PLEURAL MALIGNANT MESOTHELIOMA
Piemonte, 1990-2019

Pleural malignant mesothelioma. Observed cases, standardized incidence rates (per 100,000 per year; standard: European population, EU27) and 95% confidence intervals (CI) by calendar period and sex.

INCIDENCE 1990-2019 (definite, probable and possible diagnoses)						
	MEN			WOMEN		
period	observed	rates	95% CI	observed	rates	95% CI
1990-1994	246	2.7	2.4-3.1	141	1.2	1.0-1.4
1995-1999	447	4.8	4.3-5.2	239	1.9	1.7-2.2
2000-2004	590	5.9	5.5-6.4	345	2.6	2.3-2.9
2005-2009	672	6.3	5.8-6.8	375	2.7	2.4-2.9
2010-2014	737	6.5	6.0-6.9	360	2.3	2.1-2.6
2015-2019	801	5.8	5.4-6.2	409	2.7	2.5-3.0

INCIDENCE 1990-2019 (definite diagnoses)						
	MEN			WOMEN		
period	observed	rates	95% CI	observed	rates	95% CI
1990-1994	185	2.0	1.7-2.3	114	1.0	0.8-1.2
1995-1999	331	3.4	3.0-3.8	154	1.3	1.1-1.5
2000-2004	418	4.0	3.6-4.4	222	1.7	1.5-2.0
2005-2009	503	4.6	4.2-5.0	250	1.8	1.6-2.1
2010-2014	615	5.3	4.9-5.8	286	1.9	1.7-2.2
2015-2019	659	4.9	4.5-5.3	322	2.2	2.0-2.5

Pleural malignant mesothelioma. Observed cases, standardized incidence rates (per 100,000 per year; standard: European population, EU27) and 95% confidence intervals (CI) by local health authority and sex (2015-2019)

	INCIDENCE 2015-2019 (definite, probable and possible diagnoses)					
	MEN			WOMEN		
local health authority	observed	rates	95% CI	observed	rates	95% CI
AL	220	15.0	13.0-17.0	146	9.2	7.7-10.7
AT	29	4.6	2.9-6.3	12	1.6	0.7-2.6
BI	25	4.2	2.5-5.9	10	1.7	0.6-2.7
CN1	50	4.1	2.9-5.2	10	0.8	0.3-1.3
CN2	17	3.4	1.8-5.1	8	1.5	0.5-2.6
NO	57	5.5	4.0-6.9	22	1.9	1.1-2.8
TO	123	4.4	3.6-5.2	66	2.1	1.6-2.7
TO3	90	4.8	3.8-5.8	45	2.3	1.6-3.0
TO4	80	5.0	3.9-6.1	35	2.0	1.3-2.6
TO5	38	4.2	2.8-5.5	26	2.6	1.6-3.7
VC	37	6.9	4.6-9.1	13	2.1	0.9-3.3
VCO	35	6.2	4.1-8.2	16	2.7	1.3-4.0

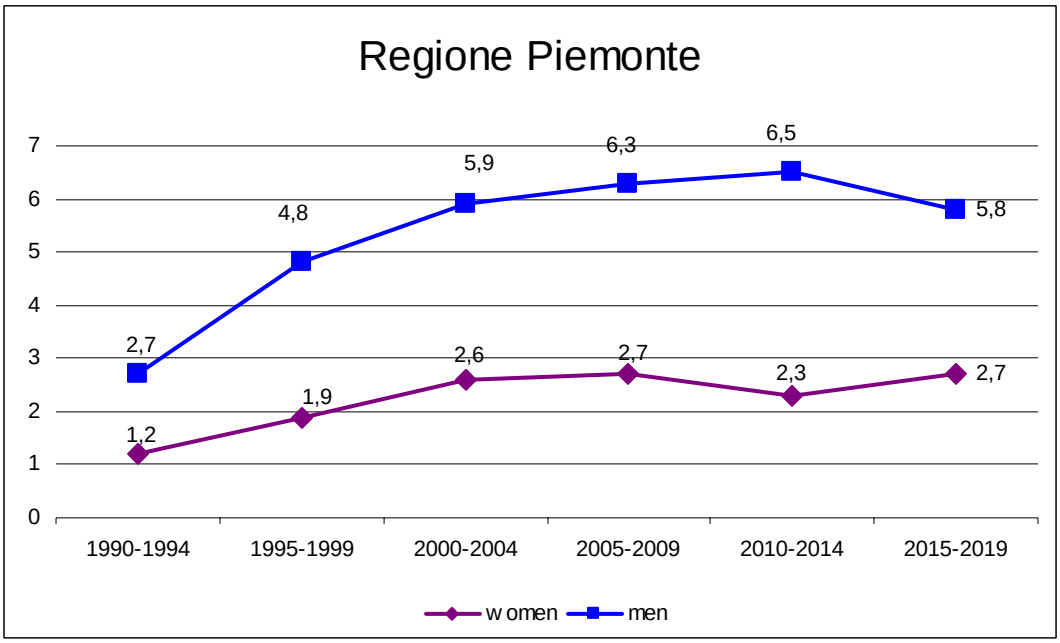
Pleural malignant mesothelioma. Observed cases, standardized incidence rates (per 100,000 per year; standard: European populationEU27) and 95% confidence intervals (CI) by area and sex. Definite diagnoses

