

Estimating 10-year risk of lung and breast cancer by occupation in Switzerland

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BACKGROUND

- Lung and breast cancer important in the working-age population
 - Incidence and costs
- Lifestyle-related factors important risk factors, but associations with occupations are lacking

OBJECTIVE

To estimate 10-year risks of lung and breast cancer by occupation and smoking status

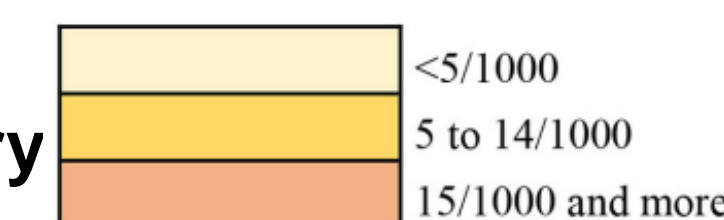
METHODS

- Primary malignant lung and breast cancer cases between 2010-2014 from cancer registries of Western Switzerland
- Estimation of 10-year risk by occupational category
 - Elementary** professions: agriculture, industry, crafts, elementary professions
 - Intermediate** professions: intermediate professions, administrative employees, personal service and personnel
 - Managerial** professions: managerial, intellectual, or scientific professions
- Stratified by smoking status for lung cancer, using smoking prevalence data from the Swiss Health Survey

RESULTS

Age	Smoking status	Elementary professions	Intermediate professions	Managerial professions
35	Never	<1	<1	<1
	Former	1	<1	1
	Current	1	<1	1
45	Never	1	<1	<1
	Former	3	2	1
	Current	4	3	1
55	Never	2	1	1
	Former	9	5	4
	Current	19	12	9
65	Never	3	3	2
	Former	12	11	7
	Current	27	25	15
75	Never	2	3	2
	Former	10	11	8
	Current	20	24	17

10-year risk of **lung** cancer in **men**
Highest in smokers and **elementary** professions



Age	Smoking status	Elementary professions	Intermediate professions	Managerial professions
35	Never	<1	<1	<1
	Former	1	1	<1
	Current	1	1	<1
45	Never	<1	1	<1
	Former	2	2	1
	Current	3	4	2
55	Never	1	1	1
	Former	5	6	5
	Current	12	13	11
65	Never	1	2	2
	Former	5	9	9
	Current	11	21	20
75	Never	1	1	1
	Former	5	4	3
	Current	10	8	6

10-year risk of **lung** cancer in **women**
Highest in smokers and **intermediate** professions

Age	Elementary professions	Intermediate professions	Managerial professions
35	6	6	5
45	11	12	12
55	11	15	18
65	16	21	25
75	12	14	9

10-year risk of **breast** cancer in **women**
Highest in **managerial** professions

KEY MESSAGES

- 10-year **risks** of lung and breast cancer **differ substantially** between occupational categories
- Risk charts can serve as **public health indicators** and help make informed choices related to cancer risk

