



Féidhmeannacht na Seirbhíse Sláinte
Health Service Executive



Health Protection Surveillance Centre
Lárionad Faire um Chosaint Sláinte



Epidemiology of Tuberculosis in Ireland, 2009



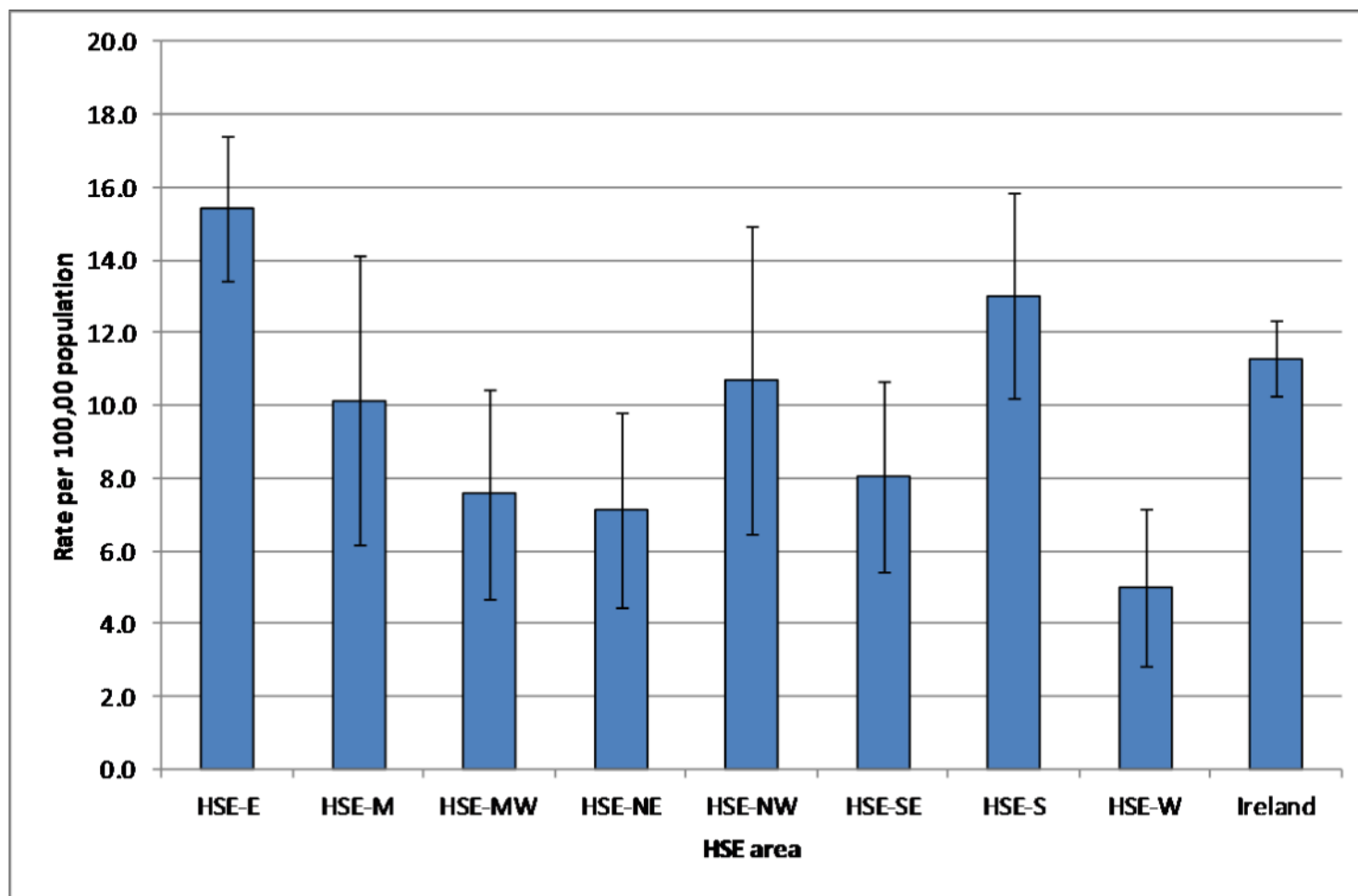
Summary of the epidemiology of TB in Ireland, 2009

Parameter	Number (Rate/100,000)	% of Total
Total cases	479 (11.3)	-
Cases in indigenous population*	270 (7.6)	56.4
Cases in foreign-born persons*	206 (33.6)	43.0
Culture positive cases	341	71.2
Pulmonary cases	314	65.6
Smear positive pulmonary cases	139	29.0
Multidrug-resistant cases	1	0.2
Mono-resistant to isoniazid	11	2.3
Deaths attributable to TB	10	2.1
Outcomes reported in cases	395	82.5
TB meningitis cases	8	1.7

* Country of birth was unknown for 3 (0.6%) cases

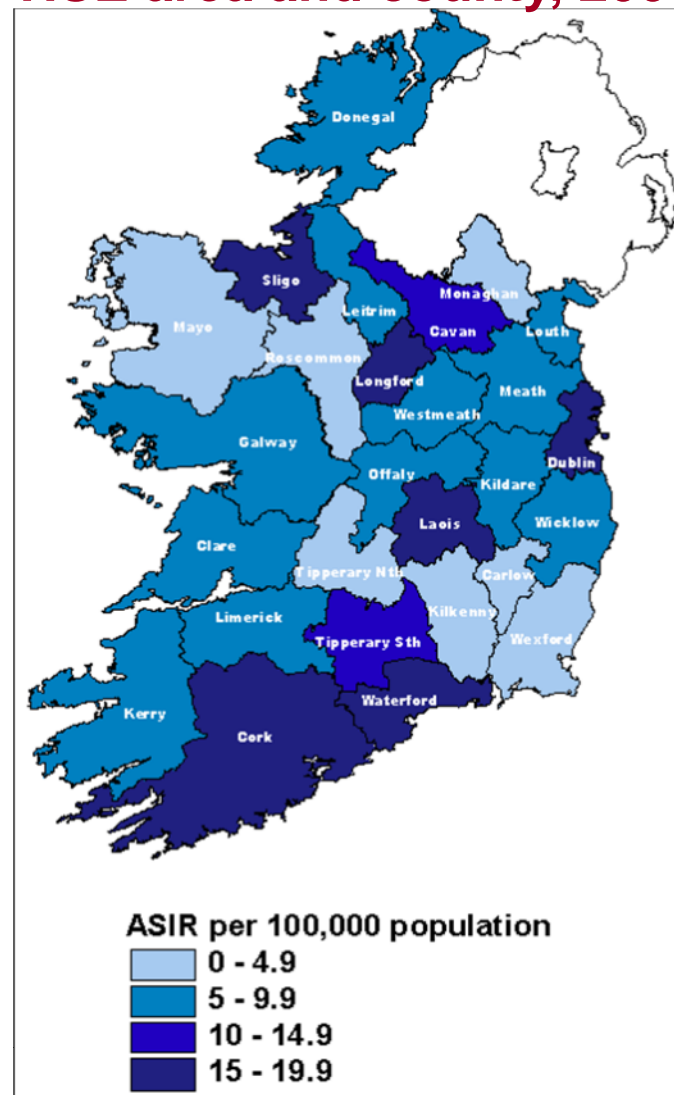
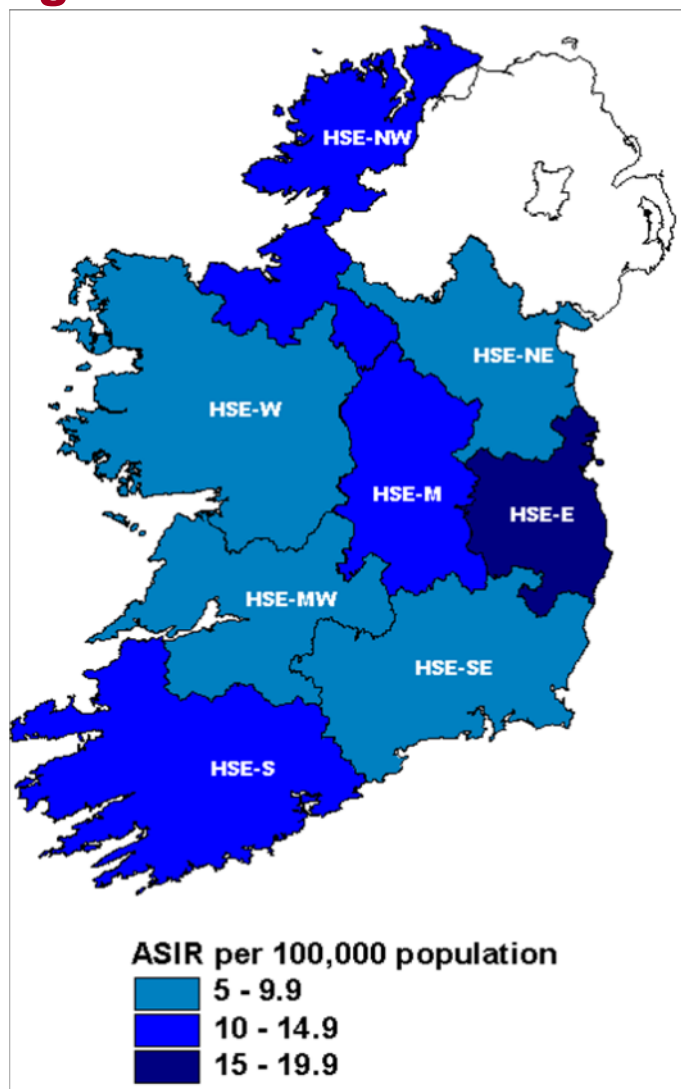


