

Parlare di Vaccini

Giovanni Rezza



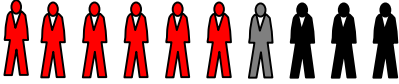
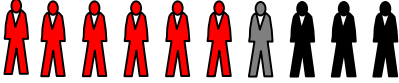
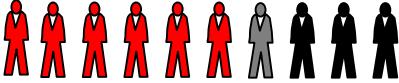
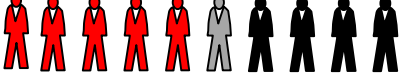


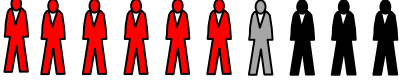
Department of Infectious Diseases



Effetti delle vaccinazioni

- Effetto diretto: una frazione della popolazione transita direttamente nella categoria «immune» (risultato della protezione diretta: meno infezioni)
- Effetto indiretto: un minor numero di infezioni determina una diminuzione del numero di persone che diffondono l'infezione per cui anche gli individui non immunizzati vengono protetti (effetto gregge)

Relazione fra diffusione delle malattie e coperture vaccinali

	# di suscettibili contagiati da 1 persona infetta (su 10)	CV necessaria per l'immunità di gregge
Morbillo:		→ 92-94%
Pertosse:		→ 92-94%
Poliomielite:		→ 80-86%
Difterite:		→ 83-85%
Rosolia:		→ 83-85%
Parotite:		→ 75-86%
Hib:		→ 70%
Influenza:		→ 30-75%
Vaiolo:		→ 80-85%



