

APH: How the Love Canal and Silicone Breasts Nearly Destroyed Lloyds

Younger Members' Convention - Warrington

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APH: How the Love Canal and Silicon Breasts Nearly Destroyed Lloyd's

- **A**sbestos - the miracle mineral that murdered millions
- **P**ollution - cleaning up after other people's filth
- **H**ealth Hazards - pestilent products that poisoned people

- How insurers have had to pay for them and make lawyers rich in the process

Largest Losses to the Insurance Industry

- September 11 Terrorist Attacks: \$30-58bn
- Hurricane Andrew, Florida 1992: \$21bn
- Northridge Earthquake, USA 1994: \$17bn
- Typhoon Mireille, Japan 1991: \$7bn
- Windstorm Daria, Western Europe 1990: \$6bn
- Windstorm Lothar, Western Europe 1999: \$6bn
- Hurricane Hugo, USA 1989: \$6bn
- US Asbestos: \$120bn (to world-wide insurance industry)
- US Pollution: \$30-40bn (to US insurance industry)

Q: What do these Claim Types have in Common?

- They are all LATENT claims
- Lengthy delays between original exposure / incident and the identification of the problem
- Further delays in reporting claims to insurers and in determining liability and resolving coverage issues
- Single claims affect many policy years
- Calendar year effects are common
- Subject to one-off changes (legislative, judicial etc.)
- Policies were written many years ago (1950's onwards) when such claims were not anticipated

Why are Asbestos and Pollution Claims so Large?

- Limits to amounts payable under Workers Compensation coverages (US equivalent to EL but no-fault basis)
- Borel case moved asbestos claims to General Liability coverages
- In the US awards determined by Juries not Judges
- Punitive damages are insurable in some US states
- Aggregation - many disputes and exceptions, but generally:
 - all asbestos claims against a single defendant in a given policy year become a single claim
 - for pollution, same is true for a defendant, site, year combination

Asbestos

What is Asbestos?

- Word is derived from ancient Greek and means “inextinguishable, unquenchable or unconsumable”
- Once considered as a “miracle mineral”
 - flexible, strong and durable
 - resistant to fire, heat and corrosion
 - 6 varieties, abundant quantities (most used White)
- Heavily used in a number of industries e.g.
 - shipbuilding
 - construction
 - used in brake linings on the railways
- The large number of uses leads to a large number of potential defendants

Asbestos Exposure

- 600,000 to 700,000 tons of asbestos imported into U.S. during last 10 years
- End uses not effectively tracked and warning label requirements are vague
- On-going exposure to:
 - asbestos containing products
 - asbestos in-place
- More than 27 million Americans with significant occupational exposure to asbestos during 20th century
- Typically American breaths ~1 million fibres per year from natural and man-made sources
- Still legal in the U.S. today - attempts to ban asbestos have been largely unsuccessful
- High usage continues in developing countries

Asbestos Diseases (1)

- Recognised cause of disease since 1920's
- 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 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

Asbestos - Claim Characteristics

- Mostly Bodily Injury claims
- Mostly under Product Liability coverages
- Claims tend to be able to be aggregated
- “Finite” population of original assureds?
- Liability no longer as big an issue

Asbestos Litigation

- At least 600,000 claims filed since early 1980's against:
 - asbestos producers (eg Johns Manville - largest producer in U.S. from 1940's to 1970's)
 - manufacturers and distributors of asbestos related products
 - companies owning or operating facility where asbestos related products were used
- Longest running mass tort litigation in U.S. history
- Awards can be large for the most severe forms of disease
 - mesothelioma claims tend to be settled for a few million dollars
 - non-malignant claim awards can also be sizeable due to "inventory" settlements

Deterioration in Asbestos Claims Environment(1)

- Higher than expected claim filings
 - Defendants catching up on claim filings after collapse of class action (“Georgine Settlement”)
 - Increased aggression of plaintiff attorneys
 - lawyers obtaining awards for unimpaired claimants as inventory settlements common
 - new law firms aggressively pursuing new claimants
 - geographical expansion of existing law firms
 - Acceleration of claim filings
 - anticipation of tort reform
 - bankruptcy creditor lists
 - statute of limitations
 - concerns money may run out

Deterioration in Asbestos Claims Environment(2)

- Coverage expansion
 - Reclassification of products claims as non-products claims by traditional products defendants with installation activities with exhausted (or nearly exhausted) products coverages
 - reinstates previously exhausted products coverages
 - opens up previously “untapped” non-products coverages
 - non-products coverages may not have aggregate limits
 - Roll forward of previously agreed coverage blocks into later years of cover
- CCR now in run-off, no longer settling claims

