

Italy, Biella Province

Registration area

The cancer registry of the Province of Biella covers the population of 83 municipalities, 22 having less than 500 inhabitants and 19 with a population between 500 and 1000 inhabitants. The majority live in urban areas, with 25% concentrated in the district of Biella (chief town) and a further 25% in four municipalities with more than 5000 inhabitants.

The textile industry has always been the main activity.

There has been significant immigration, from north-eastern Italy in the fifties and from the south of the country since, but the population is fairly stable. Birth rates are low, probably due to the high cost of living and the large number of women in employment.

Cancer care facilities

The province has only one hospital with about 800 beds, which provides most surgical and medical specialities (except neurology, cardiology and thoracic surgery). There is a department of radiotherapy, and a recently established oncological department. There is one private clinic with about 80 beds and a private psychiatric clinic.

Due to the position of the hospital, the characteristics of the region and the poor public transport facilities, many gynaecological, general surgery, dermatological and ENT patients go to hospitals outside (but near to) the region. Other patients, notably thoracic, neurosurgical and oncological, go to the university or research centres located in Milan, Turin, Novara and Pavia. Most of these return to the local facilities after diagnosis for treatment and follow-up.

Registry structure and methods

The registry is located within the Department of Preventive Medicine of a Local Sanitary Unit in Biella. The initial experimental phase was sponsored by a private foundation (Edo Tempia Foundation). Now the registry is financially supported partly by the Local Sanitary Unit and partly by the regional funds allocated to oncological resources in Biella.

The registry is staffed by a part-time medical officer, a full-time trained nurse, a part-time health worker with a scientific degree trained for cancer epidemiology and data management and a full-time medical officer.

During the initial phase of the registry activities, the Piedmont Cancer Registry supported the staff with training and supervision.

The Province of Biella Registry uses active case finding from the local general hospital and local private clinic in- and outpatient records, the computerized archives of the Sanitary Unit containing data from 1985, pathology reports, breast screening programme records and hospital registry records. Information from the hospital registry is ascertained through linkage with the records obtained from the pathology laboratory, the local hospital and clinic.

In-patient and out-patient records from the hospitals of the whole Region which concern residents of the Province of Biella are also consulted, as are the records of the Piedmont Childhood

Cancer Registry, Primary Malignant Bone Registry and Occupational Regional Cancer Registry.

Data are checked for quality through manual review, particularly of coding, and automated checking by the Piedmont Cancer Registry.

Interpreting the results

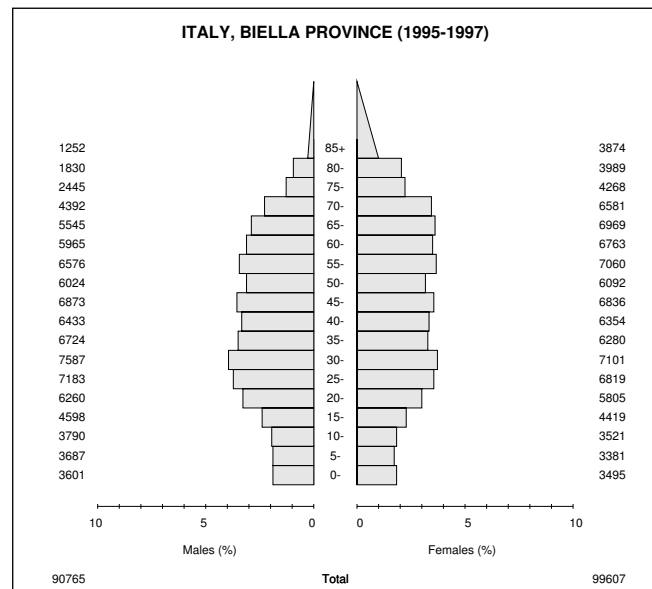
Smoking is increasing among females. The rate of HIV infection is high among young people.

Several voluntary organizations (E. Tempia Foundation, Angelino Foundation, Lega Italiana Tumori) have contributed to the development of a Pap-test programme (since 1980), an organized breast cancer screening programme (covering part of the province from 1990 and the whole area since 1995), screening for prostate cancer and melanoma and limited colorectal screening.

