



The Actuarial Profession

making financial sense of the future

UK & European Asbestos GIRO XXX 2003 Convention

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UK & European Asbestos

- Background
 - Exposures
 - Diseases
- Asbestos Compensation Systems across Europe
- Comparison with the US Compensation System
- Recent Legal Cases across Europe
- The UK Situation
 - Court Cases
 - Public Liability
 - Future Exposures (CAWR 2002)
- Estimates of the Cost of European Asbestos Exposures

What is Asbestos?

- Word is derived from ancient Greek and means “inextinguishable, unquenchable or unconsumable”
- Naturally occurring silicate with 6 varieties
 - actinolite
 - amosite
 - anthophyllite
 - crocidolite
 - tremolite
 - chrysotile
- Once considered as a “miracle mineral”
- Many favourable properties
 - flexible, strong and durable
 - resistant to fire, heat and corrosion
- Available in abundant quantities, hence inexpensive

Uses of Asbestos

- Heavily used in many industries in hundreds of products
 - shipbuilding (insulator)
 - construction (insulation, roofing and flooring)
 - railroads (brake linings)
- Used in virtually every industrial process involving heat or friction
- Used for over 2,000 years
- Classified by the US Government as a strategic material during World War II
- Global annual consumption:
 - 3.5 to 5 million tons in 1980
 - 2.5 million tons in 2000

Asbestos Diseases (1)

- Recognised cause of disease since 1920's
- Evidence suggests even known about in Roman times - Pliny the Elder noticed sickness in his servants
- Long latency periods - can be in excess of 50 years
- Malignant and non-malignant diseases
- "Signature" diseases make liability fairly straightforward to establish
- White asbestos tends to be softer and more flexible and is therefore supposedly broken down by the body more easily
- Asbestos kills over 3,000 people per annum in Great Britain

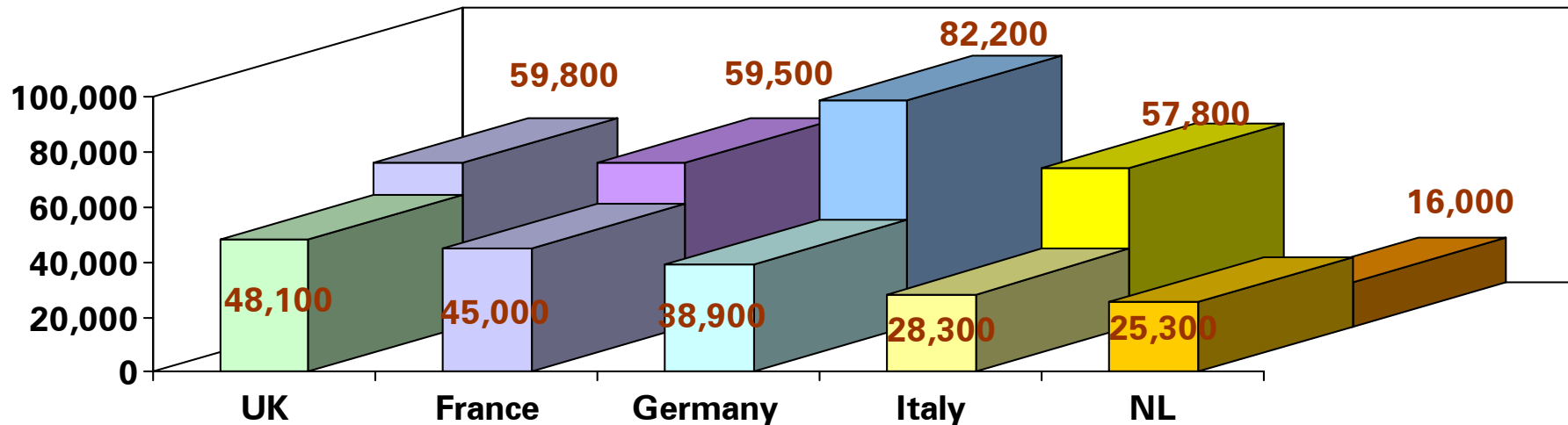
Asbestos Diseases (2)

Disease	Symptoms / Comments	Malignant (Y/N)	Latency Period
Mesothelioma	Cancer of membranes that cover & protect lungs. Fatal within 2 years of diagnosis	Yes	Typically 30-40 years - can be as long as 50 years
Lung Cancer	Cancer of the bronchial covering of the lungs. Often fatal	Yes	Typically 20-30 years
Other Cancers	Tumours of the throat, larynx, oesophagus, stomach, colon, lymphoid	Yes	Typically 20-30 years
Asbestosis	Non-cancerous scarring of interior lung tissue. Many cases do not involve significant impairment	No	Typically 15-30 years
Pleural Plaques/ Pleural Thickening	Scarring or thickening of pleural tissue surrounding lungs. No detectable impairment or injury	No	Depends on when detected

Emergence of Asbestos Diseases in Europe

- Emergence of asbestos-related disease in Western Europe appears to be repeating that seen in the US
- Projections anticipate higher incidence rate per head of population
- Time-lag – European emergence appears on average to be around 20 years behind the US
 - Worse affected generation in the UK born in 1940's (US 1920's)
- Exposure in the US is likely to be earlier due to:
 - Heavy exposure in US during WWII due to ship building effort
 - Tighter controls may have been brought in earlier in US
 - Imports in some European countries continued until mid-1990's
 - Mined in some European countries (France, Greece, Italy)