Age-standardised TB incidence rates by HSE area with 95% confidence intervals; 2009



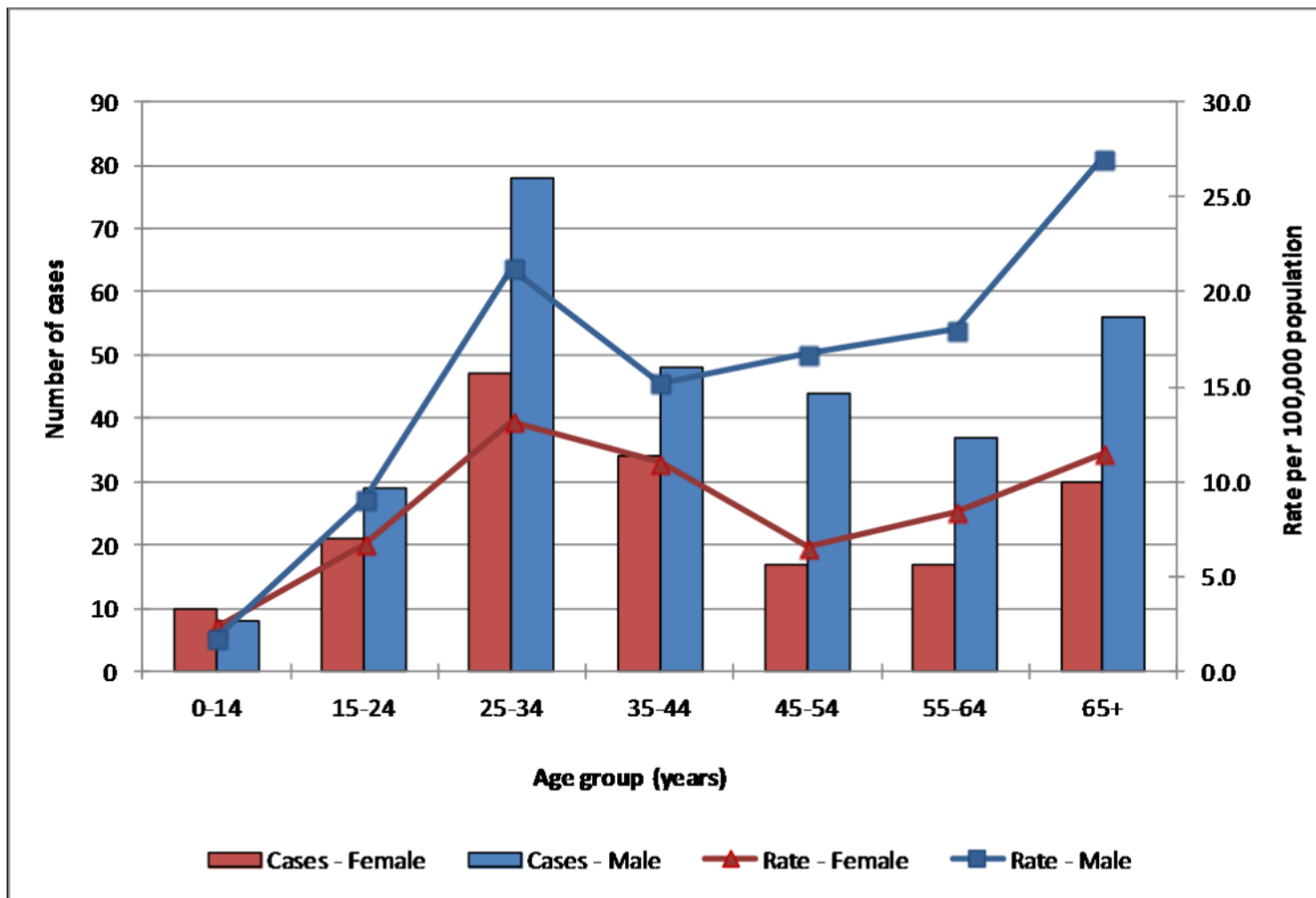


Age-standardised TB incidence rates by HSE area and county, 2009



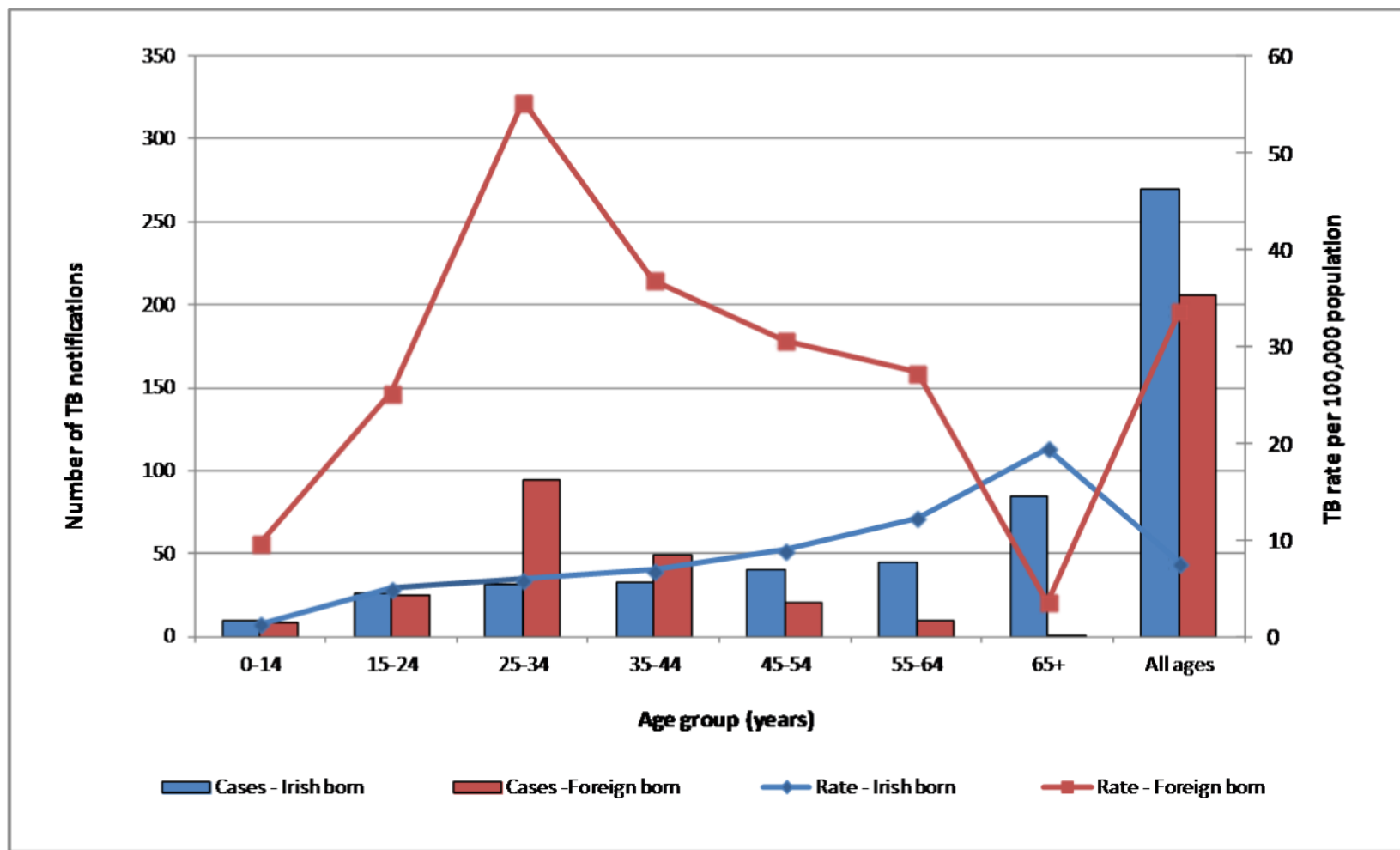


TB cases by age & sex, and age-specific rates; 2009





TB cases by age group and age specific rates by geographic origin, 2009





TB cases and rate per 100,000 population by geographic origin & HSE area, 2009

HSE Area	Irish-born			Foreign-born			Unknown	Total
	Cases	%	Rate	Cases	%	Rate		
HSE-E	102	43.4	8.3	130	55.3	53.9	3	235
HSE-M	14	56.0	6.4	11	44.0	36.3	0	25
HSE-MW	16	59.3	5.2	11	40.7	24.6	0	27
HSE-NE	16	59.3	4.8	11	40.7	19.0	0	27
HSE-NW	18	72.0	9.3	7	28.0	17.1	0	25
HSE-SE	24	64.9	6.0	13	35.1	24.5	0	37
HSE-S	68	82.9	12.9	14	17.1	17.3	0	82
HSE-W	12	57.1	3.5	9	42.9	14.2	0	21
Ireland	270	56.4	7.6	206	43.0	33.6	3	479