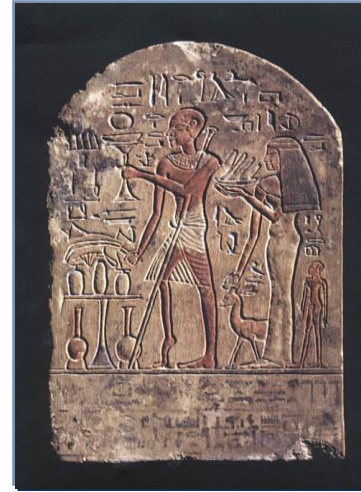
infetto



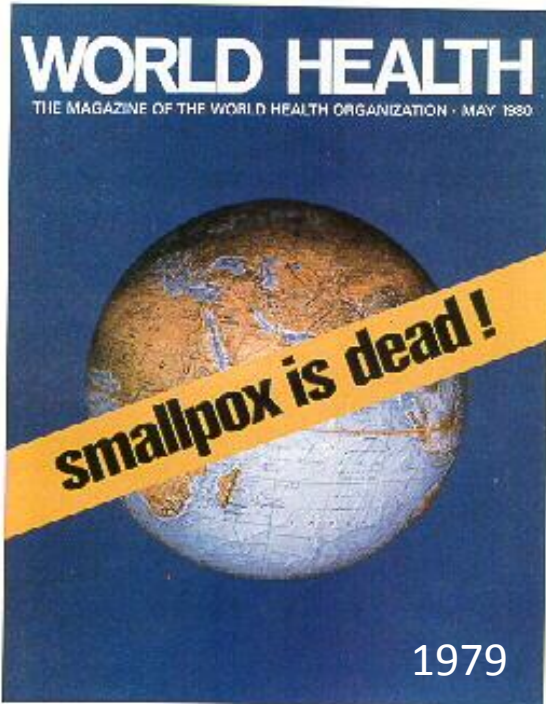
suscettibile



rappresenta metà



1796



1979



Gli “effetti” del vaccino di Jenner: illustrazione del 1802



Pertosse, copertura vaccinale, movimenti anti-vaccini

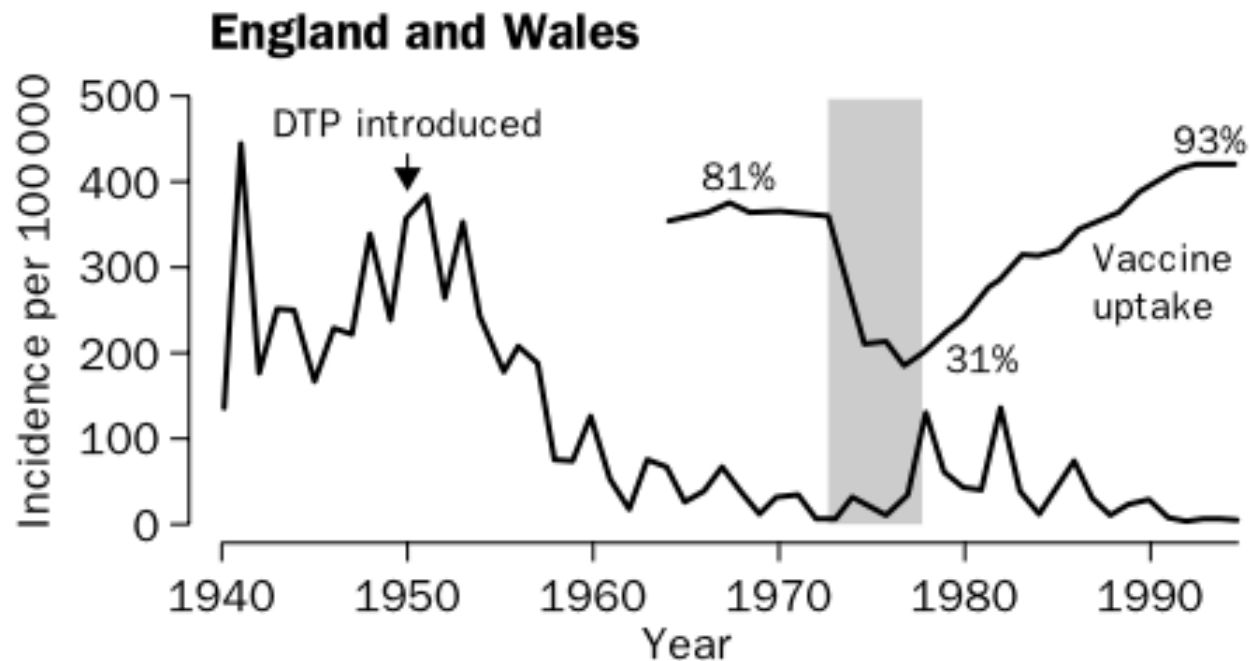
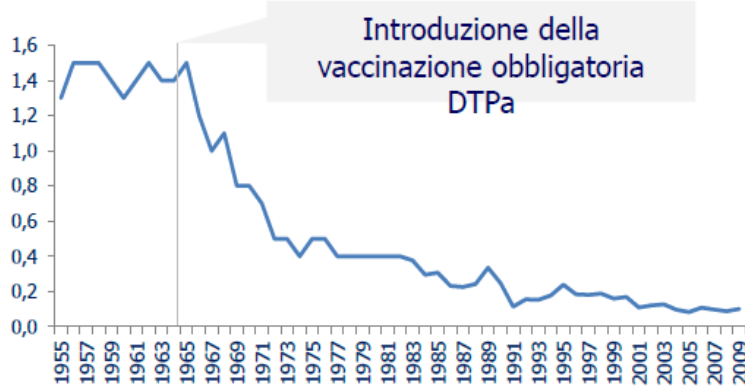


Figure 2: **Incidence of pertussis in countries affected by active anti-vaccine movements**

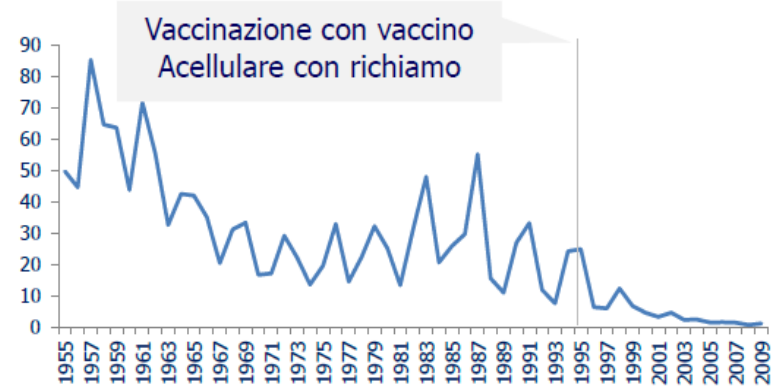
Note that scales vary.

Alcuni risultati della vaccinazione in Italia

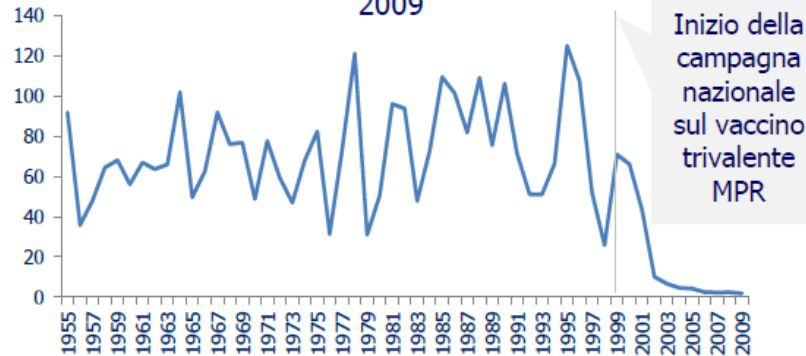
Prevalenza del Tetano in Italia su 100.000 abitanti, 1955-2009



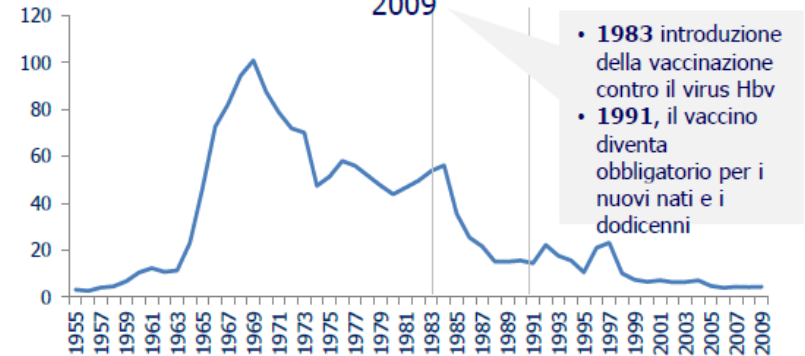
Prevalenza della Pertosse in Italia su 100.000 abitanti, 1955-2009