Peto's Forecasts of Number of Mesothelioma Deaths in Western Europe



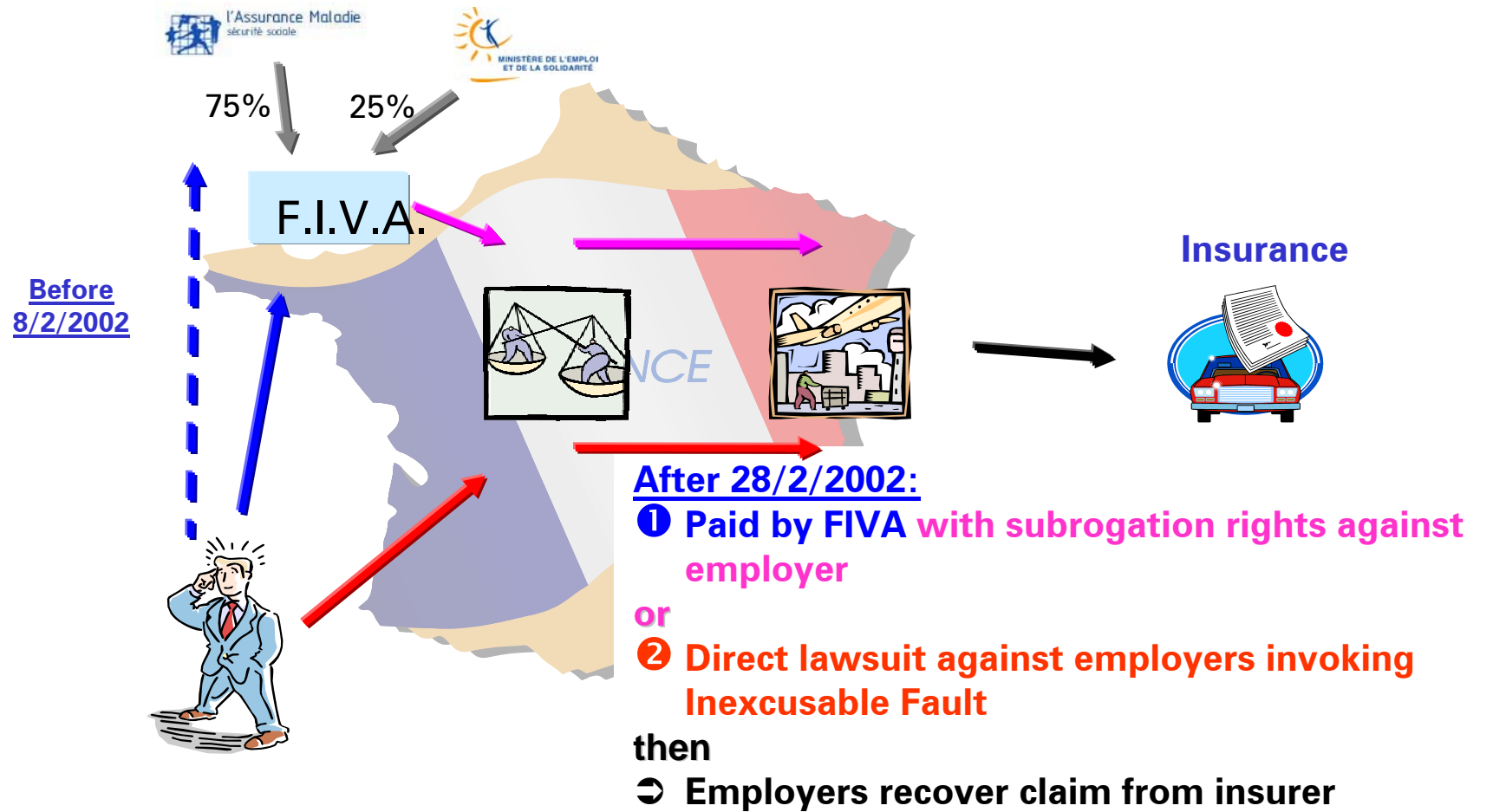
Front row: Peto's estimates 1995-2029 Back row: 2001 Population in '000

Peto's Estimates from 1999 Study "The European Mesothelioma Epidemic"