Deterioration in Asbestos Claims Environment(3)

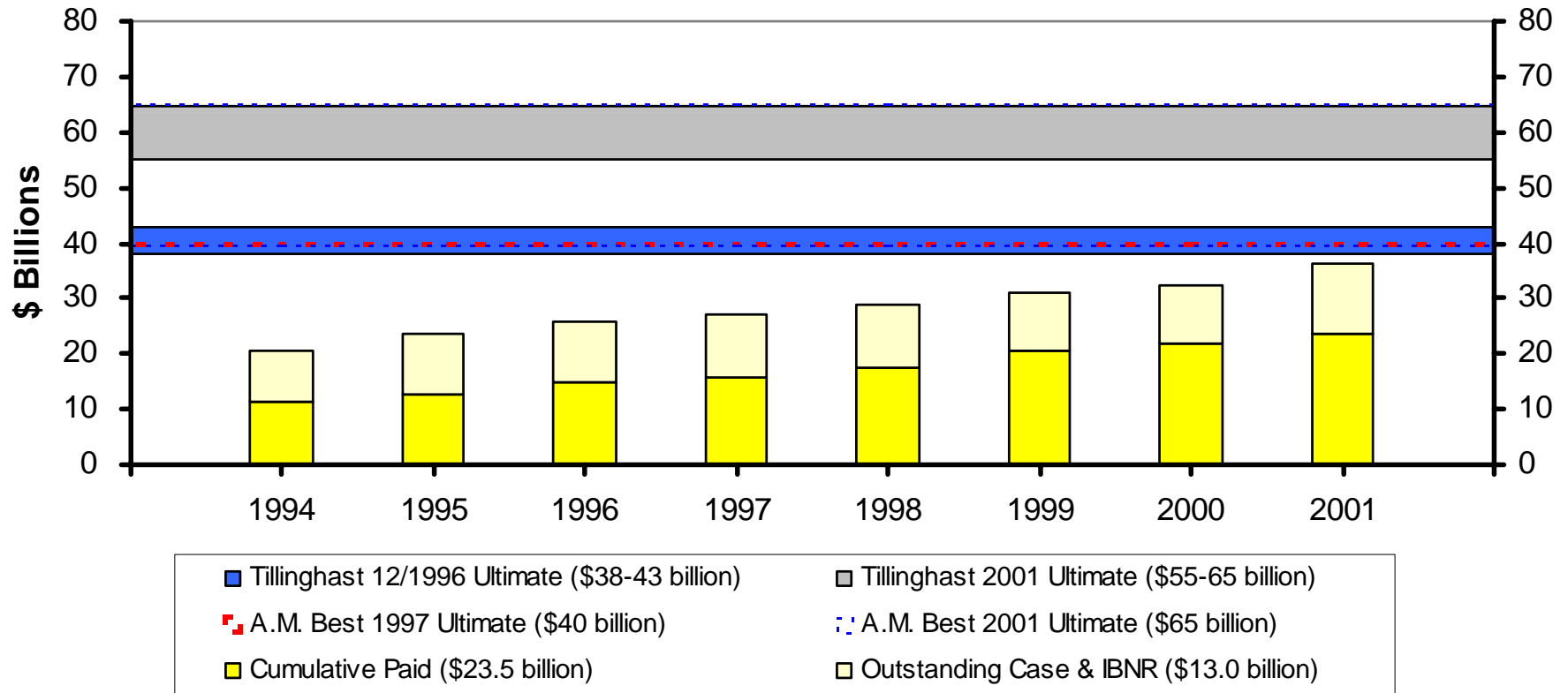
- Number of claims being filed against peripheral defendants is increasing as are the number of peripheral defendants
- By late 1990's non-traditional defendants account for 60% of asbestos expenditure
- Number of defendants has increased from around 300 (early 1980's) to around 6,000 according to RAND; covering the majority of industries in U.S. economy
- Partly in response to the increasing number of asbestos defendants that are filing for chapter 11 bankruptcy
 - Approximately 25 since 1 January 2000
 - Began in 1982 (Johns Manville, Amatex, UNR)
 - Steady trickle 1980's & early 1990's, tailed off mid 1990's, New wave from 2000 onwards

Deterioration in Asbestos Claims Environment(4)