INCIDENCE 2015-2019 (definite diagnoses)								
DISTRETTI	WOMEN				MEN			
	rates	IC 95%		observed	rates	IC 95%		observed
Regione Piemonte	2.2	2.0	2.5	322	4.9	4.5	5.3	659
AL/1 (Acqui Terme)	0	0	0	0	4.1	0.8	7.4	6
AL/2 (Alessandria)	2.2	0.8	3.6	10	6.8	4.1	9.4	26
AL/3 (Casale Monferrato)	33.9	27.0	40.8	96	46.0	37.8	54.2	124
Comune Casale Monferrato	53.0	39.5	66.5	61	51.2	37.8	64.6	57
AL/4 (Novi Ligure)	1.4	0	2.9	3	6.1	3.0	9.3	15
AL/5 (Ovada)	2.4	0	5.7	2	6.9	1.7	12.0	7
AL/6 (Tortona)	0.3	0	1.0	1	1.8	0	3.5	4
AL/7 (Valenza)	4.8	0.5	9.0	5	12.2	5.2	19.2	12
AT/1 (Asti centro)	1.7	0.2	3.3	5	4.5	1.8	7.2	11
AT/2 (Asti nord)	1.5	0	3.2	3	4.0	1.2	6.7	8
AT/3 (Asti sud-Nizza M.to)	0.3	0	1.0	1	3.1	0.4	5.8	5
BI/1(Biella)	1.8	0.4	3.1	7	3.7	1.7	5.6	14
BI/2 (Cossato)	0.5	0	1.4	1	4.1	1.2	7.0	8
CN1/1 (Borgo San Dalmazzo)	0.4	0	1.2	1	5.3	2.4	8.2	13
CN1/2 (Ceva)	1.4	0	4.2	1	0	0	0	0
CN1/3 (Cuneo)	0.4	0	1.2	1	4.1	1.4	6.9	9
CN1/4 (Fossano)	0.4	0	1.3	1	4.1	1.5	6.6	10
CN1/5 (Mondovì)	1.5	0	3.2	3	3.1	0.6	5.6	6
CN1/6 (Saluzzo)	0.4	0	1.3	1	1.2	0	2.5	3
CN2/1 (Alba)	1.3	0	2.6	4	2.0	0.5	3.6	7
CN2/2 (Bra)	1.6	0	3.4	3	4.1	1.0	7.1	7
NO/1 (Arona)	1.5	0	2.9	4	3.8	1.3	6.2	9
NO/2 (Borgomanero)	0.3	0	1.0	1	4.0	1.4	6.6	9
NO/3 (Galliate-Trecate)	1.7	0	3.6	3	9.9	5.0	14.8	16
NO/4 (Novara)	2.5	0.9	4.1	10	3.9	2.0	5.8	17
TO (Torino)	1.7	1.2	2.2	51	3.6	2.9	4.4	99
TO3/1 (Collegno)	5.0	2.5	7.6	15	5.2	2.6	7.9	15
TO3/2 (Giaveno)	1.2	0	3.4	1	3.1	0	6.6	3
TO3/3 (Orbassano)	2.4	0.6	4.3	7	3.4	1.3	5.5	10
TO3/4 (Pinerolo)	0.8	0	1.8	2	3.0	0.9	5.0	8
TO3/5 (Rivoli)	2.0	0	3.9	4	5.1	1.9	8.3	10
TO3/6 (Susa)	1.6	0.2	3.1	5	2.2	0.4	3.9	6
TO3/7 (Val Pellice)	2.4	0	5.8	2	3.0	0	7.2	2
TO3/8 (Val Chisone e Germanasca)	0	0	0	0	0	0	0	0
TO3/9 (Venaria)	0.4	0	1.2	1	3.9	1.5	6.4	10
TO4/1 (Ciriè)	2.1	0.6	3.5	8	3.6	1.6	5.5	13
TO4/2 (Chivasso)	3.1	0.9	5.3	8	6.5	3.2	9.8	15
TO4/3 (Settimo Torinese)	1.2	0	2.6	3	3.1	0.9	5.2	8
TO4/4 (San Mauro Torinese)	0	0	0	0	0.8	0	2.5	1
TO4/5 (Ivrea)	1.2	0.1	2.3	5	5.2	2.8	7.6	19
TO4/6 (Cuorgnè)	0.6	0	1.5	2	2.9	0.7	5.1	7
TO5/1(Carmagnola)	0.7	0	2.0	1	2.8	0.1	5.5	4
TO5/2 (Chieri)	1.9	0.4	3.4	6	2.6	0.8	4.3	8
TO5/3 (Moncalieri)	4.4	1.8	7.0	11	6.6	3.3	10.0	15
TO5/4 (Nichelino)	1.3	0	2.8	3	2.6	0.5	4.6	6
VC/1(Vercelli-Santhià)	2.0	0.5	3.6	7	7.0	4.0	10.1	21
VC/2 (Montano-Borgosesia-Varallo)	0.9	0	2.1	2	4.2	1.6	6.9	10
VCO/1(Domodossola)	0.9	0	2.2	2	5.3	2.1	8.4	11
VCO/2 (Omegna)	3.2	0.1	6.3	4	0.9	0	2.6	1
VCO/3 (Verbania)	2.3	0.3	4.3	5	5.1	2.1	8.2	11

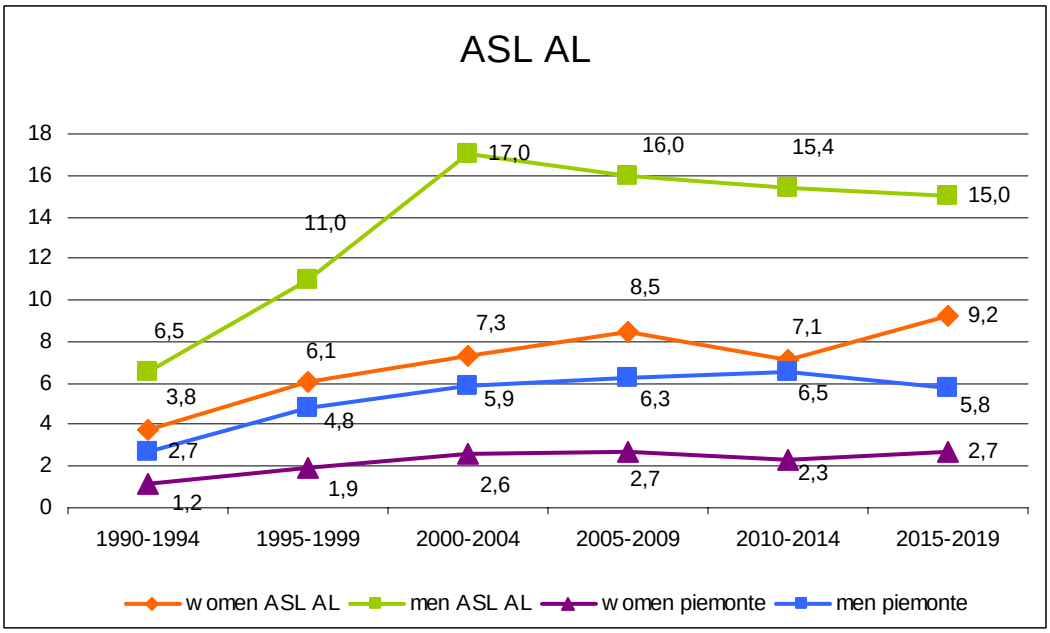
Pleural malignant mesothelioma. Observed cases, standardized incidence rates (per 100,000 per year; standard: European populationEU27) and 95% confidence intervals (CI) by area and sex. All diagnoses