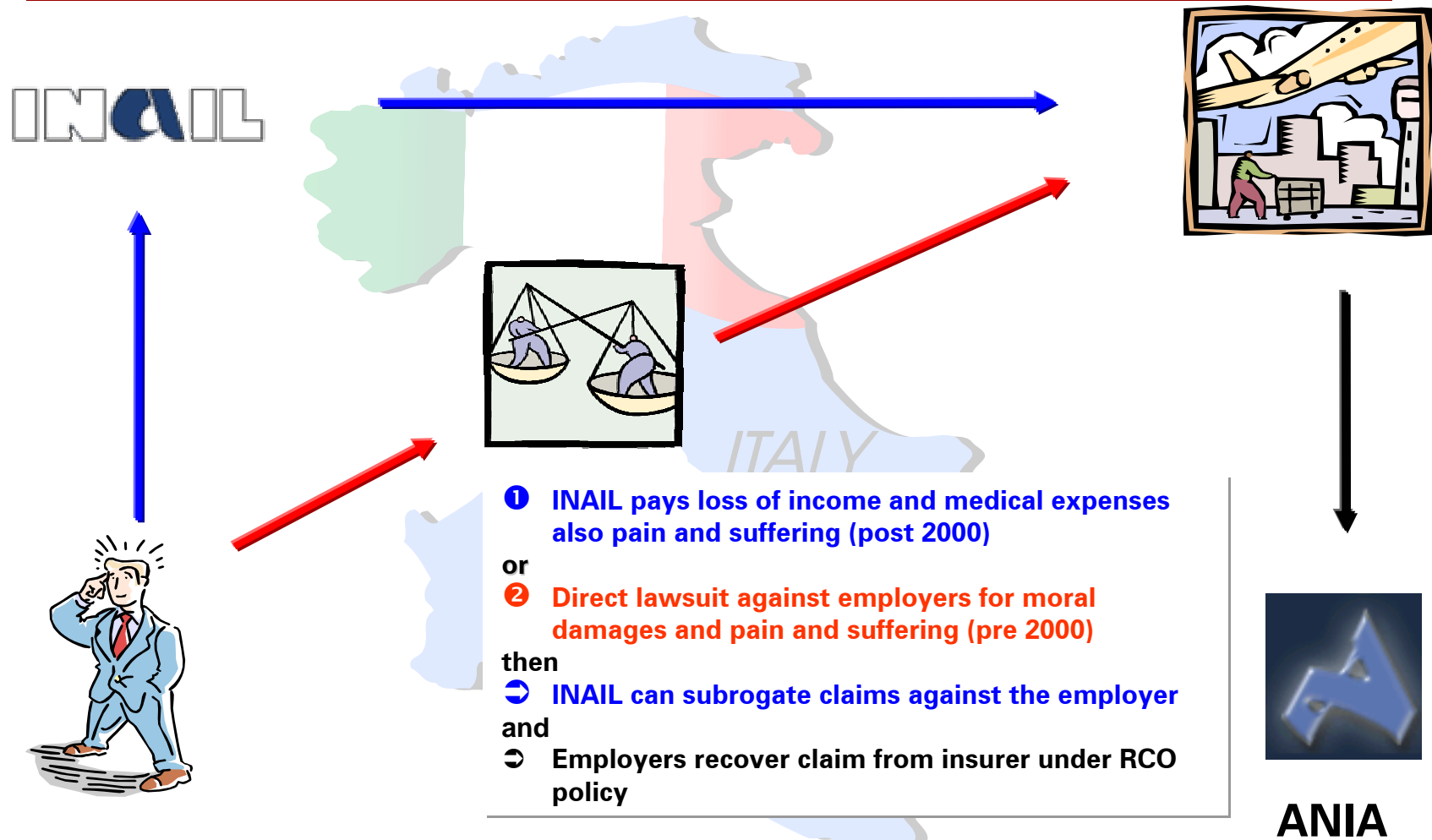
Asbestos Compensation Systems in Europe

- Significant variations exist between different countries
- Occupational diseases are typically compensated through different channels:
 - No-fault: workers compensation or social security
 - Tort: employers liability, public liability or general/products liability
- The potential sources of compensation differ not only in what must be proven but also in the diseases and damages they will compensate
- In general, no-fault systems do not pay for non-economic losses, which are, at least in theory, available from the tort systems
- In general, awards from tort system are higher than those from the no-fault systems