Use of the data

The objectives of the registry are to establish the incidence rates for the population in order to evaluate future needs in terms of diagnosis and therapy and to target prevention activities appropriately.

The registry plans to analyse prevalence, and to investigate occupational exposures. Survival analyses, evaluation of screening programmes and assessment of therapy to produce guidelines are planned.



Source of population

Annual estimates based on the 1991 census, produced by the Ufficio Sistemi Statistici Regione (Regional Office of the National Institute of Statistics – ISTAT).

ITALY, BIELLA PROVINCE (1995-1997)

SITE	MALE						FEMALE						ICD-10
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (percent)	Cum. rates 0-74 (percent)	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (percent)	Cum. rates 0-74 (percent)	
Lip	2	0.1	0.7	0.5	0.02	0.05	2	0.1	0.7	0.2	0.02	0.02	C00
Tongue	21	1.1	7.7	4.8	0.43	0.57	4	0.2	1.3	0.6	0.05	0.08	C01-02
Mouth	17	0.9	6.2	3.4	0.24	0.45	13	0.8	4.4	1.8	0.10	0.25	C03-06
Salivary glands	5	0.3	1.8	1.0	0.08	0.11	1	0.1	0.3	0.0	0.00	0.00	C07-08
Tonsil	8	0.4	2.9	1.6	0.08	0.22	1	0.1	0.3	0.1	0.00	0.02	C09
Other oropharynx	2	0.1	0.7	0.4	0.03	0.06	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	2	0.1	0.7	0.4	0.05	0.05	3	0.2	1.0	0.4	0.02	0.05	C11
Hypopharynx	19	1.0	7.0	3.7	0.23	0.53	3	0.2	1.0	0.6	0.07	0.07	C12-13
Pharynx unspecified	3	0.2	1.1	0.5	0.00	0.07	1	0.1	0.3	0.1	0.00	0.02	C14
Oesophagus	37	1.9	13.6	6.1	0.27	0.78	6	0.3	2.0	0.9	0.05	0.12	C15
Stomach	96	4.9	35.3	15.9	0.64	1.82	79	4.6	26.4	8.1	0.34	0.88	C16
Small intestine	4	0.2	1.5	0.7	0.03	0.10	7	0.4	2.3	1.3	0.10	0.15	C17
Colon	171	8.7	62.8	30.3	1.63	3.95	161	9.3	53.9	19.4	1.03	2.08	C18
Rectum	105	5.4	38.6	18.9	1.04	2.44	66	3.8	22.1	7.5	0.43	0.80	C19-20
Anus	4	0.2	1.5	0.8	0.05	0.11	6	0.3	2.0	0.5	0.02	0.07	C21
Liver	77	3.9	28.3	13.6	0.64	1.84	45	2.6	15.1	4.0	0.13	0.45	C22
Gallbladder etc.	14	0.7	5.1	2.6	0.11	0.34	38	2.2	12.7	3.8	0.12	0.52	C23-24
Pancreas	42	2.1	15.4	8.1	0.56	0.92	65	3.8	21.8	7.7	0.42	0.91	C25
Nose, sinuses etc.	7	0.4	2.6	1.4	0.10	0.13	6	0.3	2.0	0.8	0.05	0.10	C30-31
Larynx	62	3.2	22.8	11.6	0.72	1.64	8	0.5	2.7	1.3	0.08	0.15	C32
Trachea, bronchus and lung	399	20.4	146.5	70.5	3.69	9.46	85	4.9	28.4	10.0	0.47	1.26	C33-34
Other thoracic organs	3	0.2	1.1	1.0	0.06	0.09	4	0.2	1.3	0.6	0.03	0.08	C37-38
Bone	1	0.1	0.4	0.3	0.02	0.02	2	0.1	0.7	0.4	0.03	0.03	C40-41