TB cases by HSE area and site of disease, 2009

HSE area	Pulmonary only		Extrapulmonary only		Pulmonary + Extrapulmonary	
	Cases	% of total	Cases	% of total	Cases	% of total
HSE-E	143	60.9	80	34.0	12	5.1
HSE-M	10	40.0	11	44.0	4	16.0
HSE-MW	13	48.1	12	44.4	2	7.4
HSE-NE	19	70.4	7	25.9	1	3.7
HSE-NW	12	48.0	13	52.0	0	0.0
HSE-SE	22	59.5	14	37.8	1	2.7
HSE-S*	56	69.1	22	27.2	3	3.7
HSE-W	13	61.9	5	23.8	3	14.3
Total	288	60.3	164	34.3	26	5.4

* Site of disease unknown in one case



Summary of anti-TB drug resistance, 2009

DST results	Number of cases	% of culture confirmed cases
Cases with DST results	323	94.7
Resistant cases	26	7.6
MDR-TB	1	0.3
Mono-resistance to Isoniazid	11	3.2
Mono-resistance to Rifampicin	0	0.0
Mono-resistance to Pyrazinamide	2	0.6
Mono-resistance to Ethambutol	1	0.3
Mono-resistance to Streptomycin	3	0.9
Cases resistant to isoniazid and pyrazinamide	2	0.6
Cases resistant to isoniazid and streptomycin	4	1.2
Cases resistant to isoniazid and ethambutol	1	0.3
Cases resistant to pyrazinamide and streptomycin	1	0.3

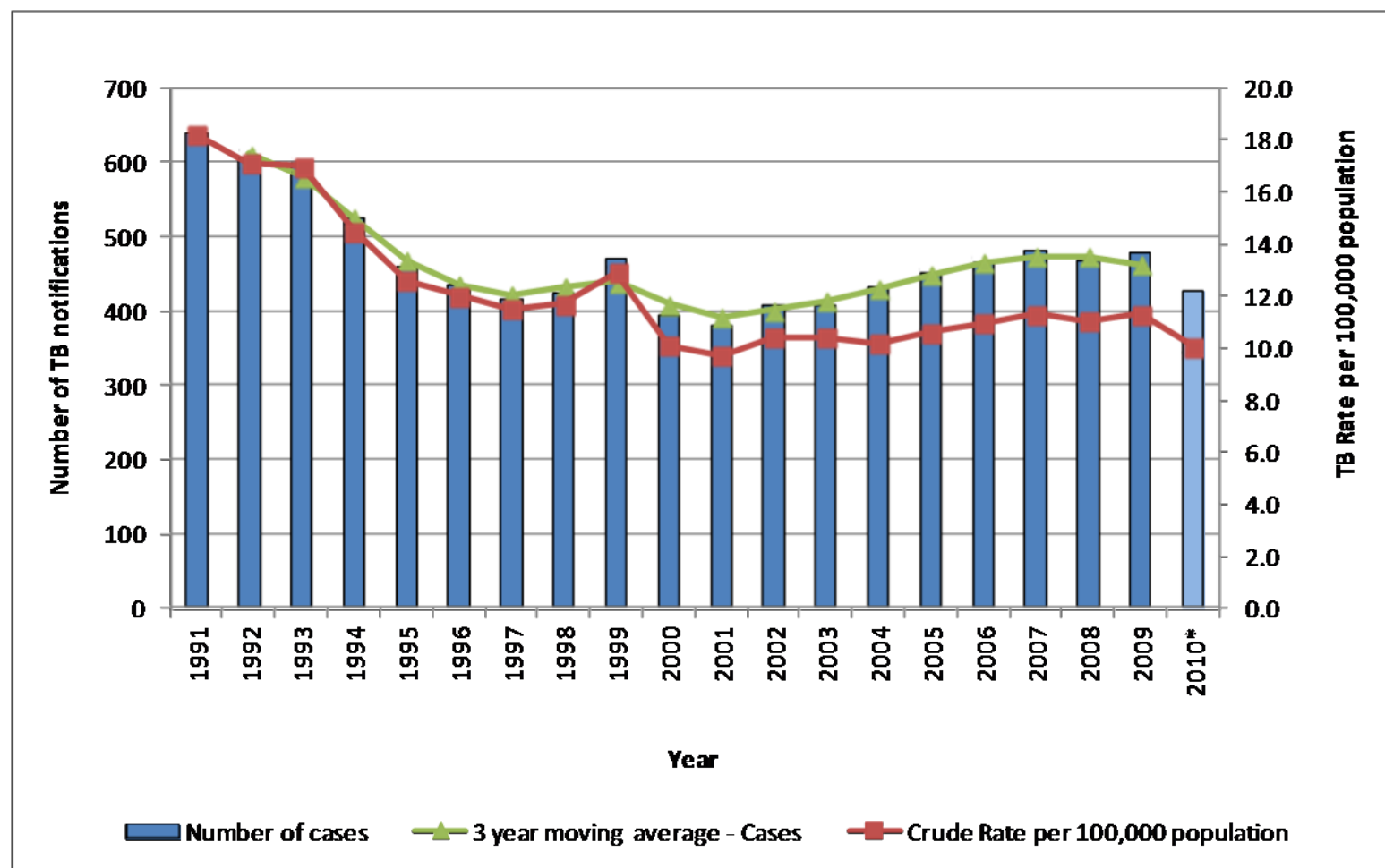


Treatment outcome for TB cases, 2009

Treatment outcome	Total		Smear Positive	
	Number	%	Number	%
Completed	307	64.1	100	71.9
Lost to follow up	30	6.3	2	1.4
Died (not attributed to TB)	22	4.6	8	5.8
Still on treatment	19	4.0	2	1.4
Died (attributed to TB)	10	2.1	6	4.3
Interrupted (>2mths)	4	0.8	2	1.4
Died (cause unknown)	2	0.4	1	0.7
Transferred	1	0.2	1	0.7
Unknown	84	17.5	17	12.2
Total	479	100.0	139	100.0



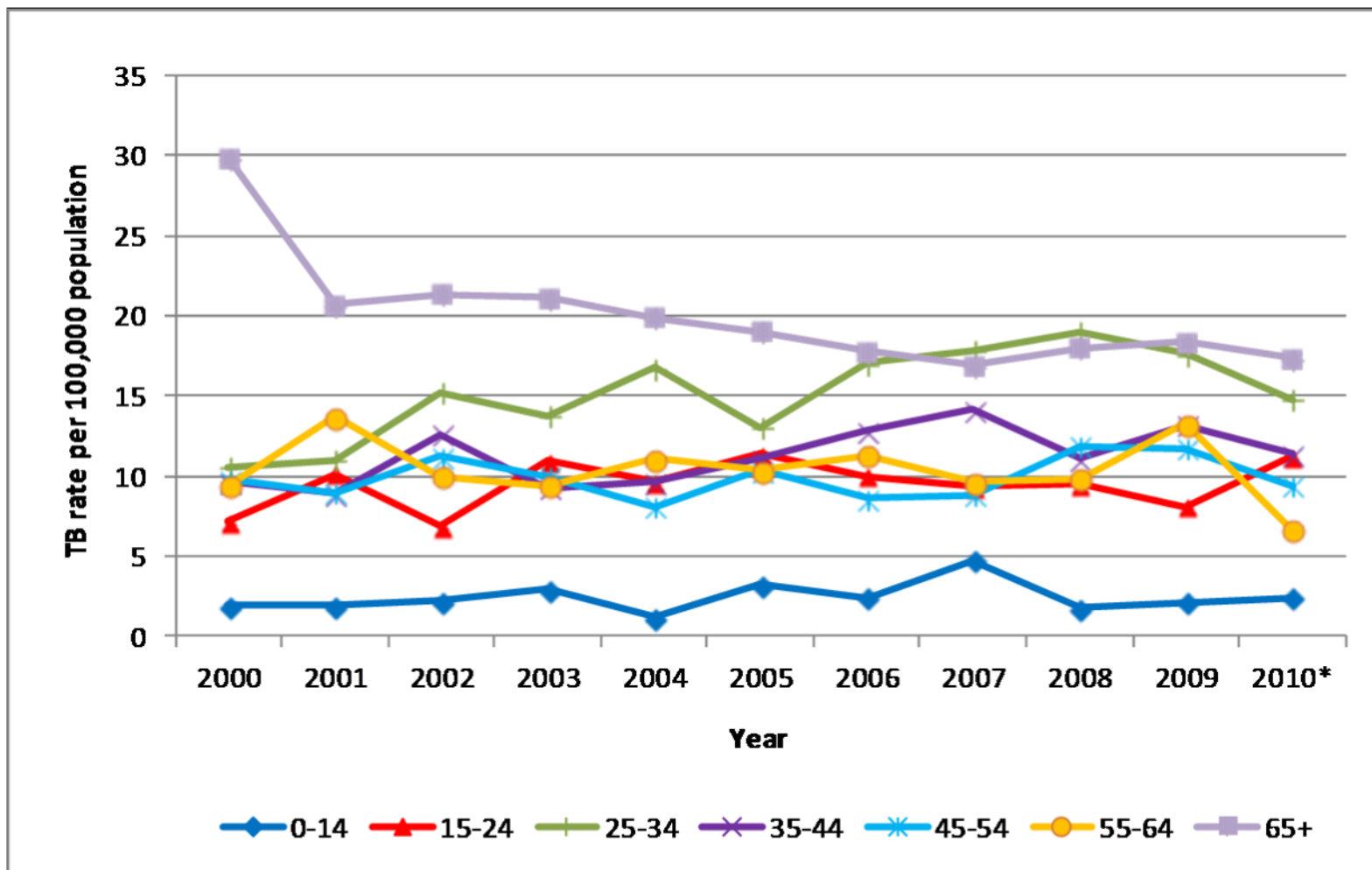
Number of TB cases and crude rate per 100,000: 1991 to 2010*