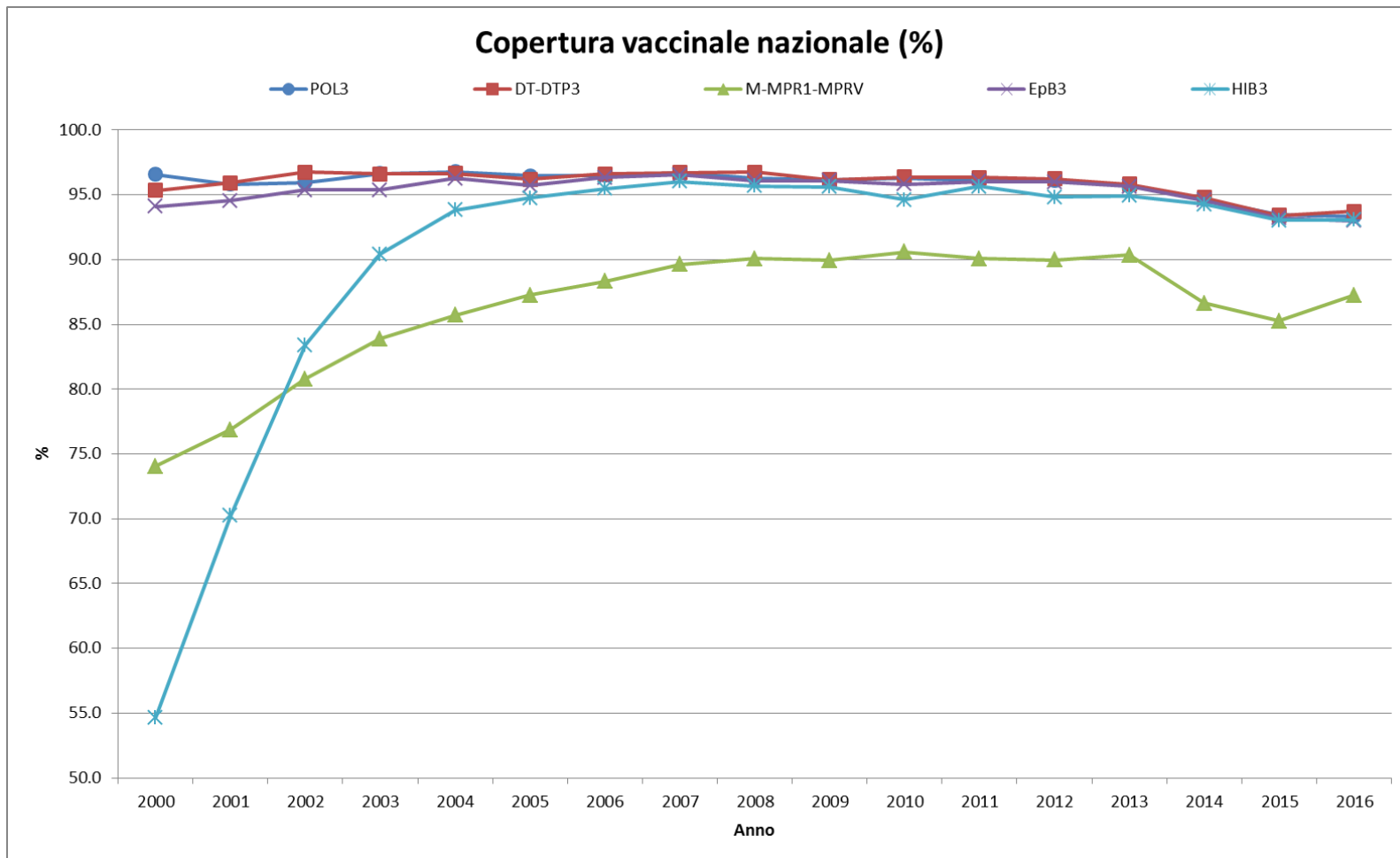
Prevalenza della Parotite in Italia su 100.000 abitanti, 1955-2009