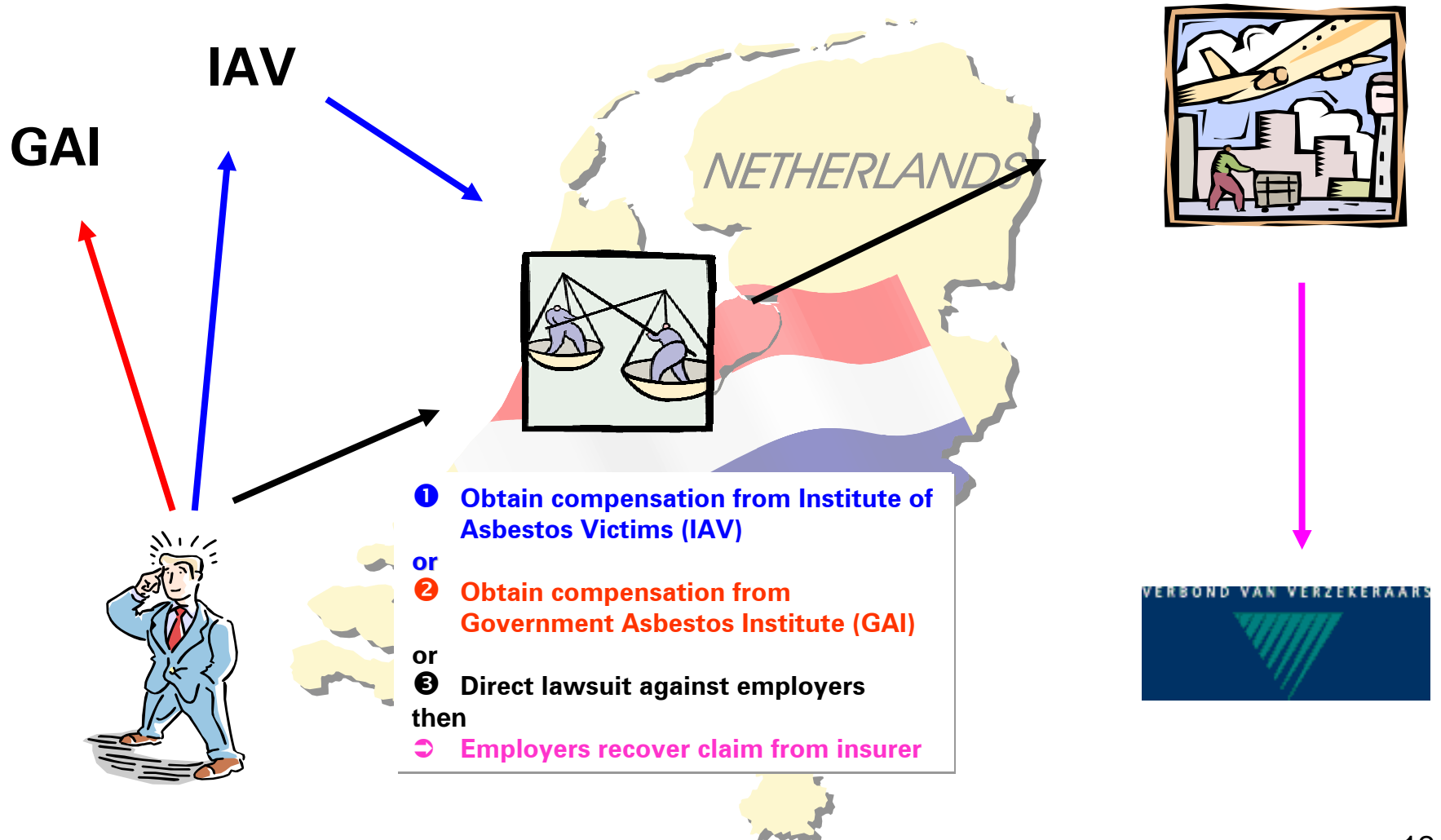
Asbestos in France



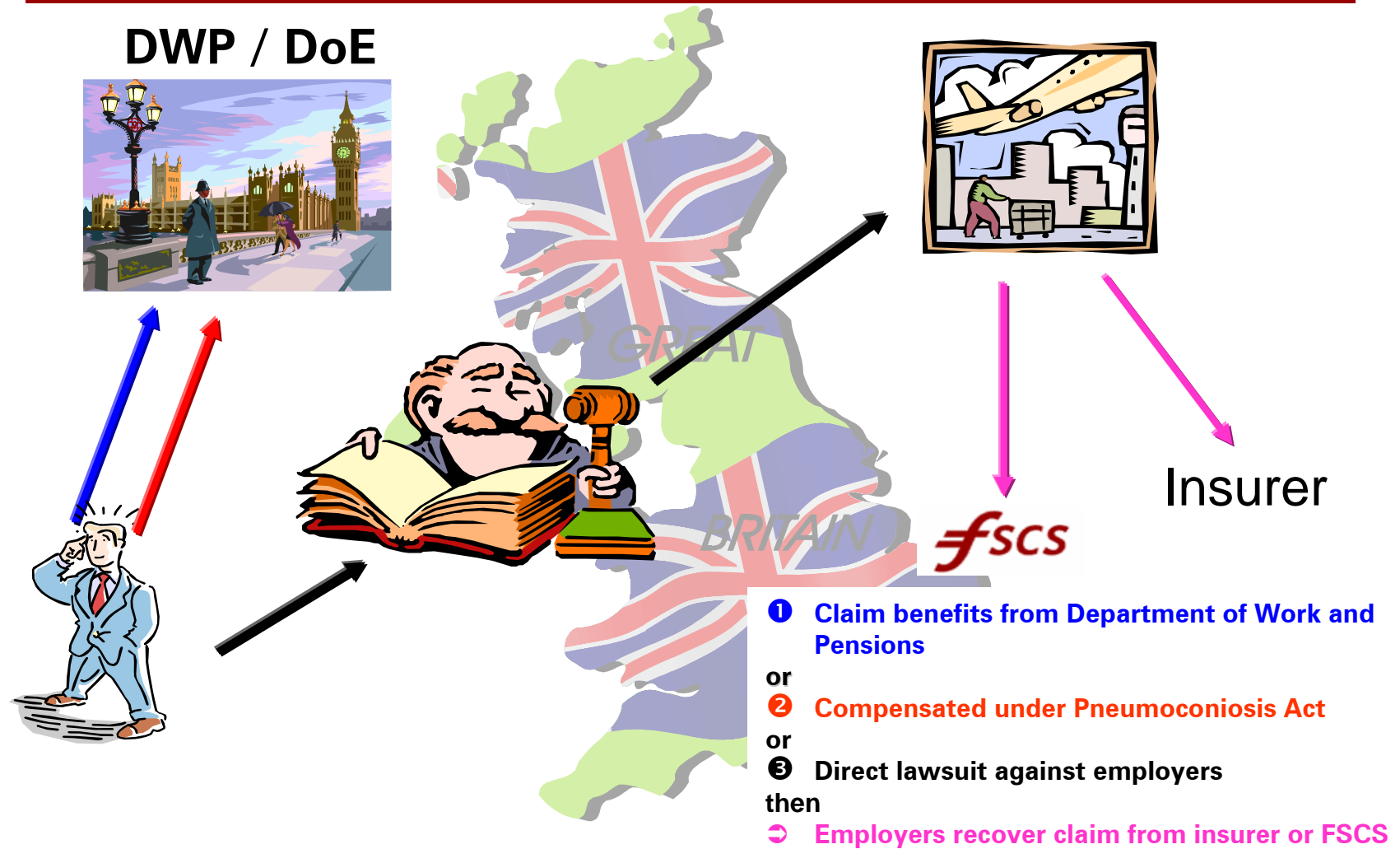
Asbestos in Italy



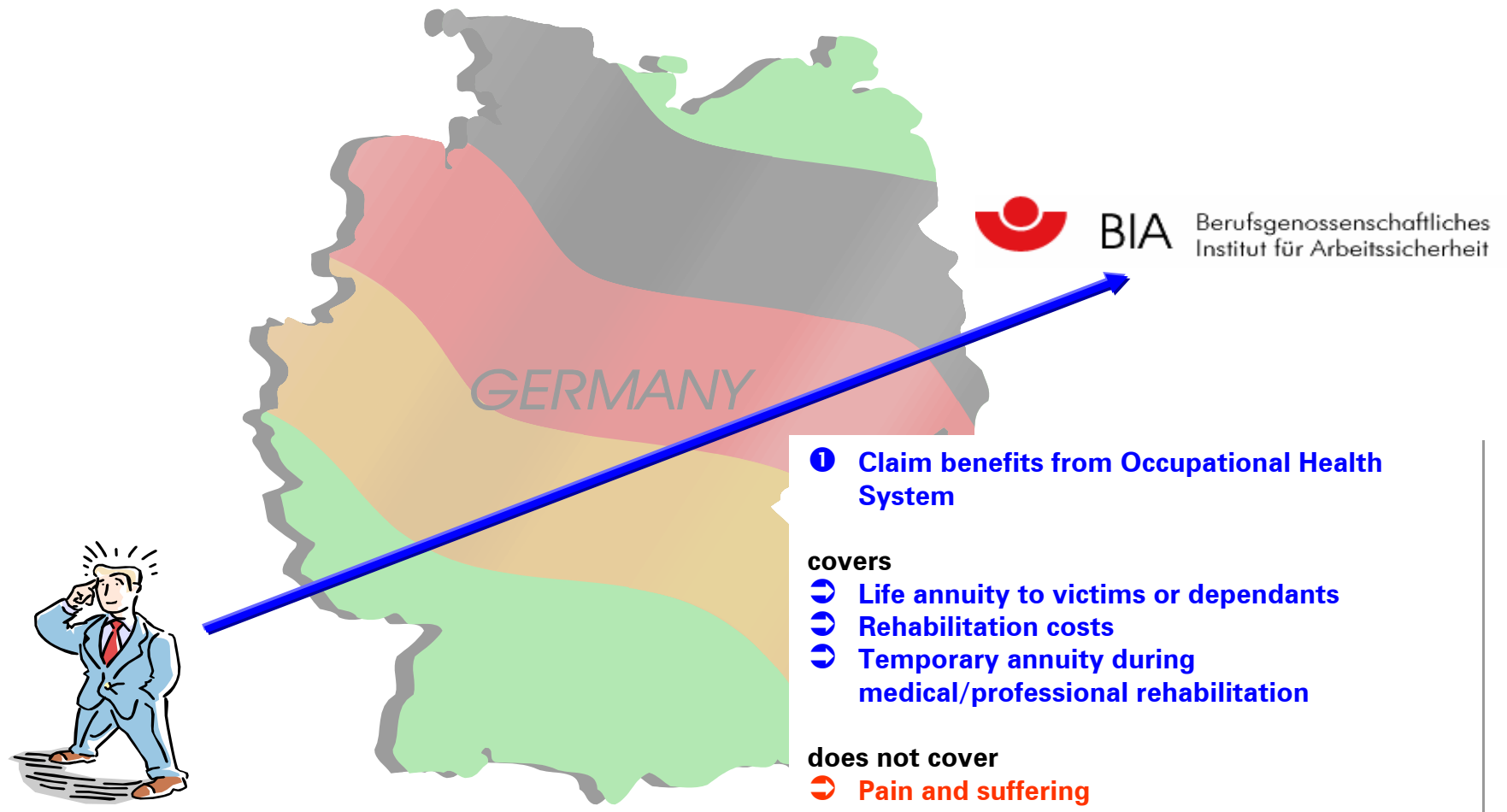
Asbestos in the Netherlands



Asbestos in the UK



Asbestos in Germany



Insurance and European Asbestos (1)

- Exposure of insurance industry to European asbestos varies from country to country
- Despite recent increases in legal activity still relatively little insurance involvement from European asbestos exposure
- This means that important insurance issues still need to be resolved in some countries:
 - trigger of coverage
 - allocation across triggered policies
 - application of exclusions
 - lost policies
 - treatment of uninsured periods (intent or insolvency)
 - application of reinsurance

Insurance and European Asbestos (2)

- Impact of European exposures on the insurance industry may differ from that of US exposures due to differences in:
 - Legal systems
 - Compensation systems (ie who pays)
- Recent legal developments in some countries suggest a narrowing of some of those differences

Key Features of US Asbestos Litigation

- Litigious culture
- Tried by jury
- Unimpaired claimants
- Consolidated trials
- Forum shopping
- Contingent fees
- Union involvement
- Product liability coverages
- Punitive damages insurable in some states

Comparison of US and European Asbestos Litigation

- | | |
|---|---|
| ■ Litigious culture | ■ Less litigious |
| ■ Tried by jury | ■ Tried by Professional Judges |
| ■ Unimpaired claimants | ■ Currently not compensated |
| ■ Consolidated trials | ■ Typically not permissible |
| ■ Forum shopping | ■ Judicial systems more uniform |
| ■ Contingent fees | ■ Not permitted in most of Europe |
| ■ Union involvement | ■ Not as active? |
| ■ Product liability coverages | ■ Workers' Comp/EL/Public Liab? |
| ■ Punitive damages insurable in some states | ■ Less common, much smaller and typically not insurable |

