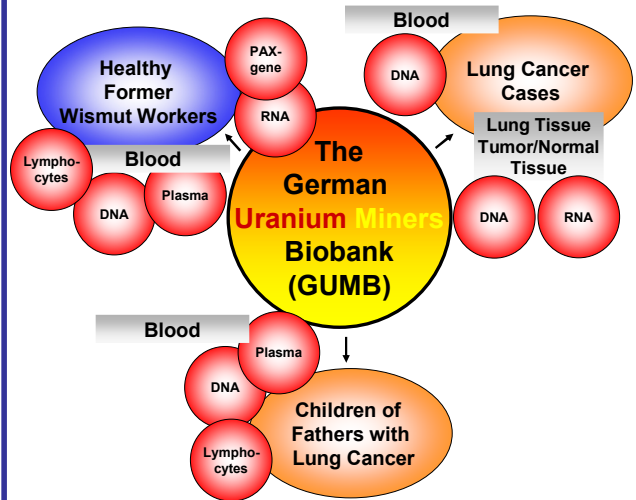
Objectives

The biological material, the radiation exposure, the epidemiological as well as current and future experimental data are stored in the German Uranium Miners Bio- and databank at the **BfS**. The data will be available via STORE.

Samples and data will be available for radiation research on e.g.:

- Radiation specific fingerprints in radiation induced lung tumors
- Research on genetic markers for radiation sensitivity
- Biomarkers for past radiation exposure from decades ago

Results



Tab. 1: Current Status July 2012
Controls (blue) and Cases (orange)

	Persons	Biological Material							
		Blood	Lymphocytes	DNA		RNA		Plasma	PAX-Gene
	[N]	[N]	[N]	[N]		[N]		[N]	[N]
Controls (Blood)	442	-	440	441		438		426	438
Pathological Archive (Tissue)	250	-	-	Tumor 250	Normal 250	Tumor 50	Normal 50	-	-
Lung Cancer Cases (Blood)	81	81	-	81		-		-	-
Children of fathers with lung Cancer (Blood)	87	87	87	87		-		87	-