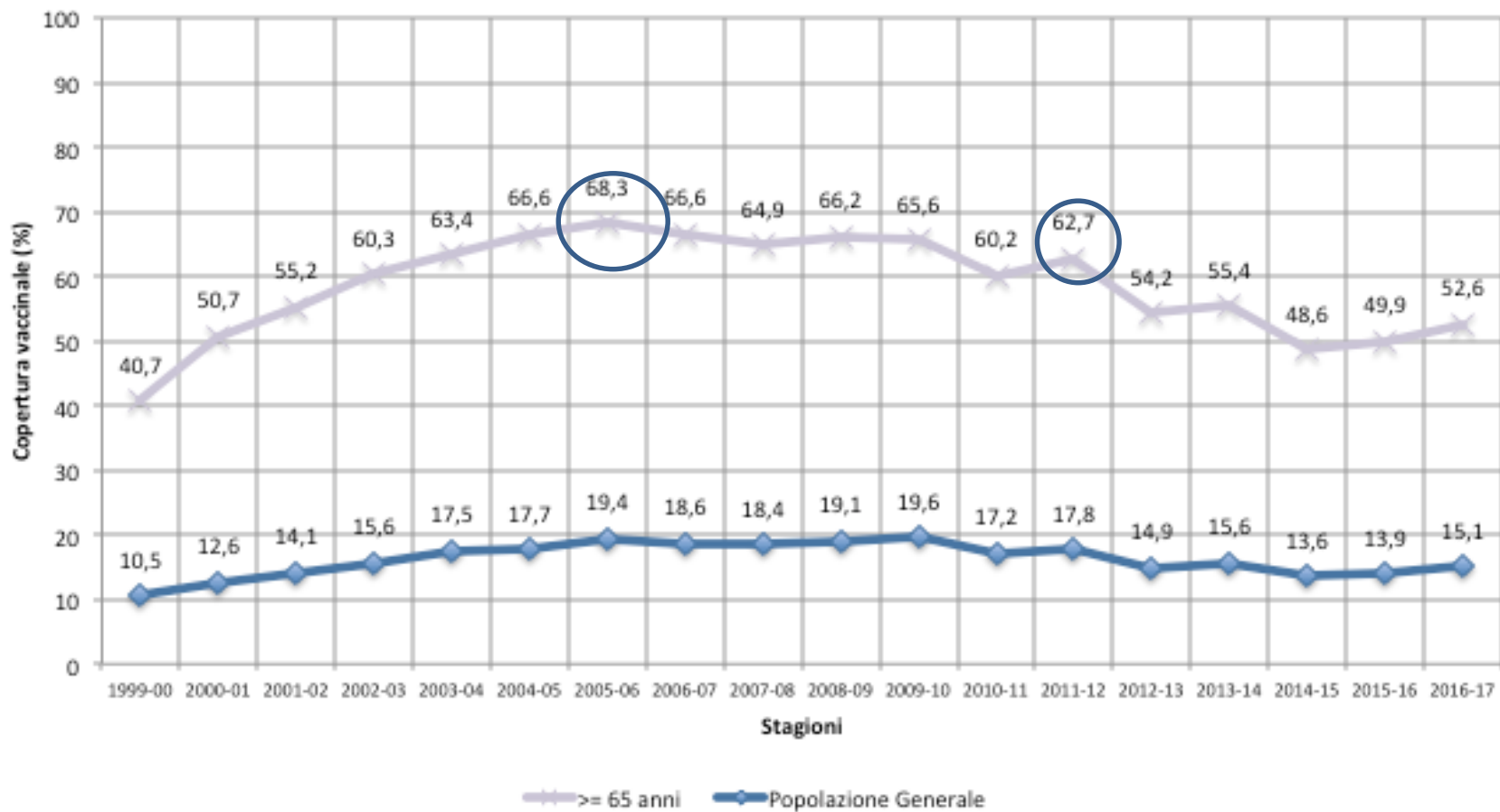
Prevalenza dell'Epatite B in Italia su 100.000 abitanti, 1955-2009



Copertura vaccinale per Esavalente ed MPR Italia 2000-2016



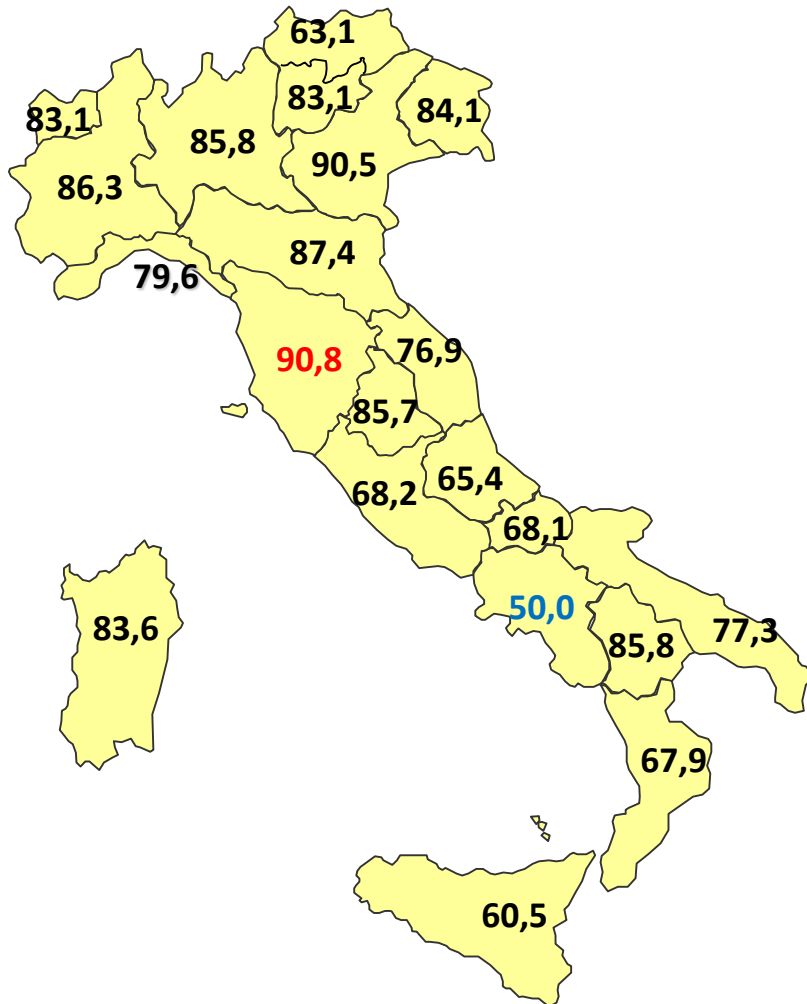
Vaccinazione antinfluenzale nella popolazione generale e con età ≥ 65 anni, Italia 1999/00 - 2016-17