■ Significant differences remain between the US and the European legal systems, despite European evolution towards tort and insurance involvement

Legal Developments in Europe - France

- February 2002 – Supreme Court of Appeal
 - Made it easier to invoke “inexcusable fault” against employers
 - “As part of contract of employment, employer has a obligation to provide safe workplace, especially in relation to products manufactured or used”
 - “Failure under this obligation regarded as an inexcusable fault where employer was, or should have been, aware of dangers and did not take precautionary measures”
 - Likely to transfer financial responsibility from social security system to employers and their insurers
- June 2002 – Court of Appeal, Rennes
 - All statutes of limitations on asbestos related occupational diseases lifted, provided first medical observation occurred between July 1947 and December 2001

Legal Developments in Europe - Italy

- 1997 Trial involving State Railways
 - Award made in favour of workers due to use of asbestos in insulating railway cars
 - Court awarded €2.6 million to 11 victims
 - State Railways established fund of €6.7 million to pay potential future claims
 - No public clarification over extent to which insurance policies will cover these liabilities

Legal Developments in Europe - Netherlands

- 28 April 2000 – Supreme Court ruling on Statute of Limitations
 - Statute did not apply in exceptional cases
 - Consideration was given to the fact that it may take longer than 30 years for disease to become apparent
 - Outlined series of considerations for determining whether or not statute should apply
- 14 December 2000 – Ruling by Dutch Parliament
 - Accepted a statute of limitations of 5 years after discovery of disease where exposure occurred after 14 December 2000
- 22 May 2003 – Eternit Case
 - Victim exposed to asbestos dust from Eternit products through brother's clothing and through debris
 - Judge applied Supreme Court ruling that statute of limitations did not hold