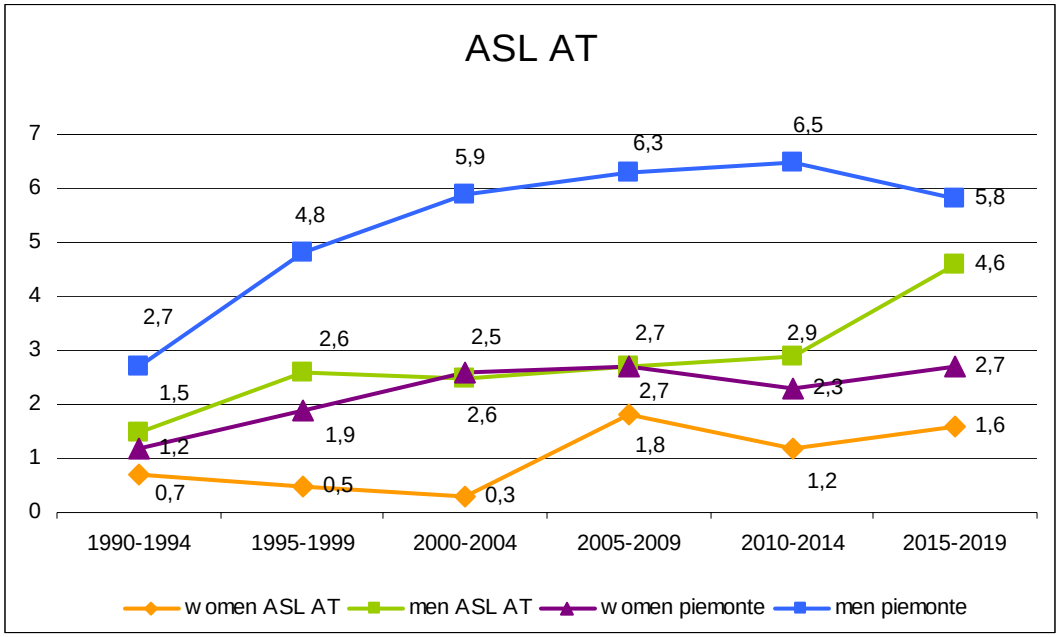
INCIDENCE 2015-2019 (definite, probable and possible diagnoses)								
	WOMEN				MEN			
LOCAL DISTRICT	rates	95% CI		observed	rates	95% CI		observed
Regione Piemonte	2.7	2.5	3.0	409	5.8	5.4	6.2	801
AL/1 (Acqui Terme)	0.4	0	1.2	1	4.8	1.2	8.4	7
AL/2 (Alessandria)	3.1	1.4	4.7	14	7.2	4.5	9.9	28
AL/3 (Casale Monferrato)	39.3	32.0	46.6	117	50.4	41.8	58.9	138
Comune Casale Monferrato	63.1	48.6	77.5	76	56.2	42.2	70.2	63
AL/4 (Novi Ligure)	1.6	0	3.3	4	7.3	3.9	10.8	18
AL/5 (Ovada)	3.0	0	6.6	3	6.9	1.7	12.0	7
AL/6 (Tortona)	0.3	0	1.0	1	2.5	0.5	4.5	6
AL/7 (Valenza)	5.5	1	9.9	6	15.4	7.8	23.1	16
AT/1 (Asti centro)	2.1	0.4	3.7	6	4.9	2.1	7.6	12
AT/2 (Asti nord)	2.3	0.3	4.4	5	5.2	2.1	8.3	11
AT/3 (Asti sud-Nizza M.to)	0.3	0	1.0	1	3.7	0.7	6.7	6
BI/1(Biella)	2.3	0.8	3.8	9	4.1	2.1	6.1	16
BI/2 (Cossato)	0.5	0	1.4	1	4.5	1.5	7.5	9
CN1/1 (Borgo San Dalmazzo)	0.4	0	1.2	1	5.7	2.7	8.7	14
CN1/2 (Ceva)	2.3	0	5.5	2	0	0	0	0
CN1/3 (Cuneo)	0.4	0	1.2	1	4.6	1.7	7.4	10
CN1/4 (Fossano)	0.7	0	1.8	2	5.9	2.9	8.9	15
CN1/5 (Mondovì)	1.5	0	3.2	3	4.2	1.3	7.1	8
CN1/6 (Saluzzo)	0.4	0	1.3	1	1.2	0	2.5	3
CN2/1 (Alba)	1.3	0	2.6	4	2.4	0.7	4.1	8
CN2/2 (Bra)	2.0	0	3.9	4	5.2	1.8	8.6	9
NO/1 (Arona)	1.5	0	2.9	4	4.9	2.1	7.7	12
NO/2 (Borgomanero)	1.0	0	2.1	3	4.4	1.6	7.1	10
NO/3 (Galliate-Trecate)	1.7	0	3.6	3	10.6	5.5	15.6	17
NO/4 (Novara)	2.9	1.2	4.5	12	4.2	2.3	6.2	18
TO1-10 (Torino)	2.1	1.6	2.7	66	4.4	3.6	5.2	123
TO3/1 (Collegno)	5.3	2.7	7.9	16	6.5	3.5	9.4	19
TO3/2 (Giaveno)	1.2	0	3.4	1	5.0	0.6	9.3	5
TO3/3 (Orbassano)	2.4	0.6	4.3	7	5.5	2.8	8.2	16
TO3/4 (Pinerolo)	0.8	0	1.8	2	3.0	0.9	5.0	8
TO3/5 (Rivoli)	2.5	0.3	4.7	5	5.6	2.3	8.9	11
TO3/6 (Susa)	2.5	0.8	4.3	8	4.5	2.1	7.0	13
TO3/7 (Val Pellice)	3.2	0	7.0	3	5.1	0	10.2	4
TO3/8 (Val Chisone e Germanasca)	1.0	0	2.9	1	1.4	0	4.1	1
TO3/9 (Venaria)	0.8	0	1.9	2	5.1	2.3	7.8	13
TO4/1 (Ciriè)	3.0	1.3	4.7	12	5.1	2.8	7.4	19
TO4/2 (Chivasso)	3.8	1.4	6.2	10	7.7	4.1	11.3	18
TO4/3 (Settimo Torinese)	1.9	0.2	3.6	5	3.9	1.4	6.3	10
TO4/4 (San Mauro Torinese)	0	0	0	0	2.4	0	5.1	3
TO4/5 (Ivrea)	1.2	0.1	2.3	5	5.7	3.2	8.1	21
TO4/6 (Cuorgnè)	1.0	0	2.2	3	3.6	1.2	6.0	9
TO5/1(Carmagnola)	0.7	0	2.0	1	2.8	0.1	5.5	4
TO5/2 (Chieri)	2.4	0.7	4.1	8	3.5	1.4	5.6	11
TO5/3 (Moncalieri)	4.8	2.0	7.5	12	7.4	3.9	10.9	17
TO5/4 (Nichelino)	2.2	0.3	4.1	5	2.6	0.5	4.6	6
VC/1(Vercelli-Santhià)	2.6	0.9	4.3	9	7.9	4.7	11.1	24
VC/2 (Montano-Borgosesia-Varallo)	1.4	0	2.8	4	5.4	2.4	8.4	13
VCO/1(Domodossola)	0.9	0	2.2	2	7.0	3.4	10.6	15
VCO/2 (Omegna)	4.3	0.8	7.8	6	1.7	0	4.1	2
VCO/3 (Verbania)	3.4	1.0	5.7	8	8.0	4.3	11.8	18