Coperture vaccinali per MenC e Pneumococc, 2015

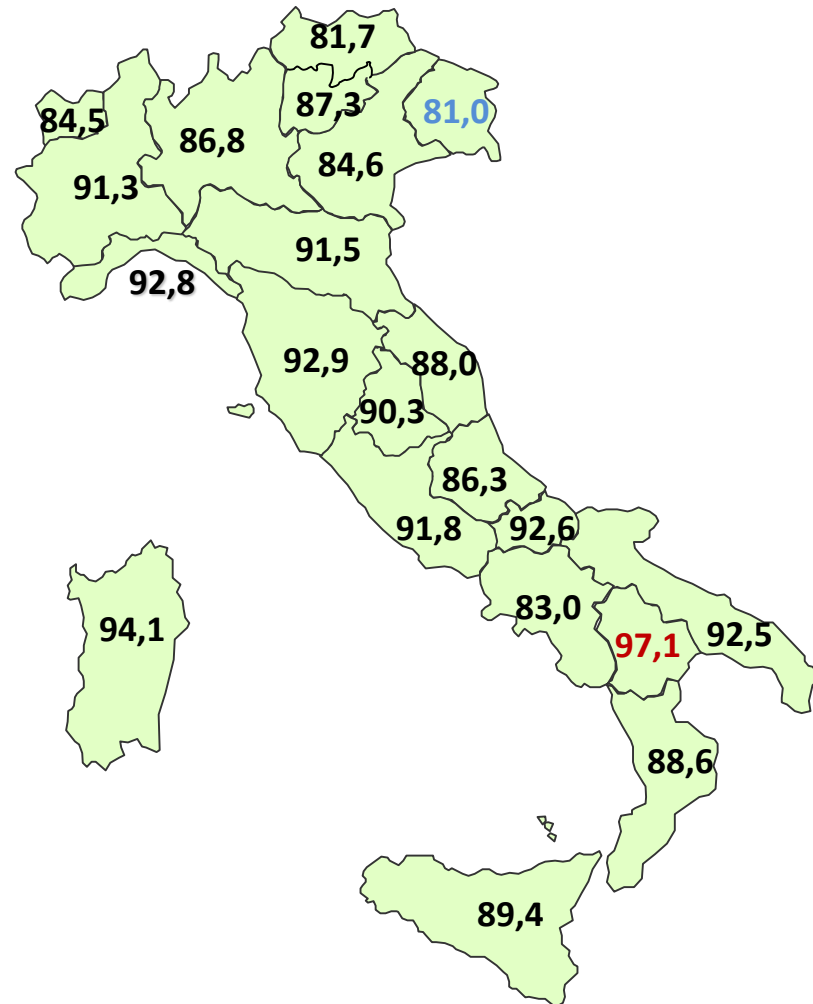
Men C

CV nazionale = 76,6%

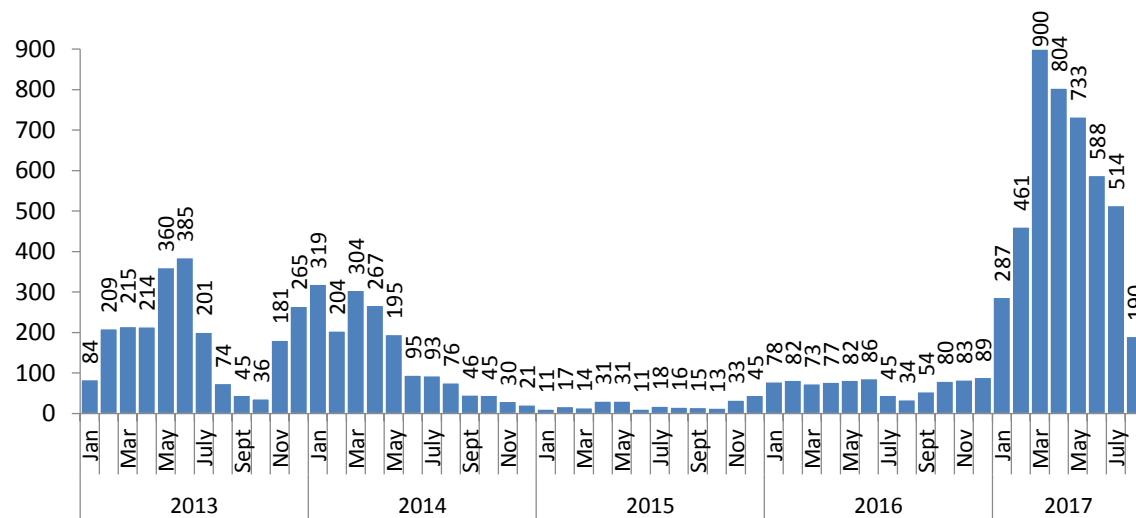
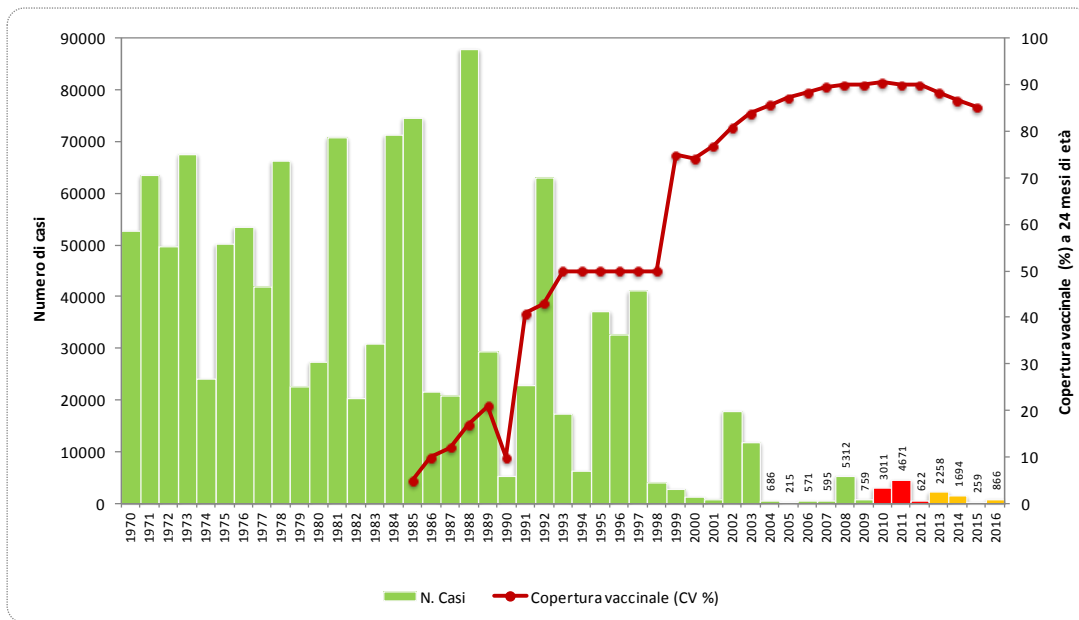