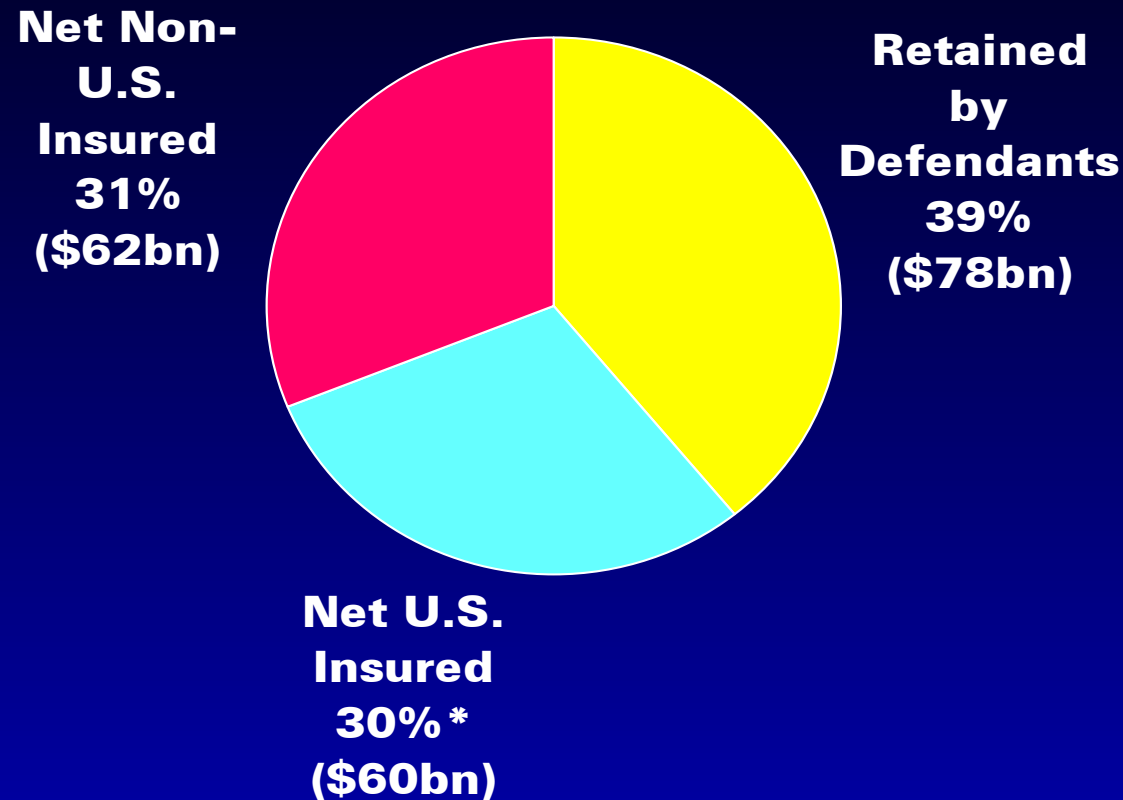
■ Consequences

- Dramatic increase in number of non-malignant and unimpaired claim filings
- Mix of claim filings shifting over time towards lower severity non-malignant and unimpaired claims
- Combined overall effect on ultimate cost to both defendants and the worldwide insurance industry has been upwards

Paid and Reported Loss and Expense Compared to Estimates of Net U.S. Ultimate Liability



How will the \$200 billion Ultimate be Shared between Defendants and the Insurance Industry? **



*\$60 billion mid-point of \$55 – \$65 billion range of the “Universe” of net liabilities to the U.S. P/C market.

**Additional details available in Emphasis 2001/3, “Sizing Up Asbestos Exposure,” a publication of Tillinghast – Towers Perrin, at www.towers.com.

Pollution

Pollution - Background (1)

- “Gradual” releases under General Liability and other policies not specifically written to cover environmental damage
- Excludes:
 - environmental Impairment policies
 - sudden and accidental incidents
- 1980 - CERCLA (Comprehensive Environmental Restoration, Compensation and Liability Act) aka “Superfund” passed by U.S. Government in response to public outrage over Love Canal
- Remediate existing sites posing hazard to human health or environment