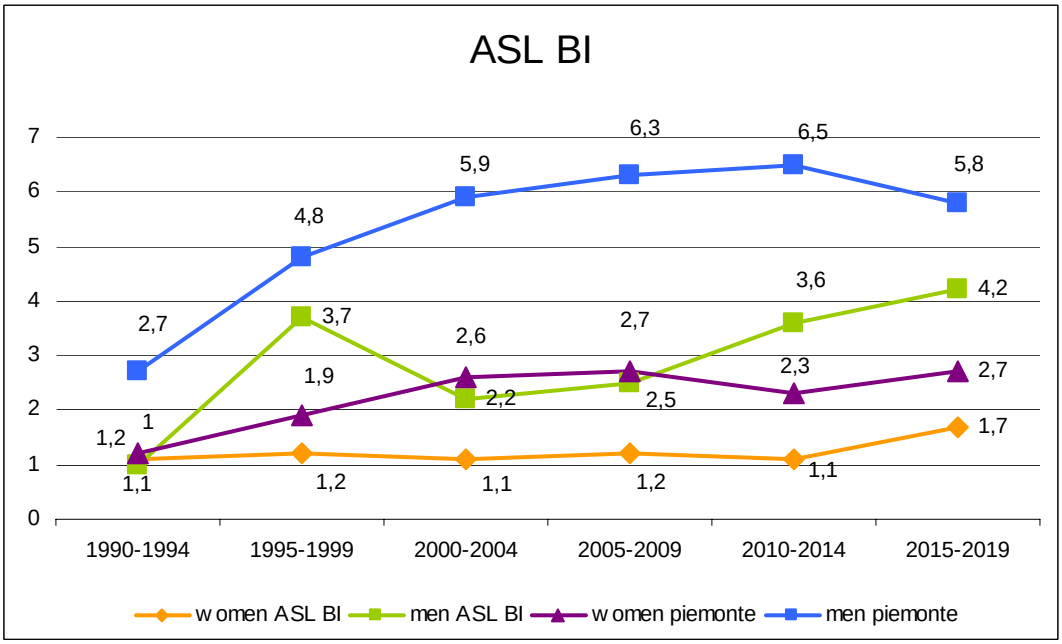
Pleural malignant mesothelioma. Regione Piemonte, time trends by sex. All diagnoses. Standardized rates (per 100,000 per year; standard: European population EU27) 1990-2019