The UK situation

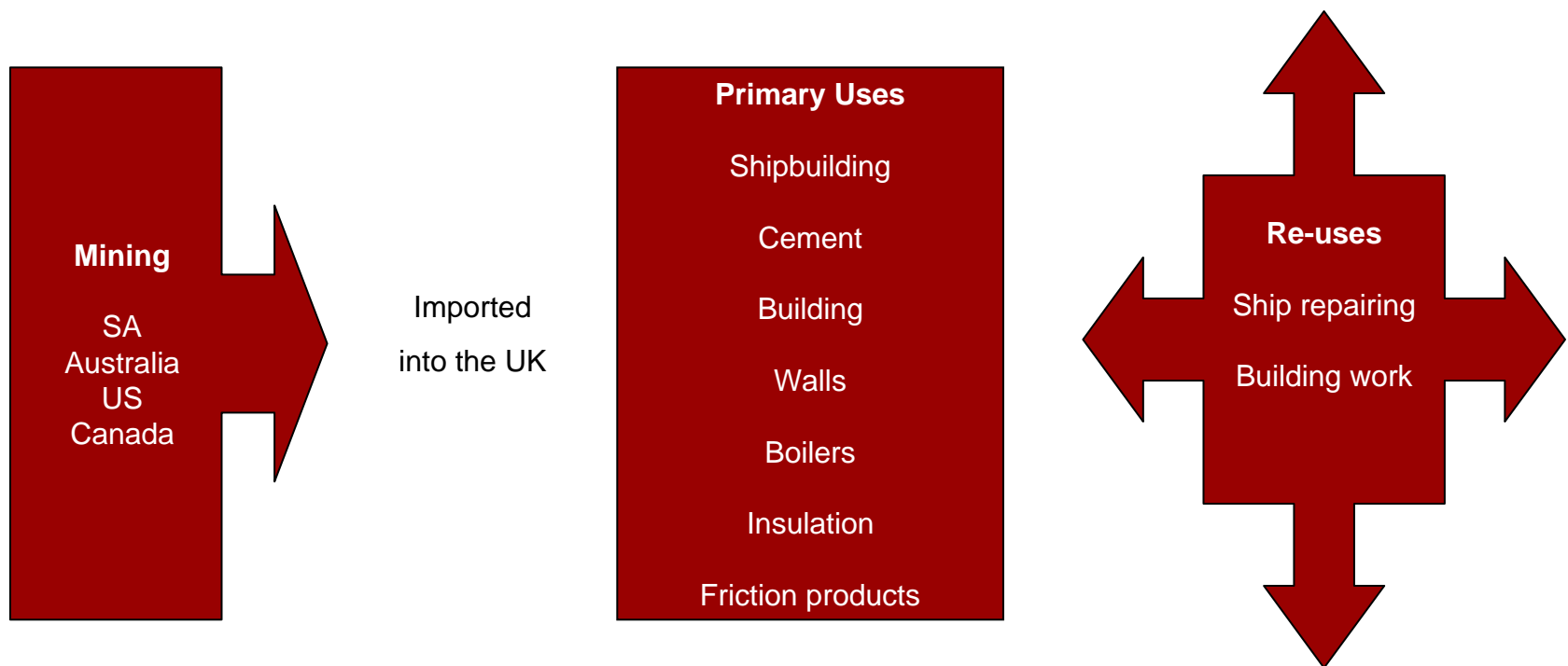
Recent court cases and developments

- Fairchild case
 - Defendants held jointly and severally liable
 - Each party responsible for all of the claim – apportionment issue not addressed
- Recently strengthened – Phillips vs Syndicate 992
 - Non-insured or unidentified years are still covered by the remaining insurers
- Allocation issues remain
- MOD case – no exposure to pre-87 exposures
- Recent record award - £4.37m
(versus £100k average)
- Risk of move from claims from EL to public liability policies