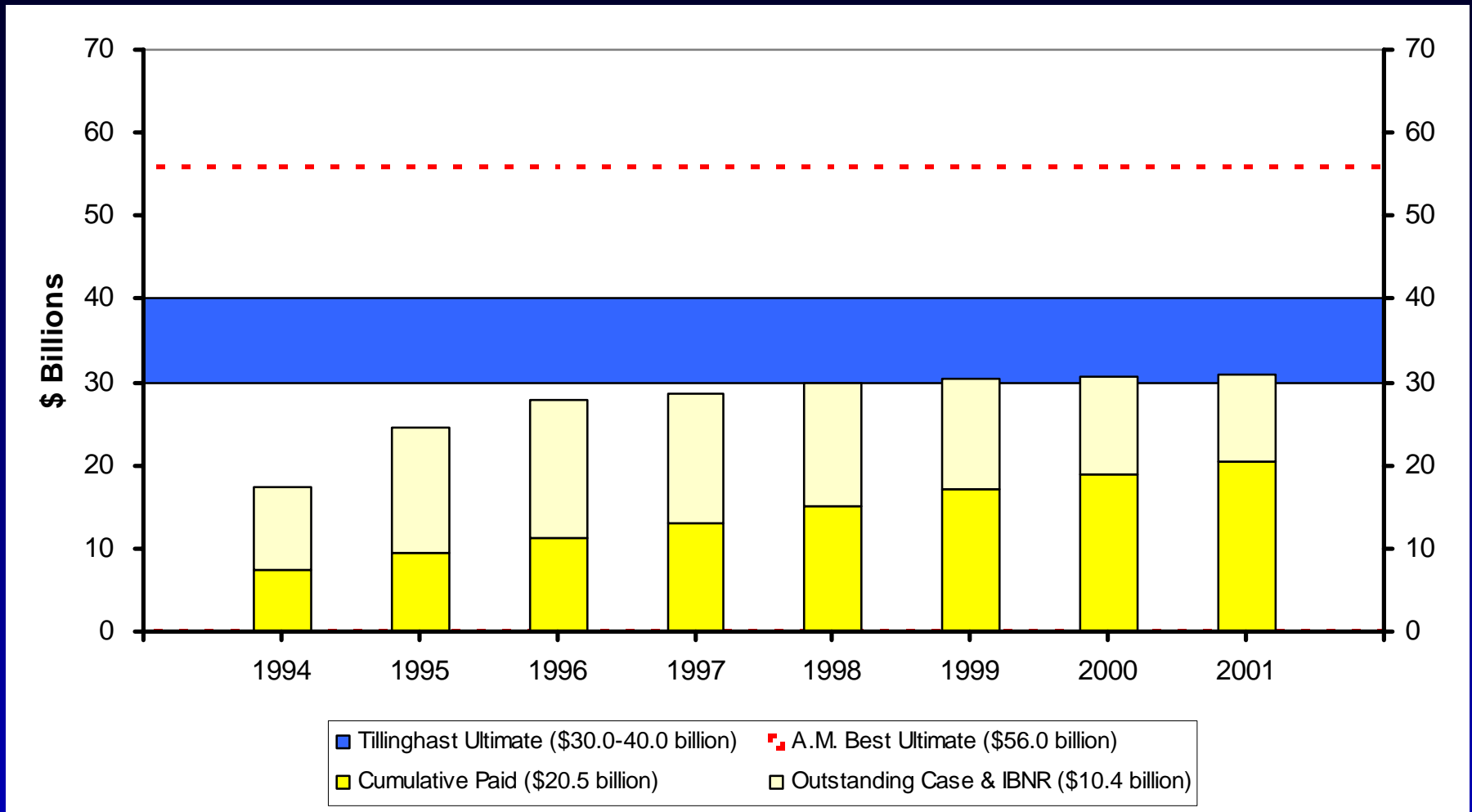
Pollution - Background (2)

- Retrospective - if polluted in past then liable to pay
- Punitive law based on principle of “polluter pays”
- Joint and Several liability
- EPA (Environmental Protection Agency) responsible for enforcing CERCLA
- Only need to identify one PRP (Potentially Responsible Party) - up to them to find the rest
- Worst sites placed on NPL (National Priorities List)
- CERCLA does not provide for third parties claiming bodily injury or property damage only covers remediation
- Rocky Mountain Arsenal claim made by Shell was first important CERCLA claim

Pollution - Claim Characteristics

- Mostly Property Damage
- Mostly General Liability
- Occurrence is per assured, per site, per year
- Allocation of claims to coverage blocks - different “triggers”
- Everyone can be a polluter
- Legal situation unclear
- Settlements are common place

Pollution: Paid and Reported Loss and Expense Compared to Estimates of Net U.S. Ultimate Liability