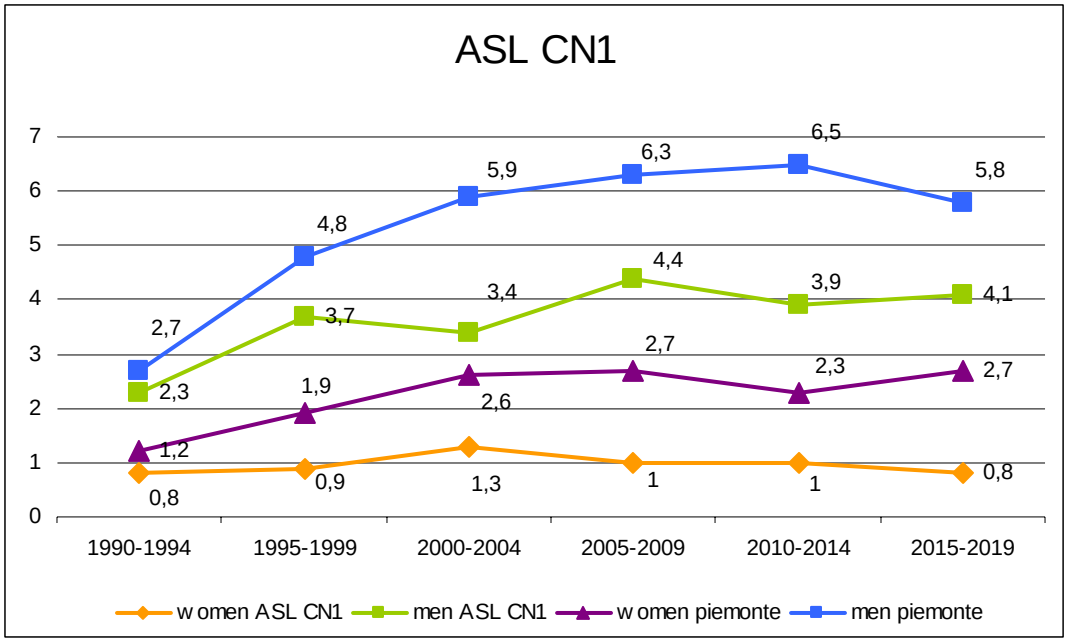


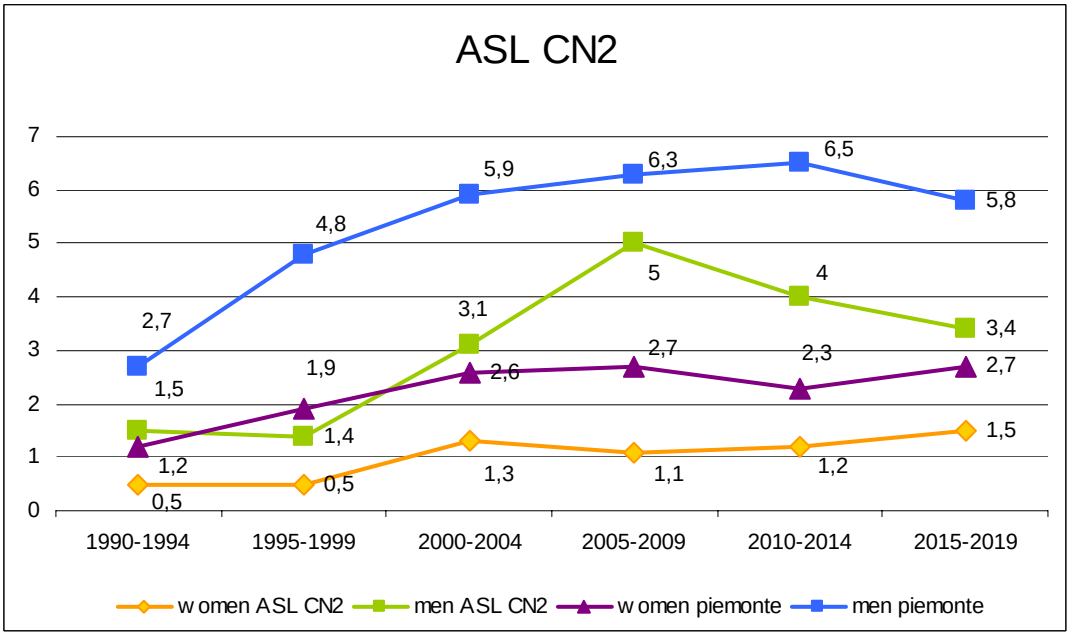
Pleural malignant mesothelioma. Regione Piemonte, time trends by sex and local health authority. All diagnoses. Standardized rates (per 100,000 per year; standard: European population EU27) 1990-2019