Estimation of numbers and costs - UK

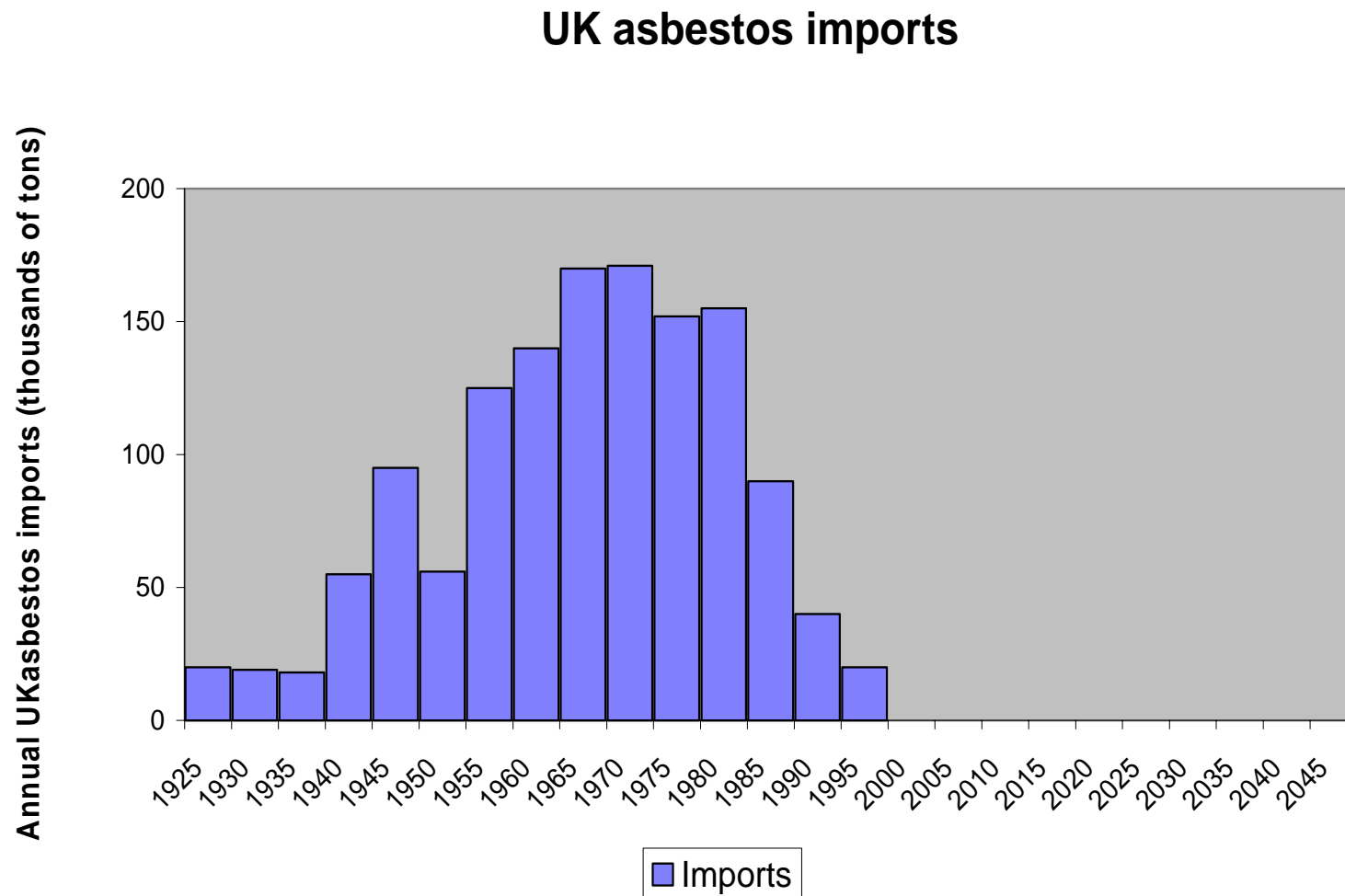
How the exposure occurred - Uses

- Exposure - based on imports, and on use and re-use



Estimation of numbers and costs - UK

How the exposure occurred - Imports



Estimation of numbers and costs - UK

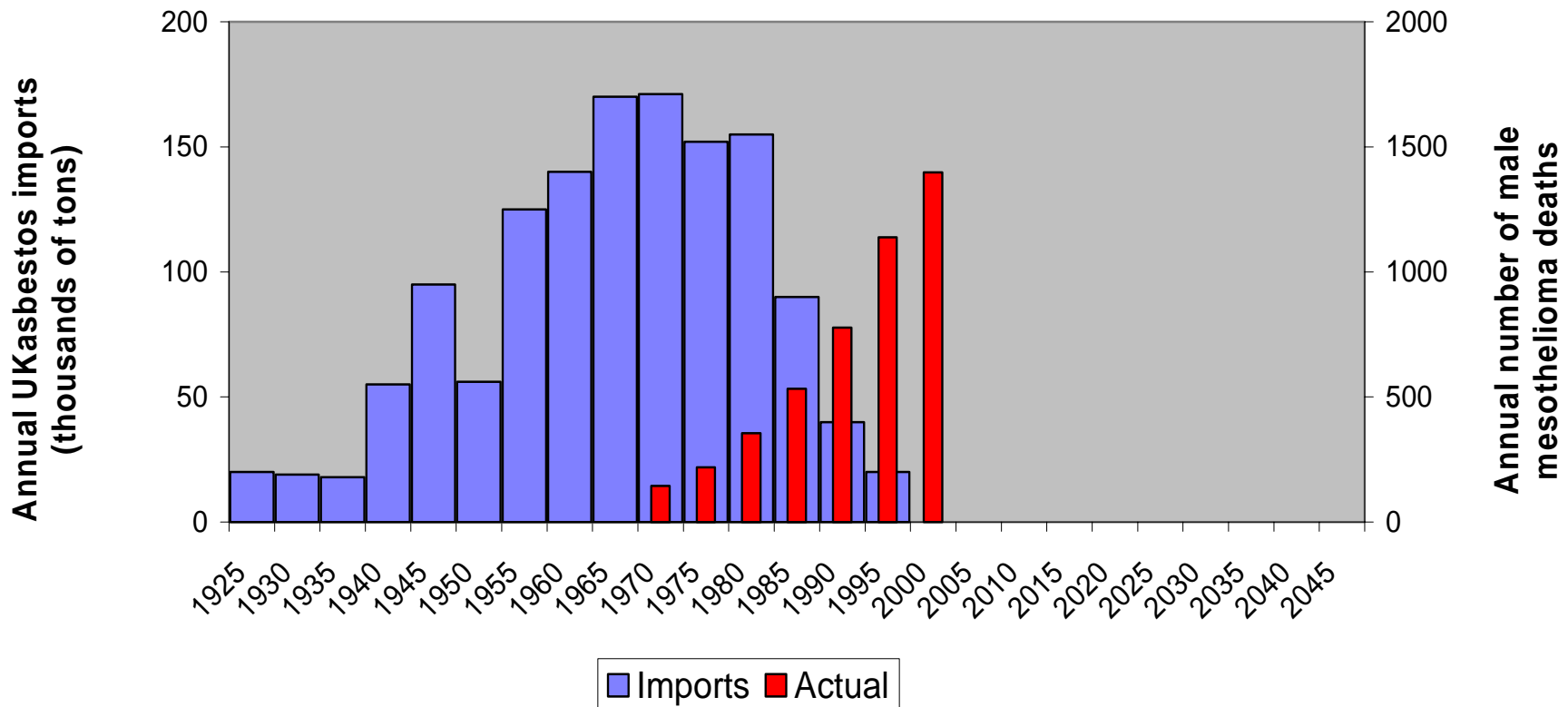
How this affected workers

- How many people have been exposed???
- Different numbers of people in asbestos-use industries
- Peaking in 1960-70
- Projection of number of people affected relies heavily on:
 - Severity of exposure
 - Length of exposure
 - Number of people exposed
 - Ages of those exposed
- Different diseases are influenced by different exposure types