*2010 data are provisional data only



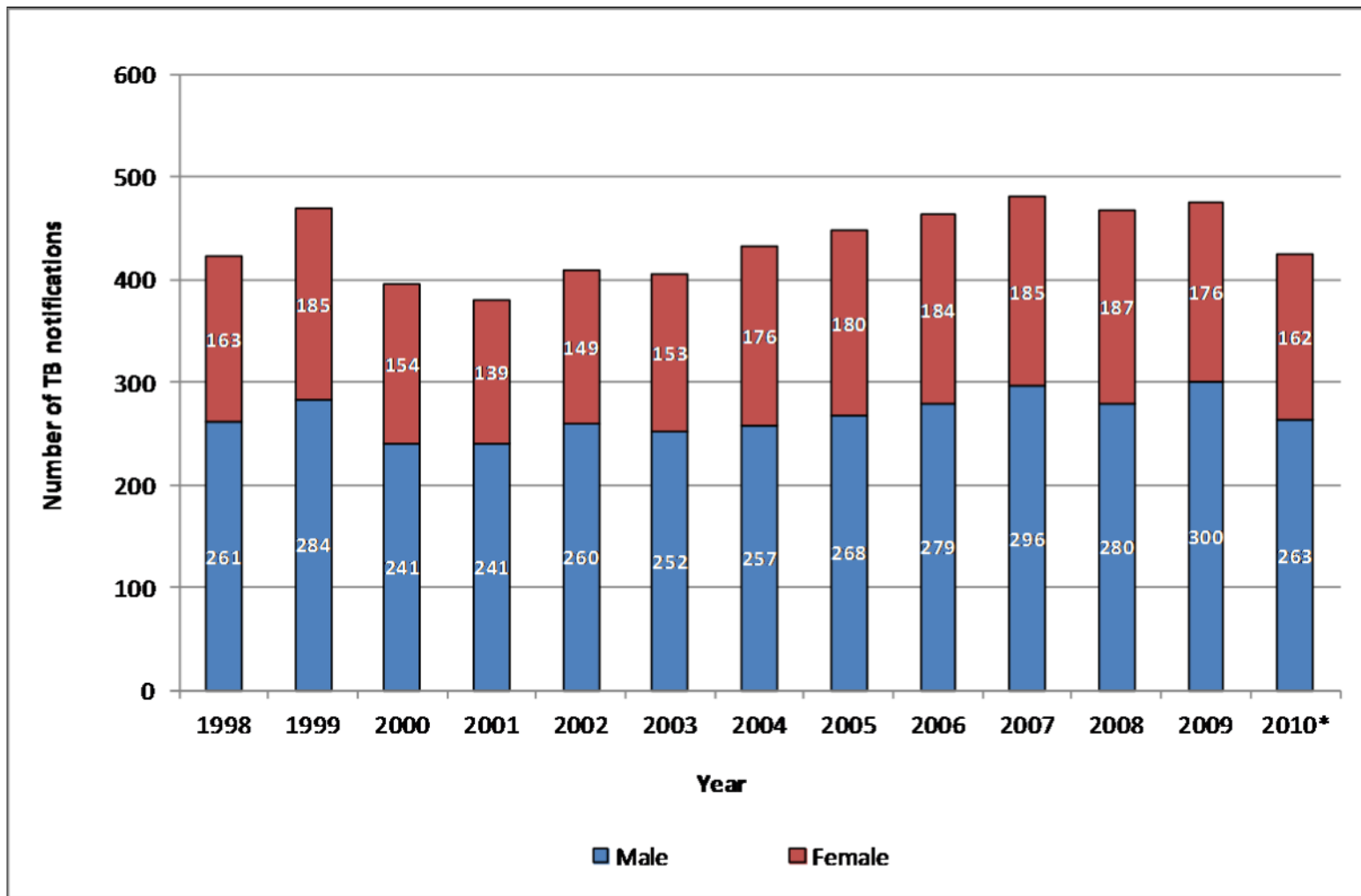
Age-specific rates of TB by year, 2000 – 2010*