Pneumococco

CV nazionale = 88,7%



Casi di morbillo e coperture vaccinali per anno in Italia



Early report

Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children

A J Wakefield, S H Murch, A Anthony, J Linnell, D M Casson, M Malik, M Berelowitz, A P Dhillon, M A Thomson, P Harvey, A Valentine, S E Davies, J A Walker-Smith

Summary

Background We investigated a consecutive series of children with chronic enterocolitis and regressive developmental disorder.

Methods 12 children (mean age 6 years [range 3–10], 11 boys) were referred to a paediatric gastroenterology unit with a history of normal development followed by loss of acquired skills, including language, together with diarrhoea and abdominal pain. Children underwent gastroenterological, neurological, and developmental assessment and review of developmental records. Ileocolonoscopy and biopsy sampling, magnetic-resonance imaging (MRI), electroencephalography (EEG), and lumbar puncture were done under sedation. Barium follow-through radiography was done where possible. Biochemical, haematological, and immunological profiles were examined.

Findings Onset of behavioural symptoms was associated by the parents, with measles, mumps, and rubella vaccination in eight of the 12 children, with measles infection in one child, and otitis media in another. All 12 children had intestinal abnormalities ranging from lymphoid nodular hyperplasia to granulomatous inflammation. Histology showed patchy chronic inflammation in 11 children and reactive ileal lymphoid hyperplasia in seven, but no granulomas. Behavioural disorders included autism (nine), disintegrative psychosis (one), and possible postviral or vaccinal encephalitis (two). There were no focal neurological abnormalities and MRI and EEG tests were normal. Abnormal laboratory results were significantly raised urinary methylmalonic acid compared with age-matched controls ($p < 0.03$), low haemoglobin in four children, and a low serum IgA in four children.

Interpretation We identify associated gastrointestinal disease and developmental regression in a group of previously normal children, which was generally associated in time with possible environmental triggers.

Lancet 1998; 351: 637–41

See Commentary page

Inflammatory Bowel Disease Study Group, University Departments of Medicine and Histopathology (A J Wakefield *msc*, A Anthony *msc*, J Linnell *msc*, A P Dhillon *msc*, S E Davies *msc*) and **the University Departments of Paediatric Gastroenterology** (S H Murch *msc*, D M Casson *msc*, M Malik *msc*, M A Thomson *msc*, J A Walker-Smith *msc*), **Child and Adolescent Psychiatry** (M Berelowitz *msc*), **Neurology** (P Harvey *msc*), and **Radiology** (A Valentine *msc*), **Royal Free Hospital and School of Medicine**, London NW3 2QG, UK

Correspondence to: Dr A J Wakefield

Introduction

We saw several children who, after a period of apparent normality, lost acquired skills, including communication. They all had gastrointestinal symptoms, including abdominal pain, diarrhoea, and bloating and, in some cases, food intolerance. We describe the clinical findings, and gastrointestinal features, of these children.

Patients and methods

12 children, consecutively referred to the department of paediatric gastroenterology with a history of a pervasive developmental disorder with loss of acquired skills and intestinal symptoms (abdominal pain, bloating and food intolerance), were investigated. All children were admitted to the ward for a week, accompanied by their parents.

Clinical investigations

We took histories, including details of immunisations and exposure to infectious diseases, and assessed the children. In 11 cases the history was obtained by the senior clinician (JW-S). Neurological and psychiatric assessments were done by specialist staff (PH, MB) with HMS-4 criteria.¹ Developmental assessments included a review of prospective developmental records from parents, health visitors, and general practitioners. Four children did not undergo psychiatric assessment in hospital; all had been assessed professionally elsewhere, so these assessments were used as the basis for their behavioural diagnosis.

After bowel preparation, ileocolonoscopy was performed by SHM or MAT under sedation with midazolam and pethidine. Paired frozen and formalin-fixed mucosal biopsy samples were taken from the terminal ileum; ascending, transverse, descending, and sigmoid colons, and from the rectum. The procedure was recorded by video or still images, and were compared with images of the previous seven consecutive paediatric colonoscopies (four normal colonoscopies and three on children with ulcerative colitis), in which the physician reported normal appearances in the terminal ileum. Barium follow-through radiography was possible in some cases.

Also under sedation, cerebral magnetic-resonance imaging (MRI), electroencephalography (EEG) including visual, brain stem auditory, and sensory evoked potentials (where compliance made these possible), and lumbar puncture were done.