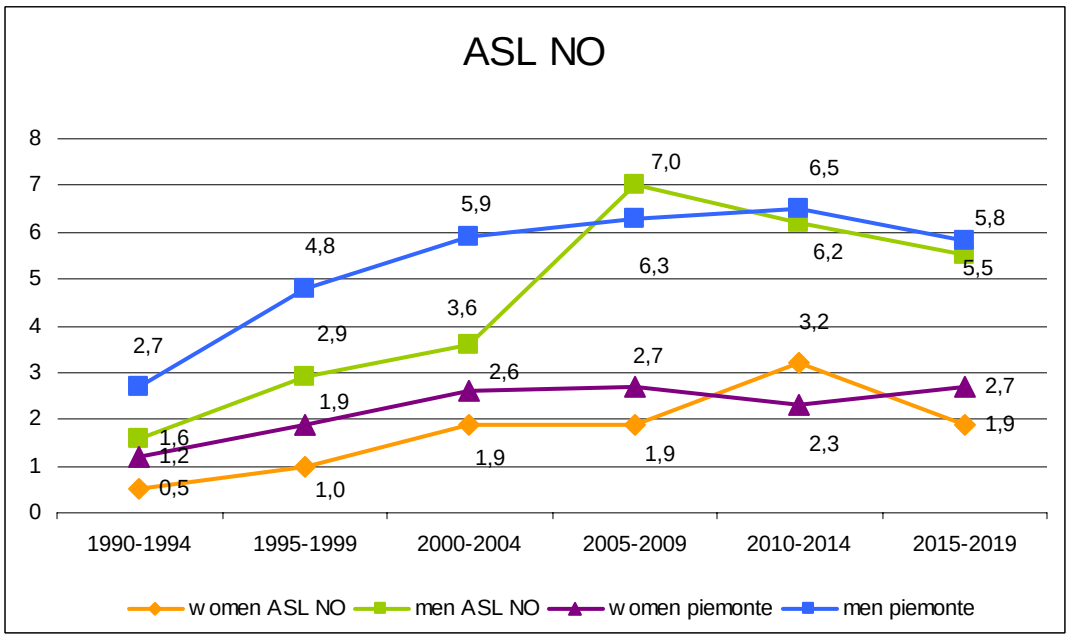


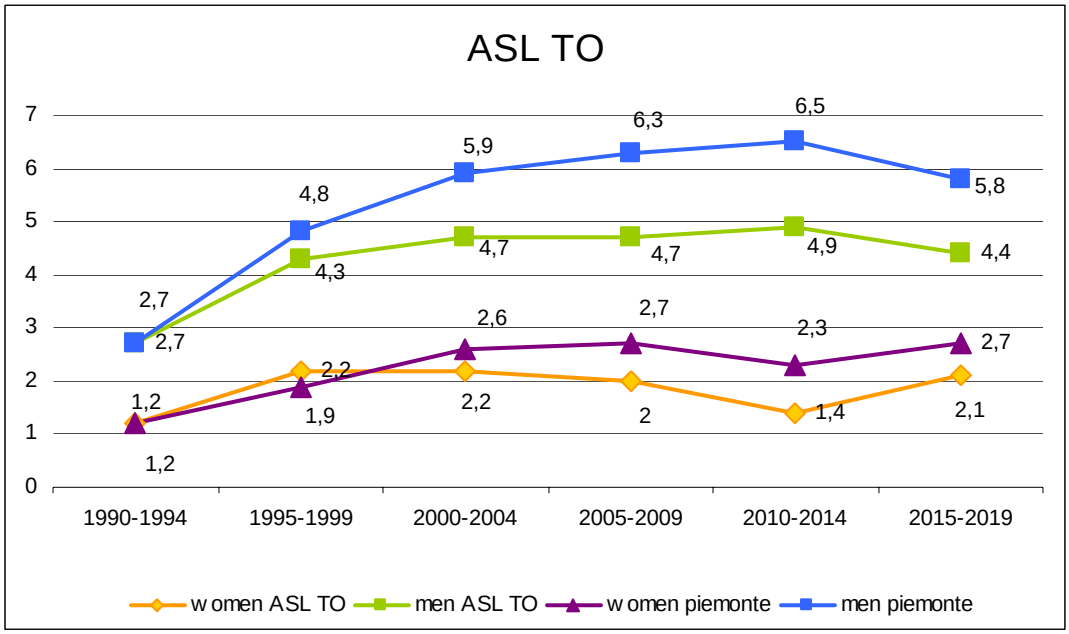

ASL AT
7
6
5
4
3
2
1
0
1990-1994
1995-1999
2000-2004
2005-2009
2010-2014
2015-2019
2,7
4,8
5,9
6,3
6,5
5,8
1,5
2,6
2,5
2,7
2,9
4,6
1,2
1,9
2,6
2,7
2,3
2,7
0,7
0,5
0,3
1,8
1,2
1,6
women ASL AT
men ASL AT
women piemonte
men piemonte

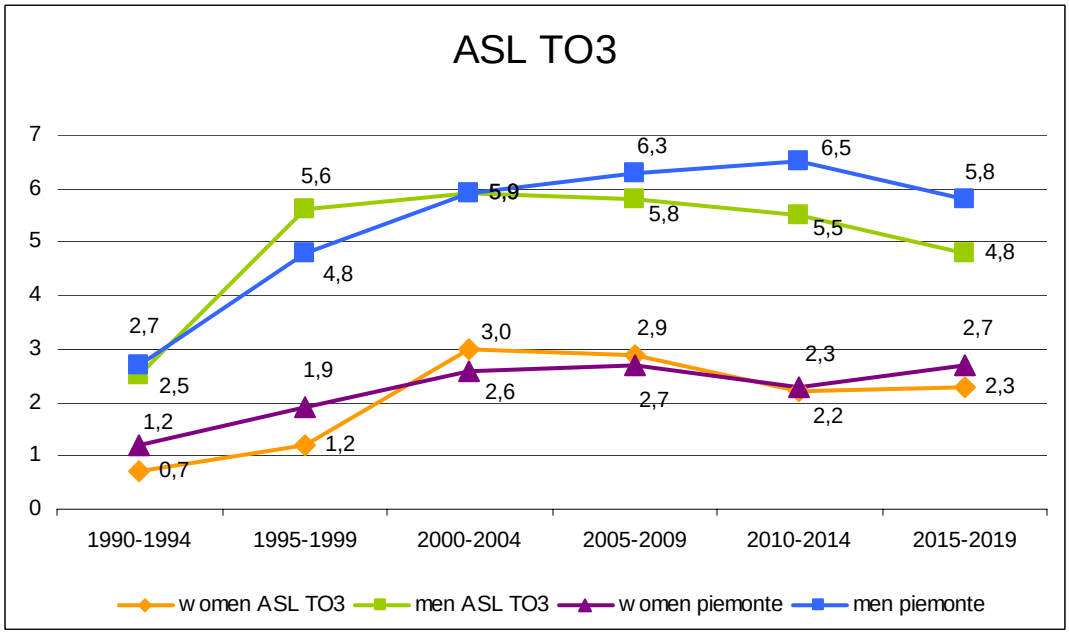

ASL BI
7
6
5
4
3
2
1
0
1990-1994
1995-1999
2000-2004
2005-2009
2010-2014
2015-2019
2,7
4,8
5,9
6,3
6,5
5,8
1,2
3,7
2,6
2,7
3,6
4,2
1,2
1,9
2,6
2,7
2,3
2,7
1,1
1,2
1,1
1,2
1,1
1,7
women ASL BI
men ASL BI
women piemonte
men piemonte

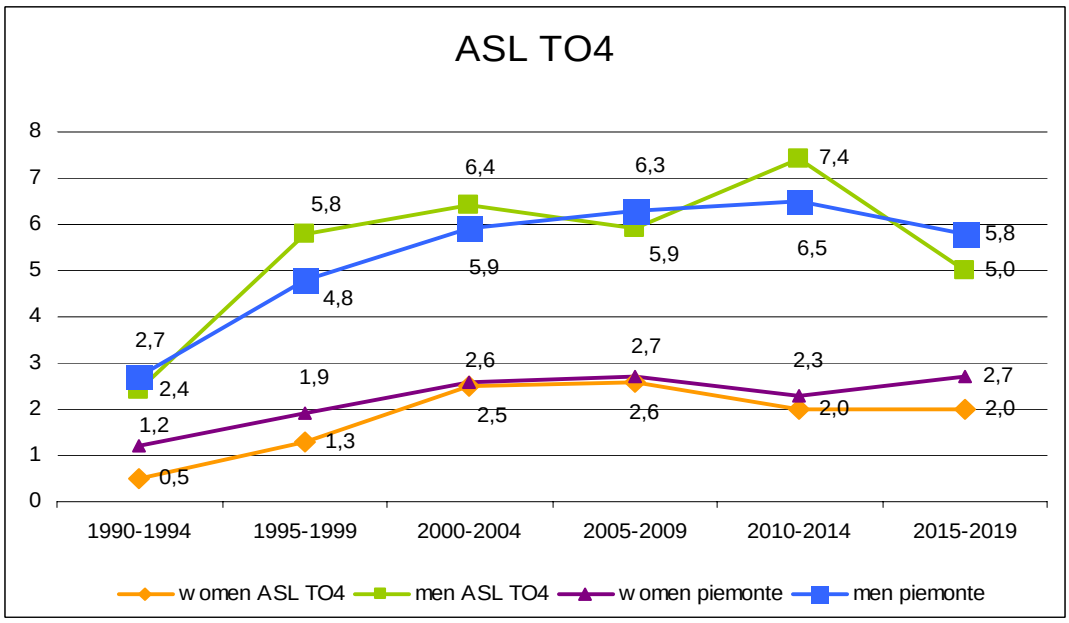

ASL CN1
7
6
5
4
3
2
1
0
6,5
6,3
5,9
5,8
4,8
4,4
3,9
4,1
3,4
3,7
2,7
2,3
2,7
2,3
2,7
1,9
2,6
1,2
0,8
0,9
1,3
1
1
0,8
1990-1994
1995-1999
2000-2004
2005-2009
2010-2014
2015-2019
w omen ASL CN1
men ASL CN1
w omen piemonte
men piemonte