*2010 data are provisional data only



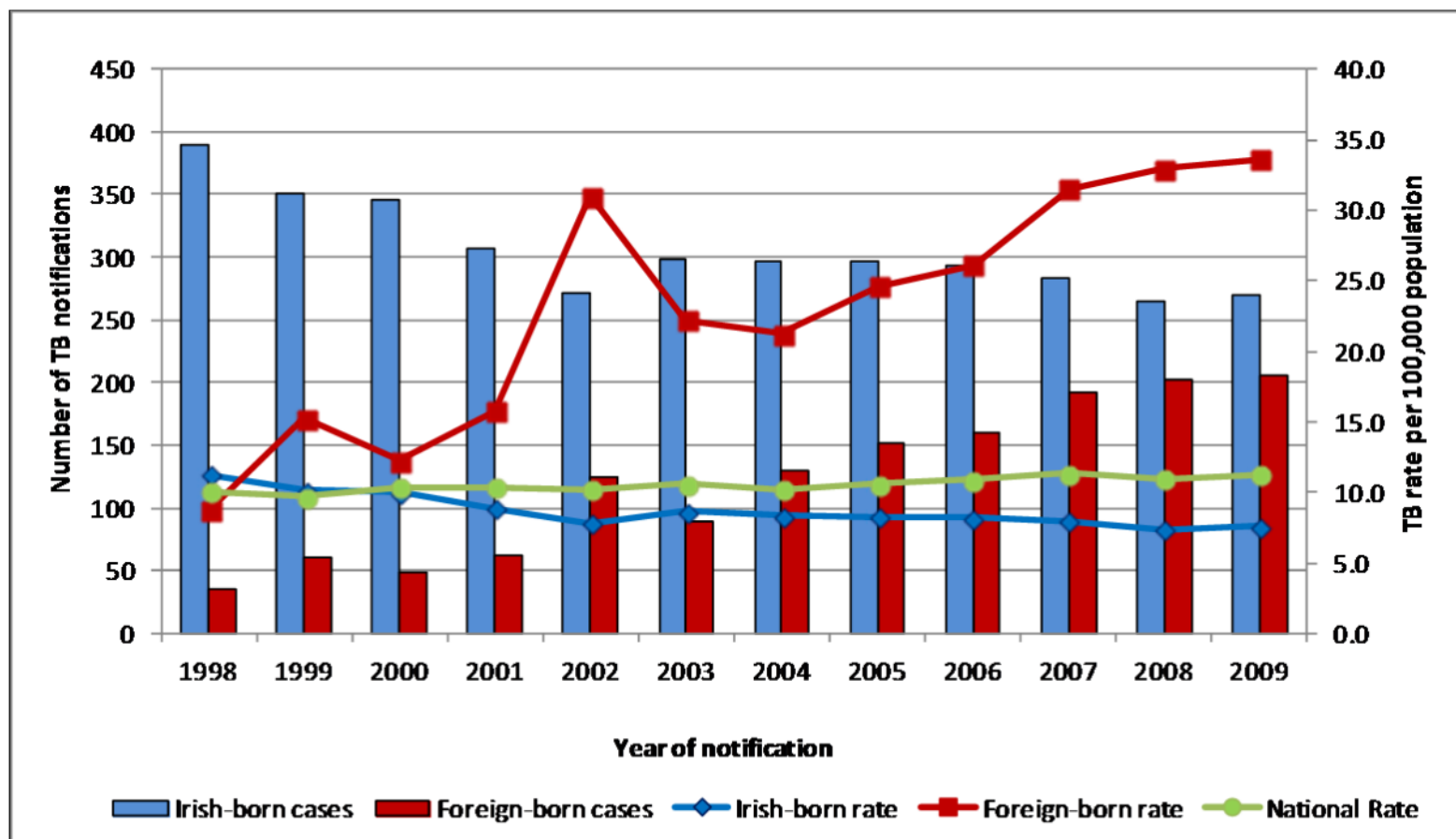
TB cases by sex and year, 2000 – 2010*



*2010 data are provisional data only

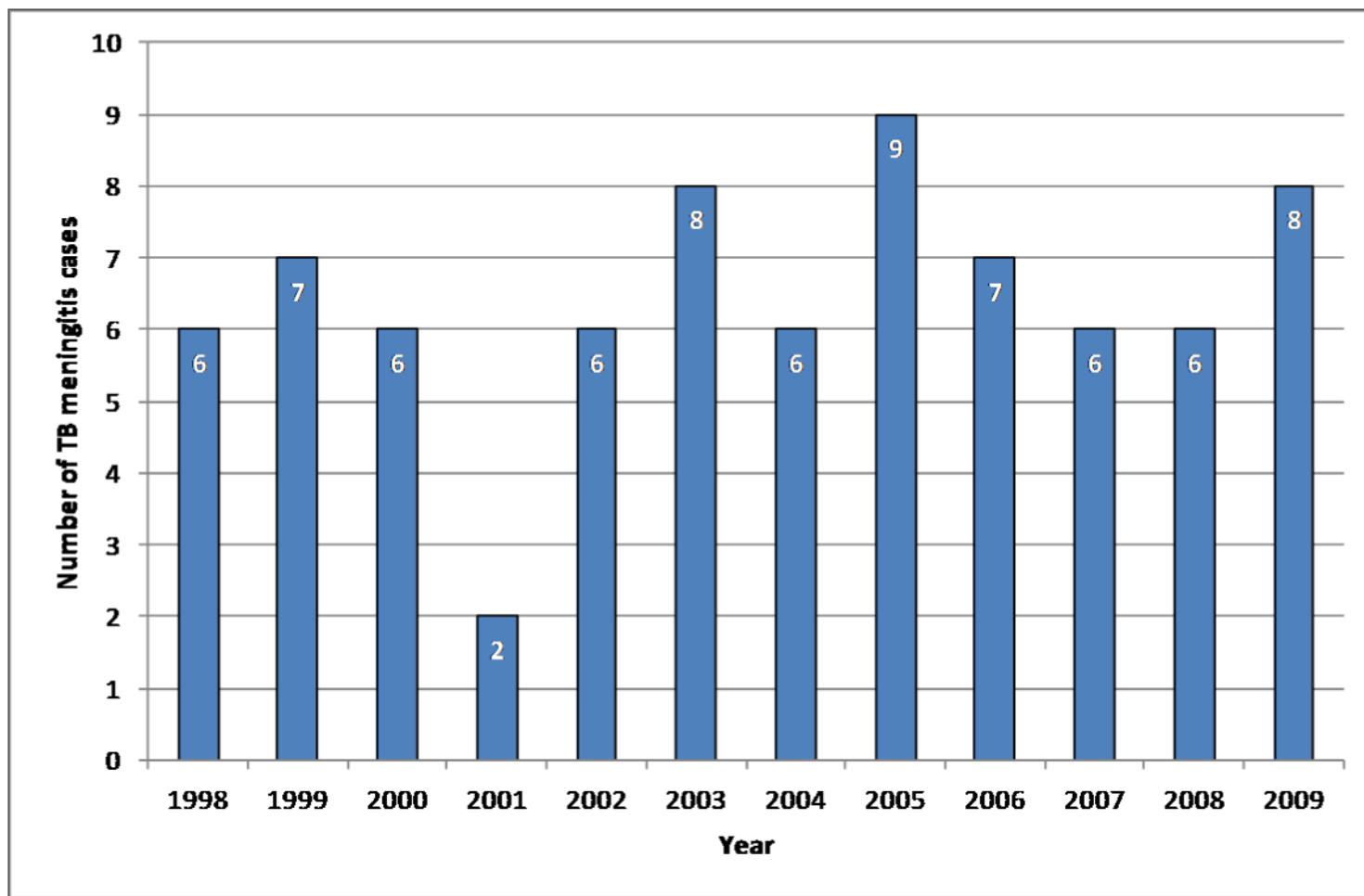


TB cases and rate by geographic origin and year, 1998 - 2009



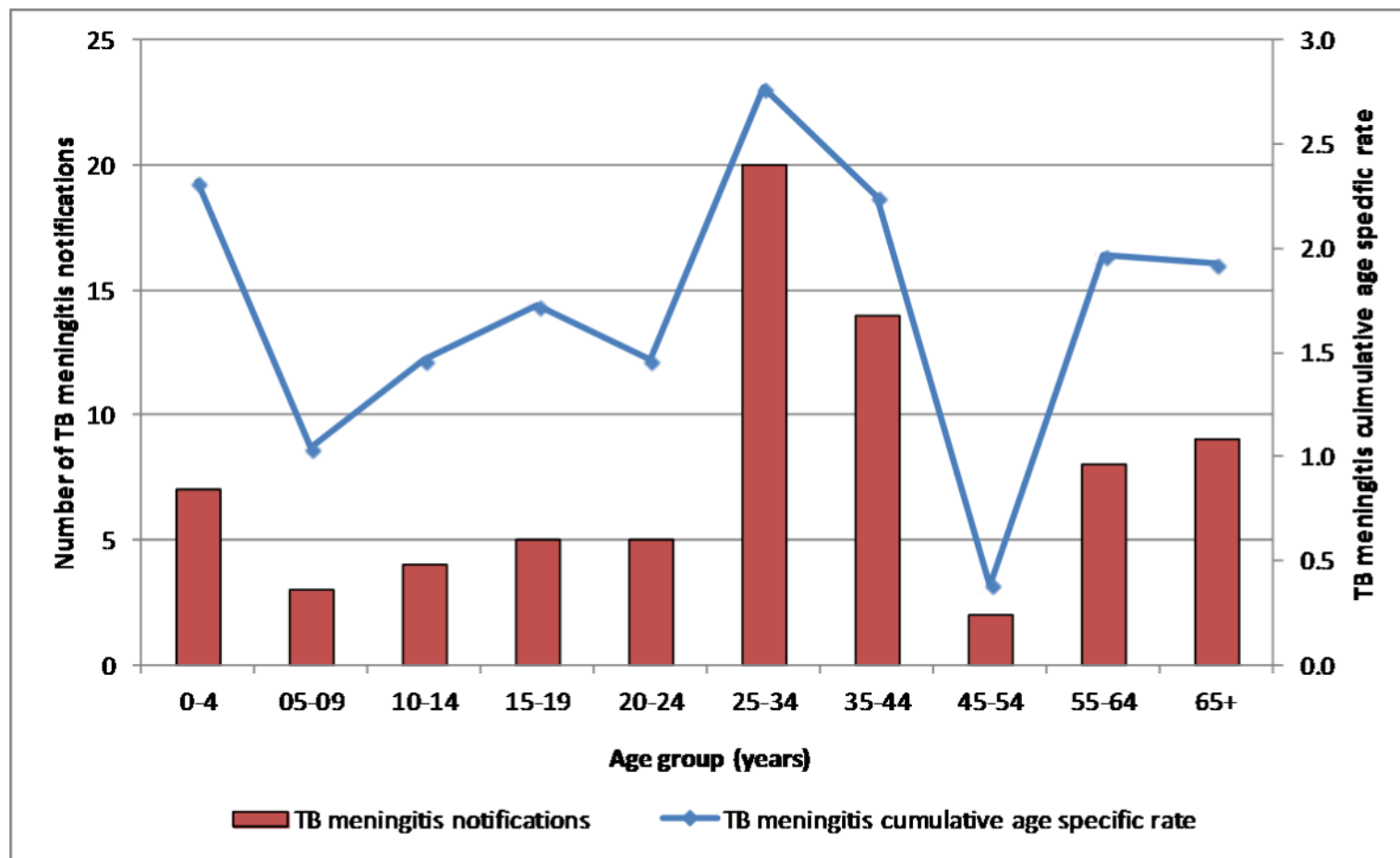


Number of TB meningitis cases by year, 1998 - 2009



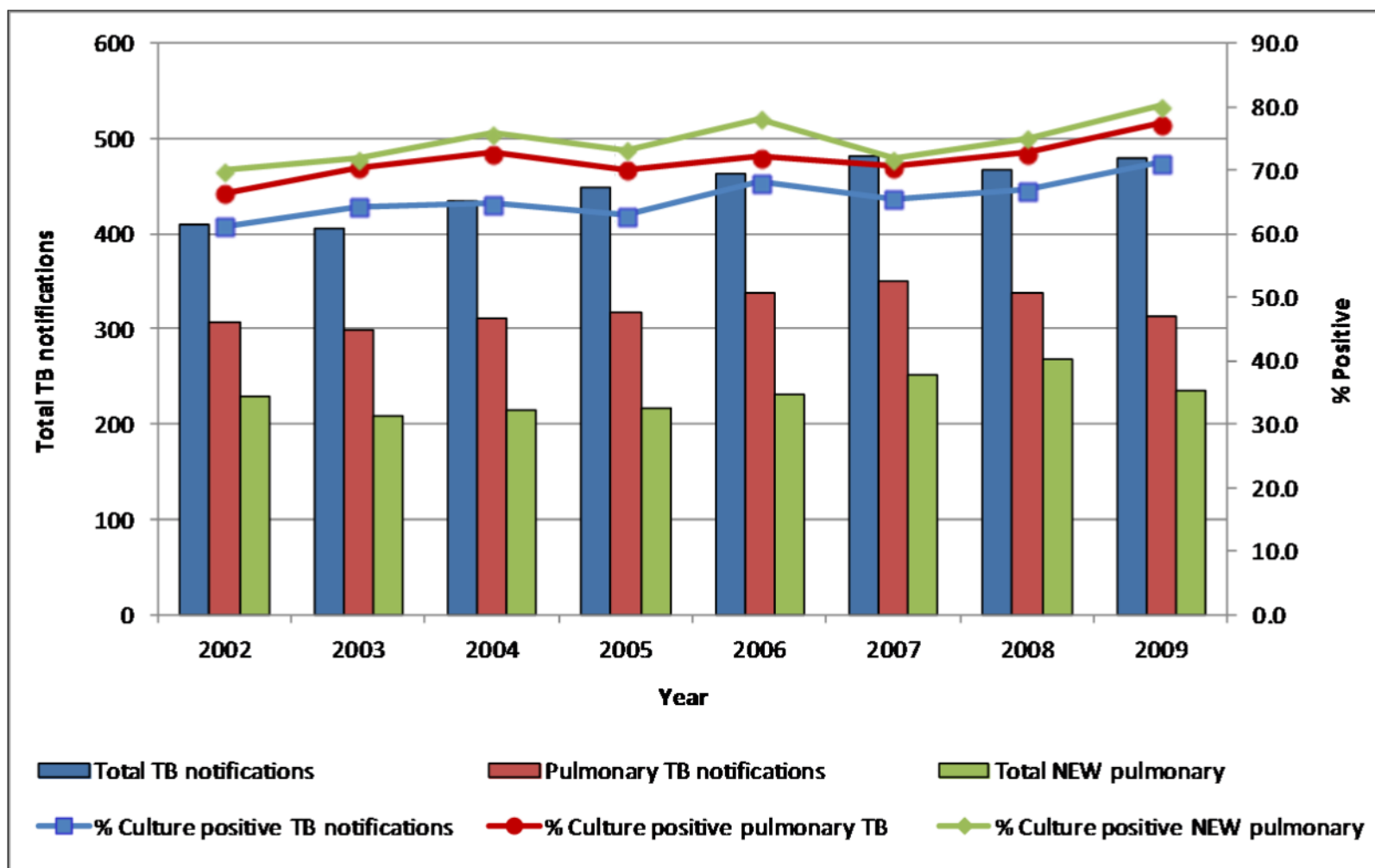