Asbestos v Pollution

Characteristic	Asbestos	Pollution
Methods used to Analyse	Not triangles Preferably exposure	Not triangles Preferably exposure
Uncertainty of Projections	Large	Large
Type of Claim	Bodily Injury	Property Damage
Type of Insurance	Products Liability	General Liability
Concentration of Claims	Vertical	Horizontal
Defendants	"Finite"	Anyone
Legal Situation	Defined ?	Not Clear

Health Hazards

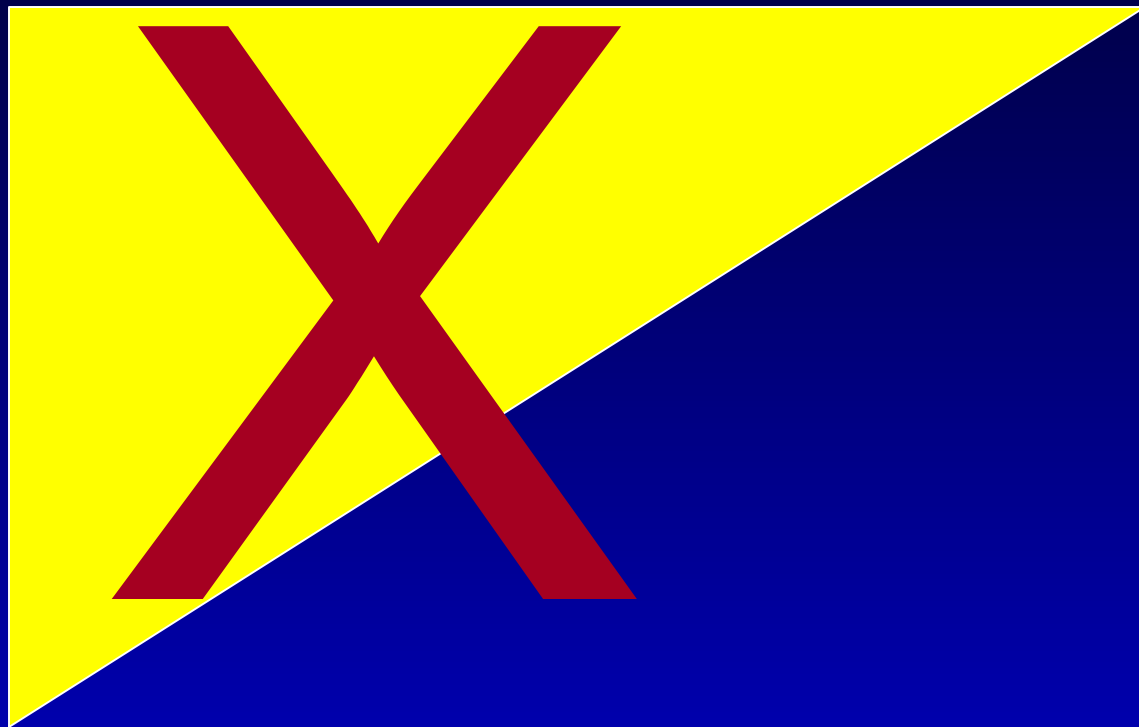
Health Hazards

- Agent Orange
- DDT (pesticide)
- Silicon Breast Implants
- Blood Products (HIV, Hepatitis)
- Repetitive Strain Injury
- DES (fertility drug)
- Mobile Phones
- EMF
- Stress
- Vibration White Finger
- Lead Paint
- Deafness
- Toxic Mold
- Toxic Playgrounds (Arsenic)
- Tobacco
- Economy Class Syndrome (DVT)

Health Hazards - Claim Characteristics

- Mostly Bodily Injury
- Mostly Product Liability Claims
- Aggregation possible as product liability claims
- “Finite” population
- New claim types emerging all the time

How do we Reserve for APH Claims?



Why do Conventional Reserving Methods Fail?

- Reporting delays can be huge due to long latency periods
- Calendar year effects can be significant
- Individual claims affect a number of policy years
- Past is not necessarily a good guide to the future (eg due to legislative changes)
- Different underwriting years develop differently!

What Approaches are Used in Practice?

- Approach is likely to depend on the available data and type of business (direct v reinsurance v retrocession)
- Ground-up exposure-based modelling - data critical, extensive data cleaning required
- Benchmarking methods:
 - market share
 - survival ratios
 - benchmark multiples (ultimate:incurred, IBNR:outstanding)

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