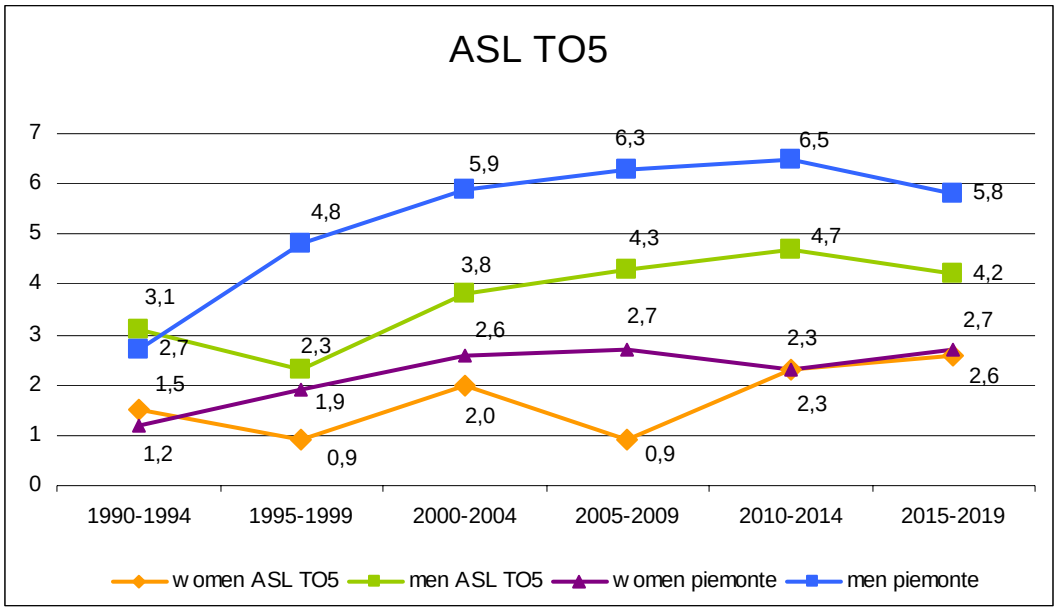

ASL CN2
7
6
5
4
3
2
1
0
6,5
6,3
5,9
5,8
4,8
5
4
3,4
3,1
2,7
2,7
2,3
2,7
1,9
2,6
1,5
1,4
1,5
1,2
0,5
1,3
1,1
1,2
0,5
1990-1994
1995-1999
2000-2004
2005-2009
2010-2014
2015-2019
w omen ASL CN2
men ASL CN2
w omen piemonte
men piemonte

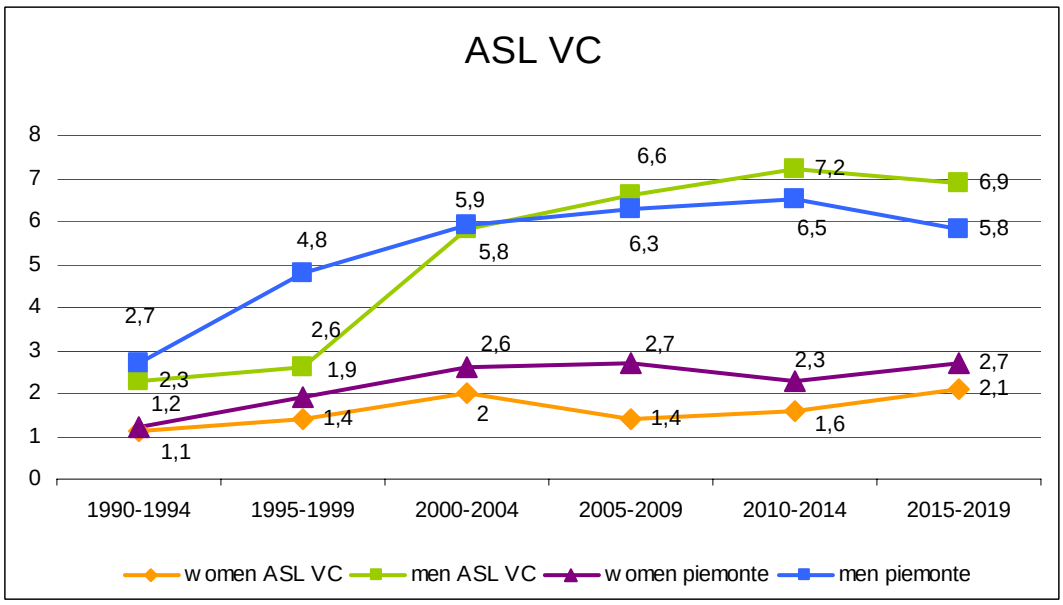

ASL NO
8
7
6
5
4
3
2
1
0
7,0
6,5
5,9
5,8
4,8
6,3
6,2
5,5
3,6
3,2
2,9
2,7
2,7
2,6
1,9
1,9
1,6
1,2
1,9
1,9
2,3
1,9
0,5
1,0
1990-1994
1995-1999
2000-2004
2005-2009
2010-2014
2015-2019
w omen ASL NO
men ASL NO
w omen piemonte
men piemonte