Cumulative number of TB meningitis cases by age group and cumulative age specific rate : 1998 - 2009



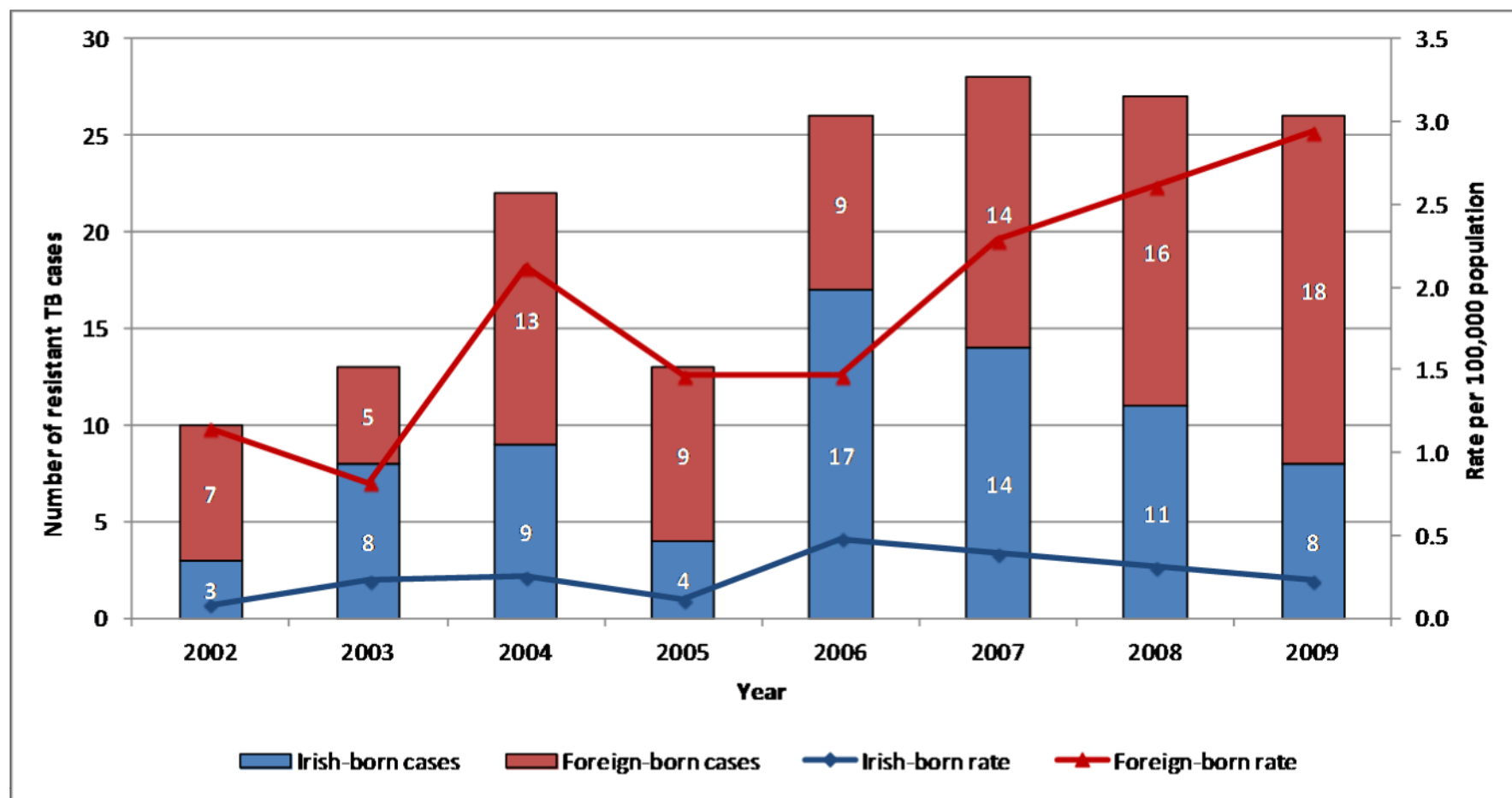


Number of TB cases and percentage culture positive by year, 2002 - 2009



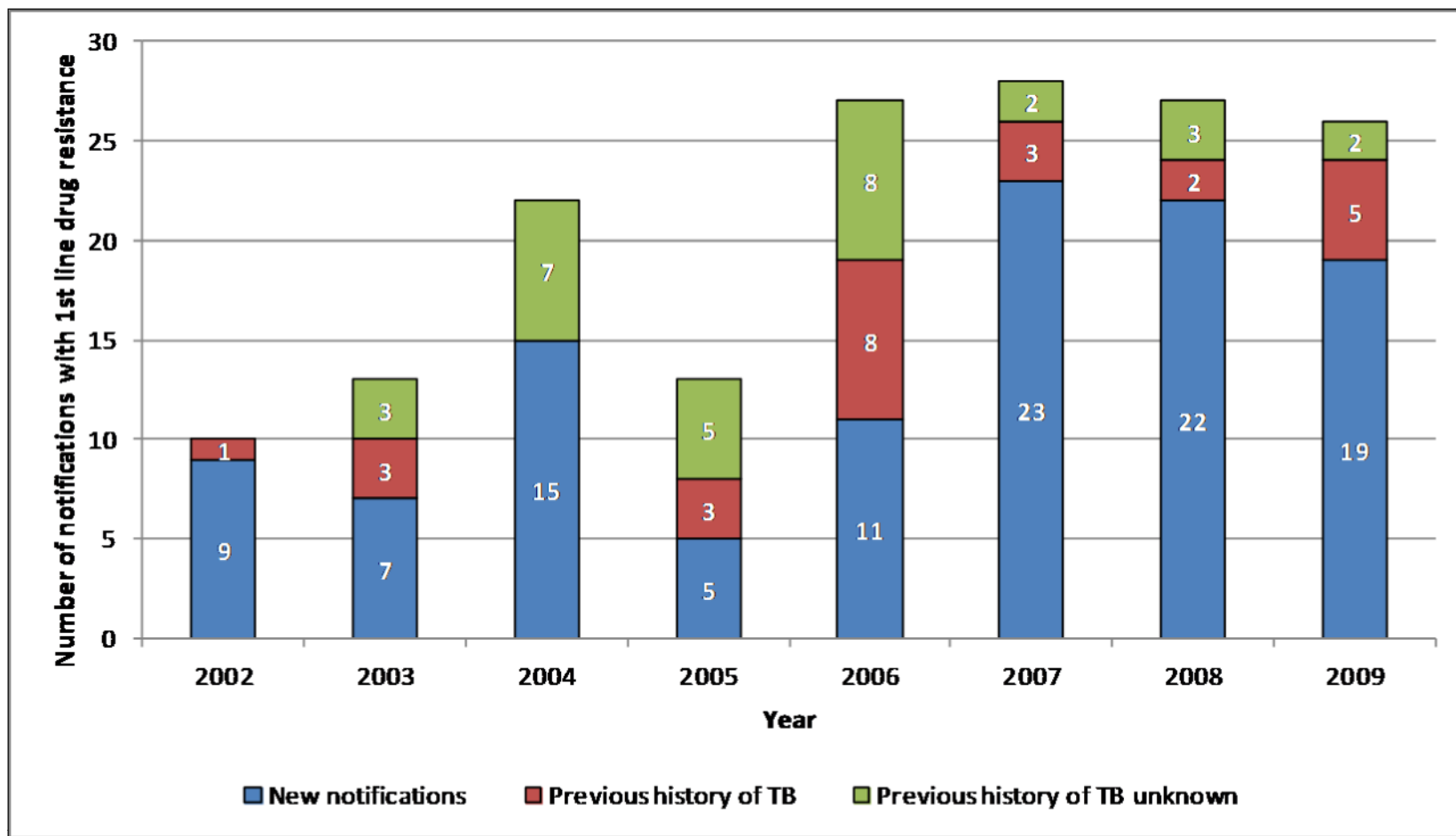


Number and rate of TB cases with resistance to any first line anti-TB drug by geographic origin and year, 2002 - 2009