Laboratory investigations

Thyroid function, serum long-chain fatty acids, and cerebrospinal-fluid lactate were measured to exclude known causes of childhood neurodegenerative disease. Urinary methylmalonic acid was measured in random urine samples from eight of the 12 children and 14 age-matched and sex-matched normal controls, by a modification of a technique described previously.² Chromatograms were scanned digitally on computer, to analyse the methylmalonic-acid zones from cases and controls. Urinary methylmalonic-acid concentrations in patients and controls were compared by a two-sample *t* test. Urinary creatinine was estimated by routine spectrophotometric assay.

Children were screened for anticonvulsant antibodies and boys were screened for fragile-X if this had not been done

CALLOUS DISREGARD

AUTISM AND VACCINES—THE TRUTH BEHIND A TRAGEDY



ANDREW J. WAKEFIELD
FOREWORD BY JENNY MCCARTHY

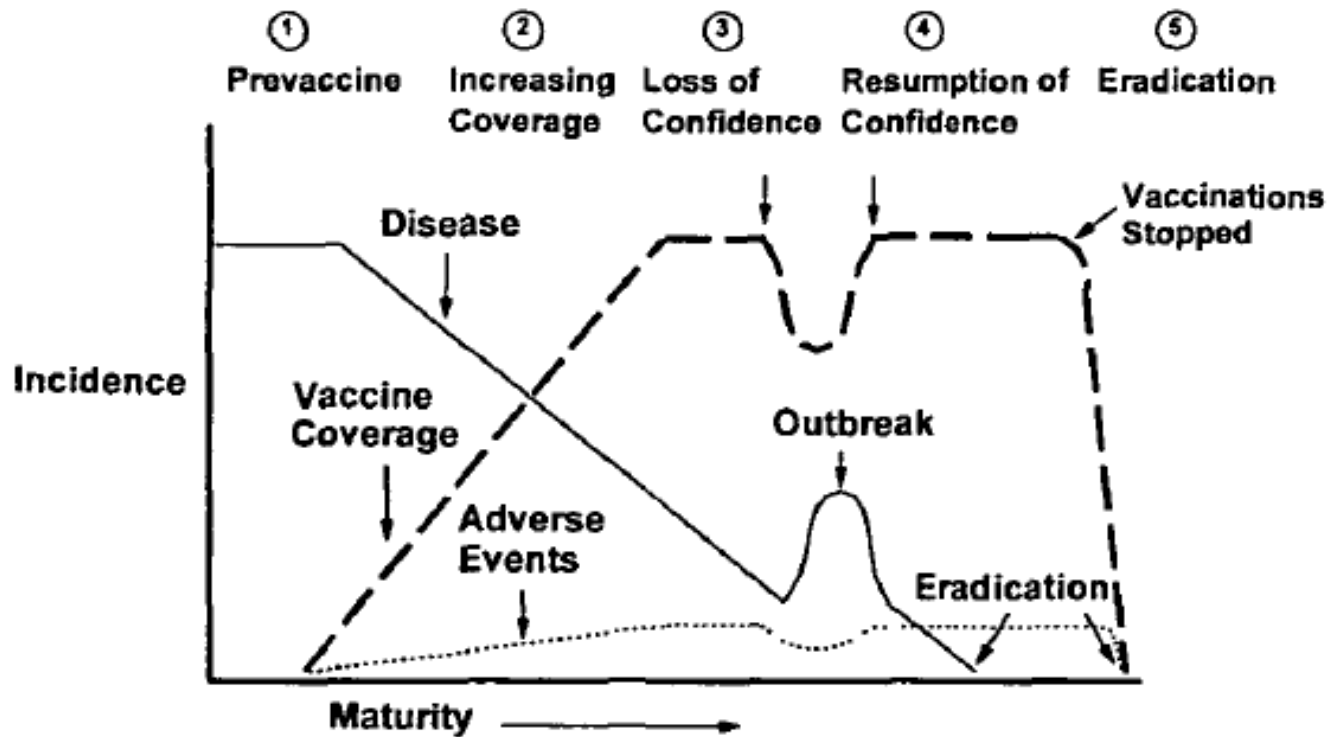


Wakefield radiato dall'OdM, UK 2010

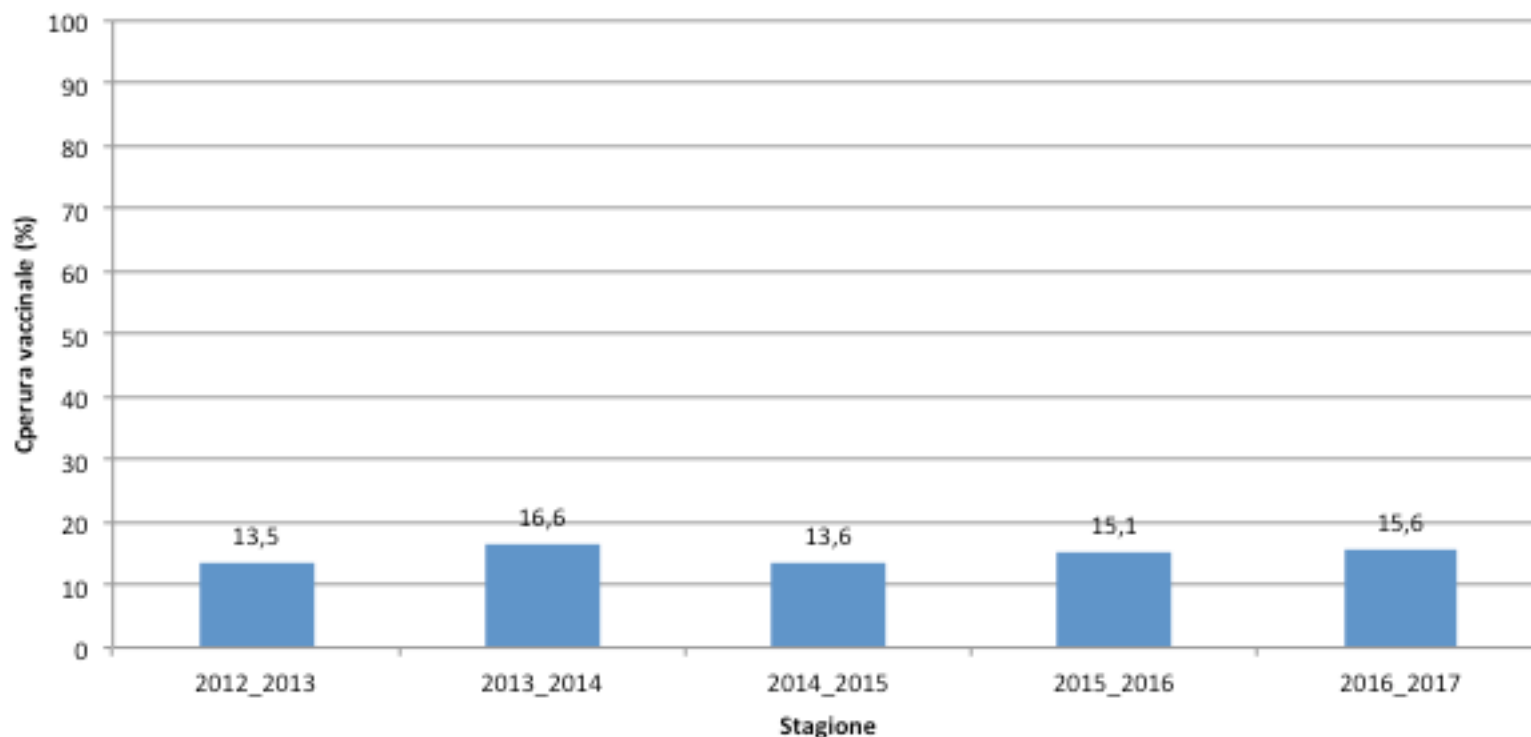
Umberto Eco: "Internet? Ha dato diritto di parola agli imbecilli: prima parlavano solo al bar e subito venivano messi a tacere"



Evoluzione dei programmi vaccinali



Coperture vaccinali antinfluenzali tra gli operatori sanitari, Italia



Calcolate sulla base dei dati relativi alle dosi somministrate ed alla popolazione target fornite delle regioni: Calabria, Emilia-Romagna, Friuli Venezia Giulia, Liguria, Marche, Piemonte, Sicilia, Toscana, P.A. Trento, Valle d'Aosta e Veneto.