Estimation of numbers and costs - UK

Reported mesothelioma deaths

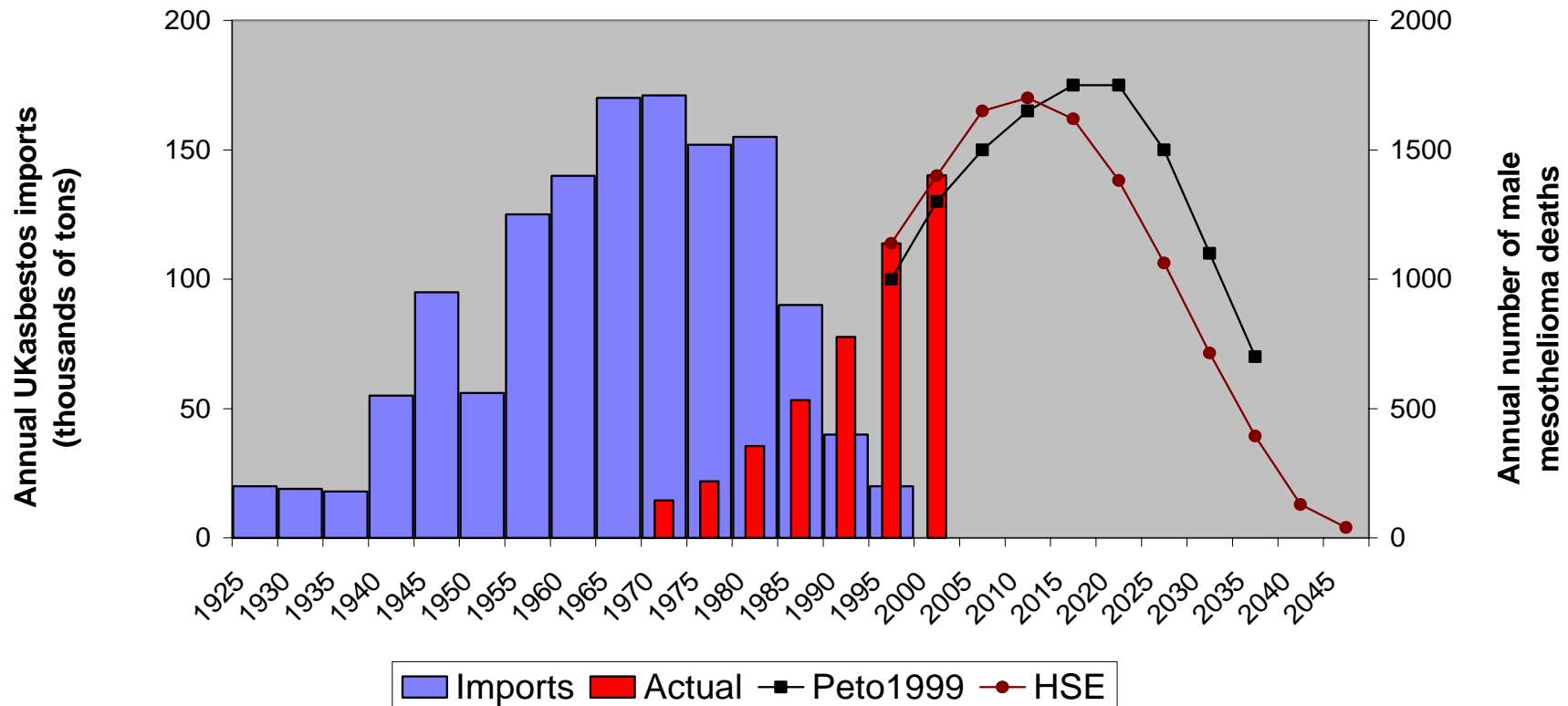
Actual mesothelioma deaths in British men and UK asbestos imports



Estimation of numbers and costs - UK

Future mesothelioma cases

Predicted mesothelioma deaths in British men and UK asbestos imports



Estimation of numbers and costs - UK

Other asbestos related diseases

- Other diseases are associated with lower costs than for mesothelioma
- However numbers of claims can be very high - see the US experience for example
- Latency differs significantly, indicating that mesothelioma will be a much longer term problem
- Anecdotal evidence is that the costs for other diseases could be the same again as for mesothelioma

Estimation of numbers and costs - UK

Estimates of claim cost in the UK

Basis	Low	High
Undiscounted	£9bn	£22bn
Discounted	£4bn	£10bn

Source: PwC, Number of mesothelioma deaths from 'The European Mesothelioma Epidemic - Peto 1999'

- Includes costs for all asbestos related diseases
- Costs met by all sources - insurers, government and companies

Estimation of numbers and costs - UK

Insured basis

- Insurance only compulsory from 1972 (UK) and 1975 (NI).
- As this was the time where exposure was declining, insurers may have escaped some of the claims cost (fall back on companies)
- Claims in UK currently being primarily made under EL policies (not products liability as in US)
- However, insurers are beginning to receive more public liability claims
- No consolidated trials currently

Estimation of numbers and costs - UK

Impact of insolvent companies

- Two major Employers' Liability insurers are insolvent:
 - Chester Street
 - Builders Accident
- What are the problems faced by other companies?
- Companies insured for Employers' Liability Insurance (from 1972) with these insurers can get 100% of claim costs from the FSCS, less the payments from the insolvent insurers.
- FSCS has raised a levy on all insurers to pay for these claims
- However, for pre-1972 there is no cover for companies insured by insolvent insurers

Estimation of numbers and costs - UK

3rd party rights

- Under 3rd party rights if the company a worker was employed by is insolvent, then they can claim directly against the insurer
- If both the insurer and company are insolvent, the claimant can claim directly to the insolvent Scheme, or the FSCS
- This also protects workers for pre-1972 where insurance was in place, but both company and insurer are insolvent

Estimation of numbers and costs - UK Financial impact on insurance market

- Need to assess insurer costs of total:
- Assume at least 50% of losses insured
- Thus insurer portion roughly £2-5bn discounted
- 6-15% of current market premium of £32bn
- In reality, reserves have been strengthened over a number of years as the size of the problem emerged
- Also, the impact on individual insurers can vary significantly from the market experience

Estimation of numbers and costs - Europe

Estimated undiscounted costs - £bn

Country	Low	-	High
•UK	9	-	22
•France	8	-	20
•Germany	7	-	18
•Italy	5	-	13
•Netherlands	5	-	11
•Switzerland	1	-	2
•Other Western Europe	6	-	14
•Total Europe	40	-	100

Source: PwC, Number of mesothelioma deaths from 'The European Mesothelioma Epidemic - Peto 1999'

Looking to the future

Future exposures

- Significant amount of asbestos still contained in buildings (estimated 500,000 buildings)
- HSE estimates that around 100 deaths a year may continue from current exposure levels
- Control of Asbestos at Work Regulations (CAWR 2002)
 - Place duty on those responsible for workplace premises
 - Very stringent – require identification and assessment of any risk of asbestos exposure
 - Firms fined even where no evidence anyone was exposed

Looking to the future

Final impact still uncertain

- Claim numbers still rising
- Significant revisions in projections over the past 5 years - could be changes of opinion as new data is available
- Europe still has a relatively low proportion of non-impaired claimants
- Will take many more years before more certainty is gained



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