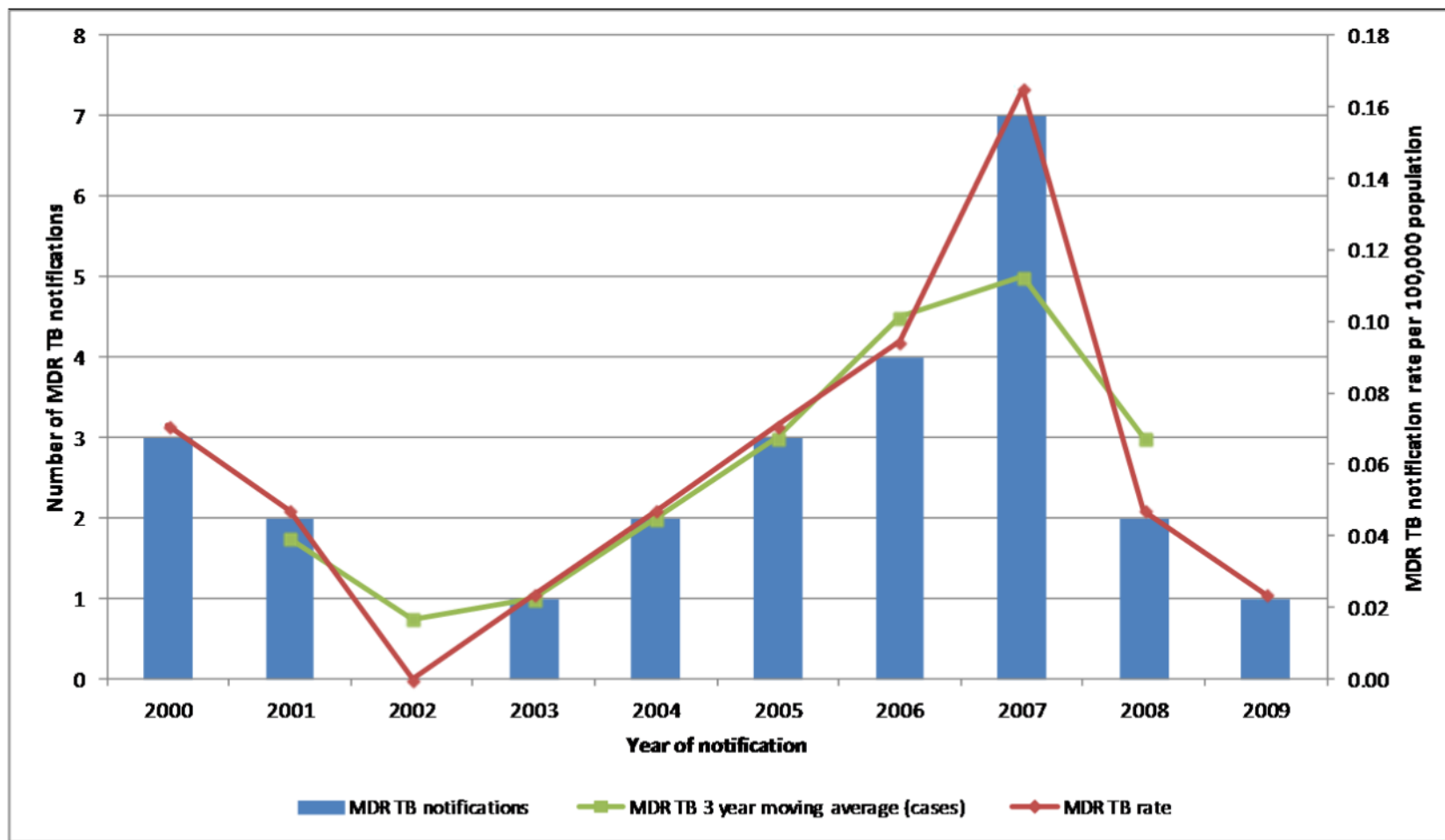


Number of TB cases with resistance to any first line anti-TB drug by previous history of TB and year, 2002 - 2009



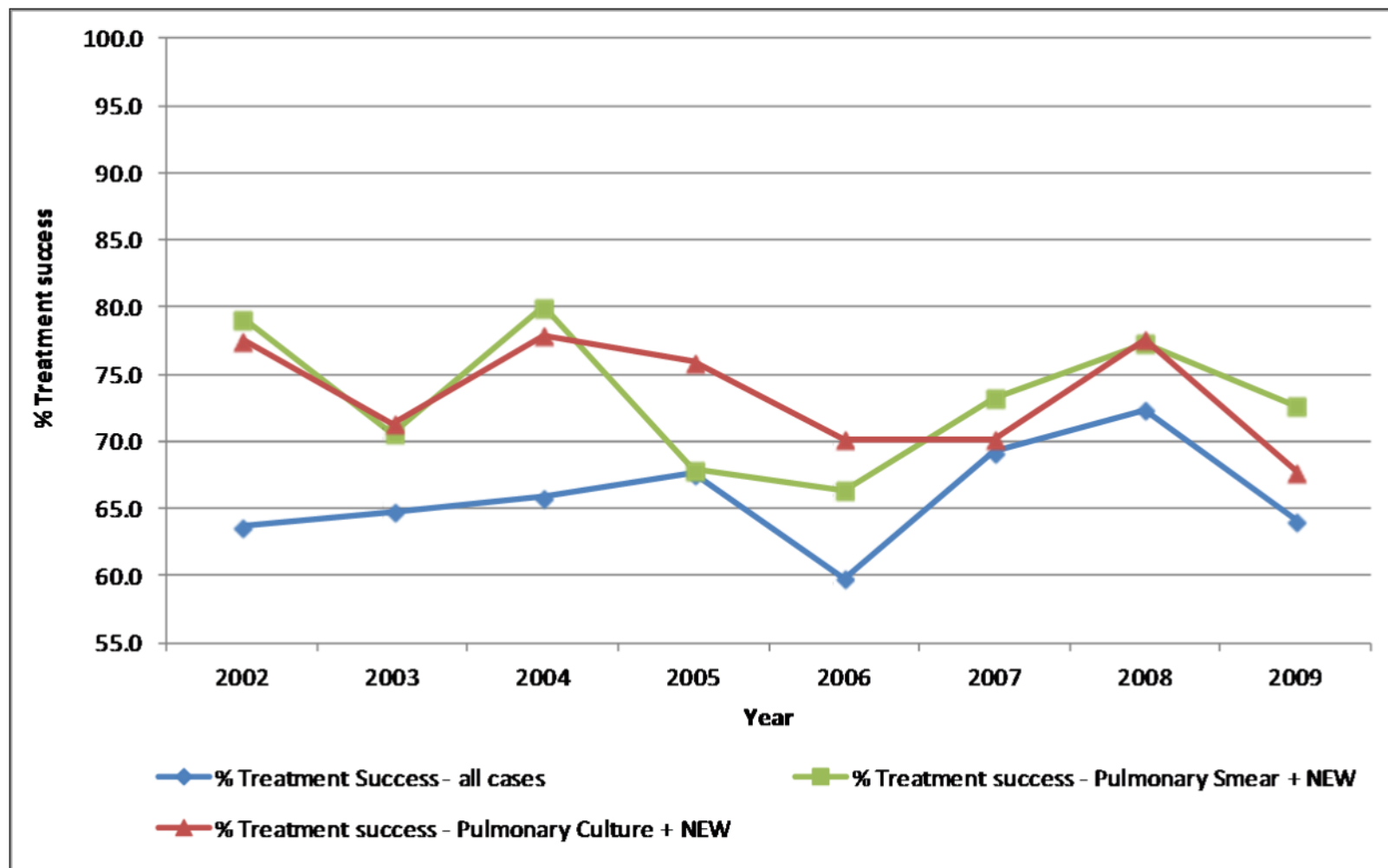


Number of MDR-TB cases, rate per 100,000 population and 3 year moving average by year; 2000 - 2009