PNPV 2017-2019



Decreto legge su obbligatorietà

Per i bambini/ragazzi non vaccinati

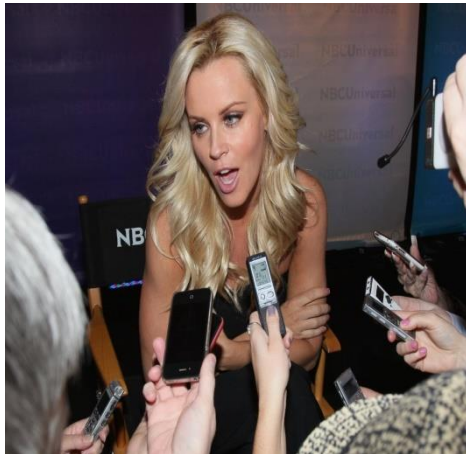
- 0-6 anni: esclusione da asili nido e scuola materna
- >6 anni: sanzioni economiche
- Le vaccinazioni da eseguire saranno quelle incluse nel calendario vigente per la coorte di appartenenza (fino a un massimo di 10 vaccini obbligatori – esa + tetravalente, e 4 raccomandati)

Date importanti e dati preliminari sugli effetti della legge sull'obbligo

- 2013-2015/16: declino delle coperture vaccinali (93.5% per l'esavalente e 85% per il morbillo)
- 2016: indagine nazionale (3130 questionari) rileva 83.7% dei genitori pro-vaccini, 15.6% esitanti, 0.7% anti-vax (C. Giambi, Vaccine 2018) **Determinanti di esitazione: non aver ricevuto adeguate raccomandazioni dai pediatri, aver ricevuto opinioni discordanti, aver incontrato genitori di bambini con SAR, usare medicine non tradizionali**
- Luglio 2017: 10 vaccini obbligatori e 4 raccomandati
- Gen/Feb 2018: copertura vaccinale (a fine 2017) per coorti di nascita 2015/16 aumentate del **95.8% per l'esavalente (+2.5%) e 93.6% (+6.3%) per il trivalente (MPR)** (dati da 5 Regioni e 1 municipalità)
- Gen-Mar 4 2018: dibattito pre-elettorale su vaccini e vaccinazioni



Red Ronnie: demenziale vaccinare i bambini



Jenny McCarthy



«I'm not anti-vaccine... let's find out the truth



Roberto Burioni

La scienza non è democratica
(la congiura dei somari)