Melanoma of skin	21	1.1	7.7	4.2	0.23	0.54	44	2.5	14.7	9.6	0.76	0.93	C43
Other skin	345		126.7	62.2	3.22	7.44	300		100.4	42.2	2.42	4.79	C44
Mesothelioma	10	0.5	3.7	1.9	0.10	0.19	3	0.2	1.0	0.4	0.05	0.05	C45
Kaposi sarcoma	4	0.2	1.5	1.0	0.05	0.08	5	0.3	1.7	0.8	0.05	0.08	C46
Connective and soft tissue	9	0.5	3.3	1.7	0.08	0.20	17	1.0	5.7	4.0	0.28	0.35	C47+C49
Breast	4	0.2	1.5	1.6	0.11	0.11	491	28.4	164.3	86.1	6.37	9.67	C50
Vulva							13	0.8	4.4	1.7	0.12	0.17	C51
Vagina							2	0.1	0.7	0.1	0.00	0.00	C52
Cervix uteri							34	2.0	11.4	6.3	0.53	0.65	C53
Corpus uteri							99	5.7	33.1	14.9	1.13	1.90	C54
Uterus unspecified							2	0.1	0.7	0.2	0.02	0.02	C55
Ovary							50	2.9	16.7	8.5	0.55	0.90	C56
Other female genital organs							3	0.2	1.0	0.2	0.00	0.03	C57
Placenta							0	0.0	0.0	0.0	0.00	0.00	C58
Penis	2	0.1	0.7	0.3	0.03	0.03							C60
Prostate	281	14.3	103.2	43.0	1.22	4.81							C61
Testis	12	0.6	4.4	3.9	0.26	0.29							C62
Other male genital organs	3	0.2	1.1	0.6	0.03	0.06							C63
Kidney	46	2.3	16.9	9.0	0.57	1.01	36	2.1	12.0	5.3	0.35	0.59	C64
Renal pelvis	7	0.4	2.6	1.2	0.08	0.14	4	0.2	1.3	0.4	0.02	0.05	C65
Ureter	6	0.3	2.2	0.9	0.00	0.14	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	201	10.3	73.8	35.0	1.66	4.39	45	2.6	15.1	5.9	0.32	0.64	C67
Other urinary organs	7	0.4	2.6	1.2	0.06	0.15	1	0.1	0.3	0.2	0.02	0.02	C68
Eye	1	0.1	0.4	0.3	0.02	0.02	4	0.2	1.3	0.5	0.00	0.10	C69
Brain, nervous system	22	1.1	8.1	6.6	0.40	0.61	20	1.2	6.7	3.4	0.25	0.43	C70-72
Thyroid	8	0.4	2.9	1.8	0.15	0.23	30	1.7	10.0	6.7	0.50	0.62	C73
Adrenal gland	1	0.1	0.4	1.1	0.05	0.05	0	0.0	0.0	0.0	0.00	0.00	C74
Other endocrine	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin disease	16	0.8	5.9	4.2	0.29	0.37	12	0.7	4.0	4.6	0.27	0.30	C81
Non-Hodgkin lymphoma	53	2.7	19.5	10.4	0.60	1.21	61	3.5	20.4	8.9	0.46	0.98	C82-85,C96
Immunoproliferative diseases	2	0.1	0.7	0.3	0.00	0.04	2	0.1	0.7	0.2	0.00	0.02	C88
Multiple myeloma	22	1.1	8.1	3.9	0.22	0.50	24	1.4	8.0	2.4	0.08	0.25	C90
Lymphoid leukaemia	31	1.6	11.4	8.7	0.40	0.71	22	1.3	7.4	5.6	0.30	0.37	C91
Myeloid leukaemia	21	1.1	7.7	5.6	0.31	0.42	21	1.2	7.0	3.0	0.16	0.33	C92-94
Leukaemia unspecified	1	0.1	0.4	0.2	0.00	0.04	1	0.1	0.3	0.2	0.02	0.02	C95
Other and unspecified	68	3.5	25.0	12.5	0.63	1.28	77	4.5	25.8	6.9	0.20	0.80	O&U
All sites	2305		846.5	421.3	21.47	50.79	2029		679.0	299.6	18.83	33.20	ALL
All sites but C44	1960	100.0	719.8	359.0	18.25	43.35	1729	100.0	578.6	257.4	16.41	28.42	ALLbC44