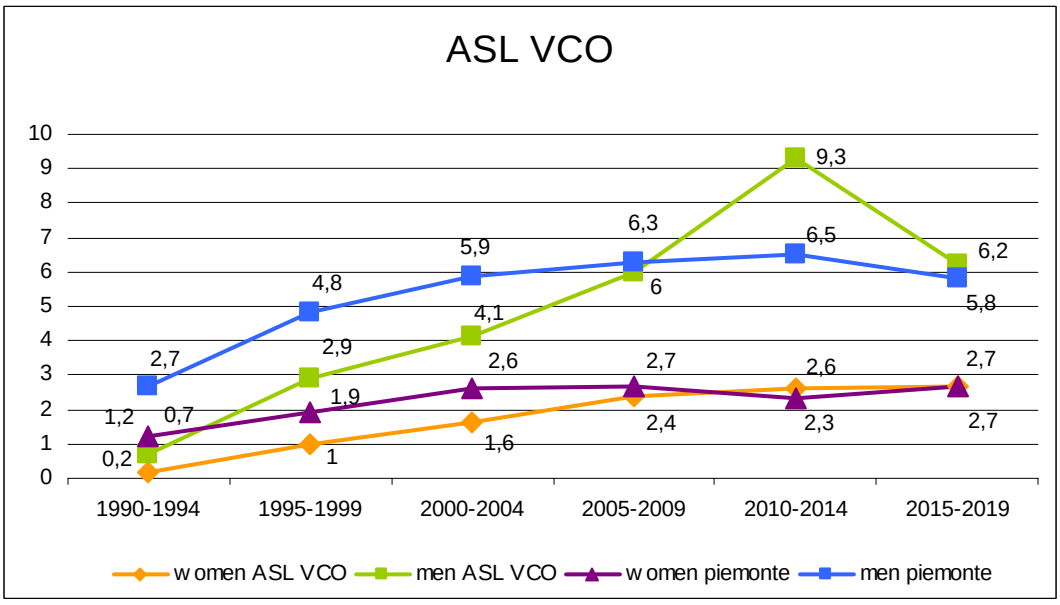

ASL TO
7
6
5
4
3
2
1
0
6,5
6,3
5,9
4,8
5,8
4,3
4,7
4,7
4,9
4,4
2,7
2,7
2,6
2,7
2,3
2,7
2,2
2,2
2
1,4
2,1
1,2
1,9
1,2
1990-1994
1995-1999
2000-2004
2005-2009
2010-2014
2015-2019
w omen ASL TO
men ASL TO
w omen piemonte
men piemonte


ASL TO3
7
6
5
4
3
2
1
0
6,3
6,5
5,8
5,6
5,9
5,8
5,5
4,8
4,8
2,7
3,0
2,9
2,7
2,3
2,5
1,9
2,6
2,7
2,3
2,2
2,3
1,2
1,2
0,7
1990-1994
1995-1999
2000-2004
2005-2009
2010-2014
2015-2019
w omen ASL TO3
men ASL TO3
w omen piemonte
men piemonte


ASL TO4
8
7
6
5
4
3
2
1
0
6,4
6,3
7,4
5,8
5,9
6,5
5,8
5,9
5,0
4,8
2,7
2,6
2,7
2,3
2,7
2,4
1,9
2,5
2,6
2,0
2,0
1,2
1,3
0,5
1990-1994
1995-1999
2000-2004
2005-2009
2010-2014
2015-2019
w omen ASL TO4
men ASL TO4
w omen piemonte
men piemonte


ASL TO5
7
6
5
4
3
2
1
0
1990-1994
1995-1999
2000-2004
2005-2009
2010-2014
2015-2019
3,1
2,7
4,8
5,9
6,3
6,5
5,8
2,3
3,8
4,3
4,7
4,2
1,5
1,9
2,6
2,7
2,3
2,7
1,2
0,9
2,0
0,9
2,3
2,6
women ASL TO5
men ASL TO5
women piemonte
men piemonte


ASL VC
8
7
6
5
4
3
2
1
0
1990-1994
1995-1999
2000-2004
2005-2009
2010-2014
2015-2019
2,7
2,3
4,8
5,9
6,3
6,5
5,8
2,6
5,8
6,6
7,2
6,9
1,2
1,9
2,6
2,7
2,3
2,7
1,1
1,4
2
1,4
1,6
2,1
women ASL VC
men ASL VC
women piemonte
men piemonte


ASL VCO
10
9
8
7
6
5
4
3
2
1
0
1990-1994
1995-1999
2000-2004
2005-2009
2010-2014
2015-2019
2,7
4,8
5,9
6,3
6,5
5,8
2,9
4,1
6
9,3
6,2
1,2
0,7
1,9
2,6
2,7
2,6
2,7
0,2
1
1,6
2,4
2,3
2,7
women ASL VCO
men ASL VCO
women piemonte
men piemonte

SURVIVAL

Median survival time and survival probability by calendar period

SURVIVAL 1990-2019							
		median	Survival probability at :				
		(months)	6 months	1 yr	2 yrs	3 yrs	5 yrs
period	1990-1994	8.6	64%	35%	15%	8%	3%
	1995-1999	8.8	61%	39%	16%	8%	4%
	2000-2004	10.0	66%	41%	17%	9%	4%
	2005-2009	11.2	71%	47%	20%	12%	5%
	2010-2014	11.0	70%	46%	20%	11%	5%
	2015-2019	10.8	68%	46%	21%	11%	4%

Median survival time and survival probability by age class

SURVIVAL 1990-2019							
		median	Survival probability at :				
		(months)	6 months	1 yr	2 yrs	3 yrs	5 yrs
age class	00-54	13.5	81%	54%	29%	20%	9%
	55-64	13.8	78%	56%	27%	15%	7%
	65-74	12.4	74%	51%	23%	11%	4%
	75+	7.0	54%	30%	11%	6%	2%

Median survival time and survival probability by histotype

SURVIVAL 1990-2019							
		median	Survival probability at :				
		(months)	6 months	1 yr	2 yrs	3 yrs	5 yrs
histotype	epithelial	14.1	80%	57%	26%	14%	6%
	biphasic	9.5	68%	37%	13%	5%	2%
	sarcomatoid	4.8	41%	16%	5%	3%	2%
	not specified	7.0	55%	31%	12%	7%	4%
	unknown	3.1	31%	16%	9%	6%	3%