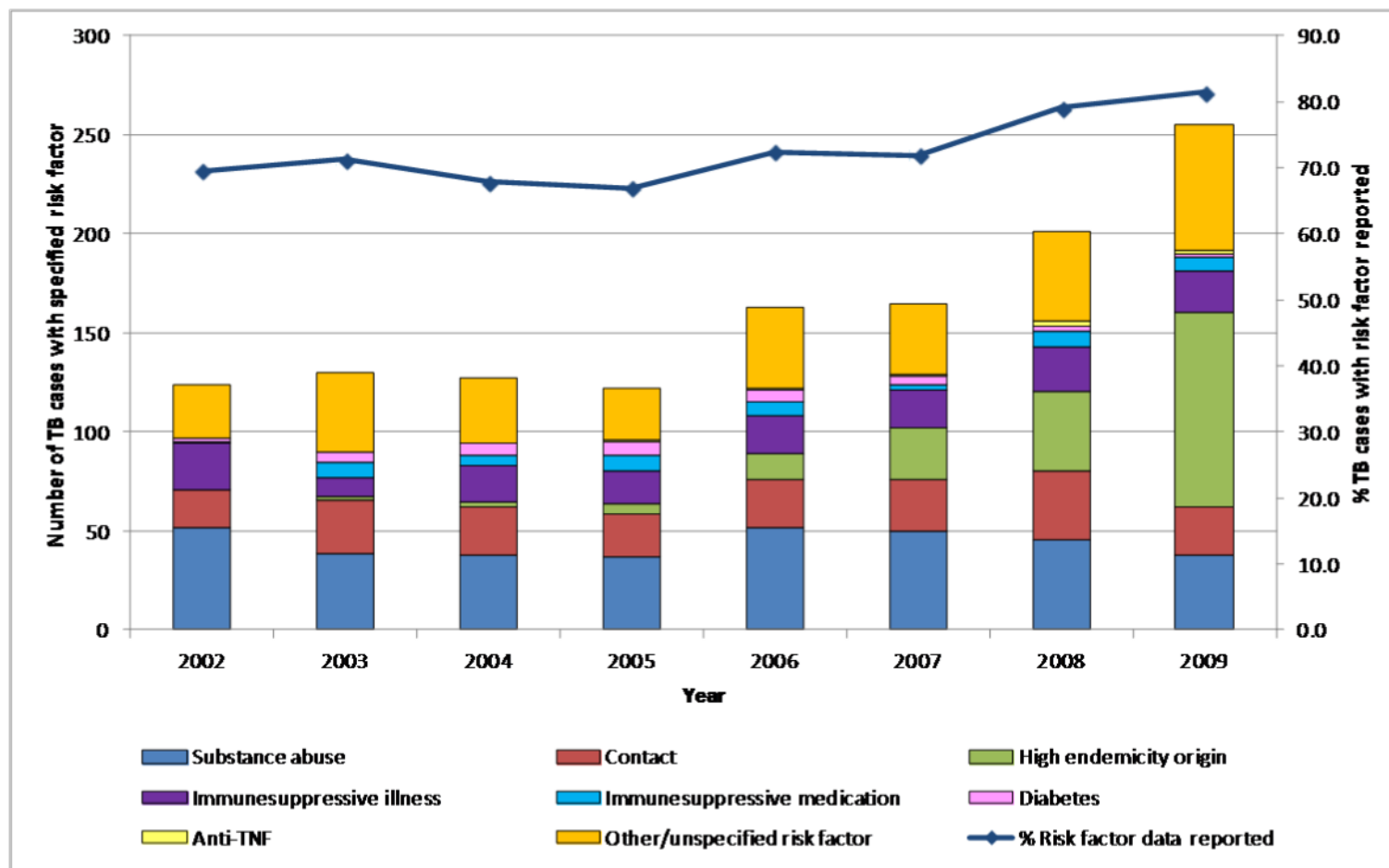


TB cases by percentage treatment success and year, 2002 - 2009



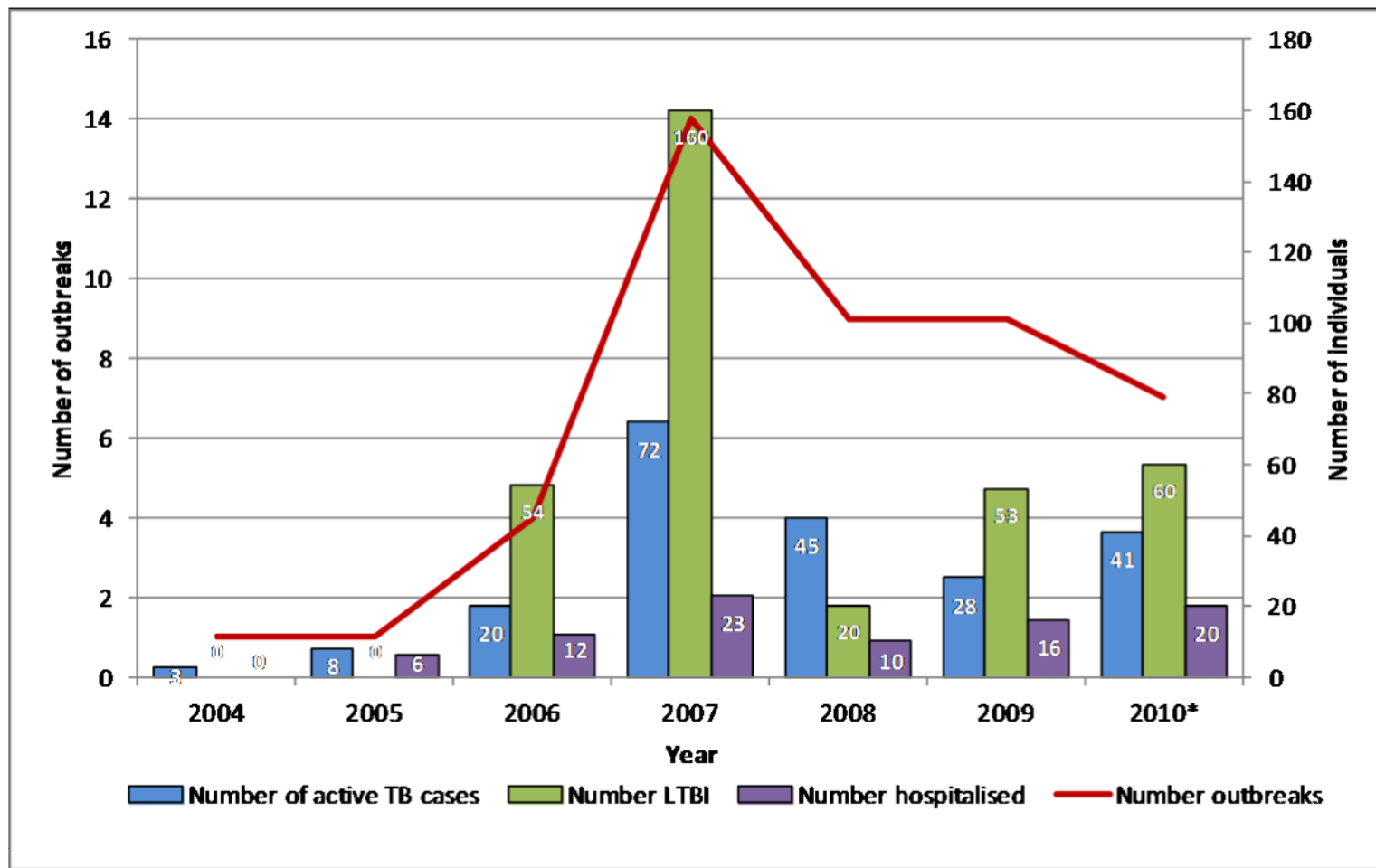


Number of TB cases with a TB risk factor reported and percentage with risk factor data reported by year, 2002 - 2009





TB outbreaks summary by year, 2004 – 2010





Data completeness of key variables, 2009

Variable	% Complete
Age	100.0
Sex	99.4
Diagnostic type	99.8
Country of birth (all notifications)	99.4
Country of birth (for foreign-born cases)	95.4
Sputum smear result (pulmonary cases)	96.7
Culture result	97.3
Isolate (Culture positive cases)	99.2
Isoniazid sensitivity result (Culture positive cases)	97.7
Rifampicin sensitivity result (Culture positive cases)	97.7
Case finding method	92.1
Treatment outcome	82.5
Risk group	81.4
Previous history of TB (all cases)	86.8
Previous year of TB diagnosis (previously diagnosed cases)	80.8
Previous TB treatment history (previously diagnosed cases)	69.2
Previous TB treatment outcome (previously treated cases)	75.8
HIV status	28.4



Provisional Epidemiology of TB in Ireland, 2010*

Parameter	2010
Total number of cases	427
Crude notification rate per 100,000	10.1
Cases in indigenous population [*]	243 (56.9%)
Cases in foreign-born persons	171 (40.0%)
Culture positive cases	270 (63.2%)
Pulmonary cases [†]	274 (64.2%)
Of which sputum smear positive	113 (41.2%)
Resistant cases	18 (4.2%)
Multi-drug resistant cases	2 (0.5%)
TB meningitis cases	8 (1.9%)

* Country of birth unknown for 13 cases

[†] Includes the cases categorised as pulmonary +extrapulmonary (P+E)



**For further information on the epidemiology of tuberculosis in Ireland,
please see our website:**

**[http://www.hpsc.ie/TuberculosisTB/AnnualReportsOnTheEpidemiologyof
TBInIreland/](http://www.hpsc.ie/TuberculosisTB/AnnualReportsOnTheEpidemiologyOfTBInIreland/)**