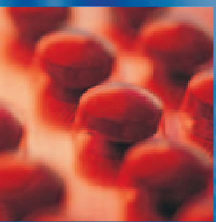
MARSH

Liability Insurance Buyers Report
Europe 2005



Chemicals, pharmaceuticals and life sciences industry report

Data summary and findings

This report discusses liability data, trends and aspects of the chemicals, pharmaceuticals and life sciences industries that will be relevant to insurance buying and risk management strategies of companies in this sector. It is a component of Marsh's *Liability Insurance Buyers Report, Europe 2005*, which supplements Marsh's global *Limits of Liability Report 2005* – the largest report of its kind.

visit: www.marsh.co.uk/insurancebuyersreport/

The data in this report is based on the prices paid for, and the volume bought of general and product liability for 123 companies in the chemicals, pharmaceuticals and life sciences industries across Europe.

- Companies across Europe in this sector have tended to buy higher limits as a result of drops in price. German companies surveyed in this report purchased the highest average limits in 2005 (€188m) and also paid the highest average price per million (€29,760). The higher limits bought in Germany reflect the wider cover and lower deductibles on policies of German companies.
- Eastern European firms purchased the lowest volume of limits (€3m). The lowest average price paid per million was €7,763 in the UK, according to our survey, reflecting the diversity and associated competition in the UK market.
- The highest price paid relative to revenue was €2.87 per thousand in Belgium, compared with the lowest price of €0.14 per thousand in the UK.

Country	Minimum limits (€millions)	Maximum limits (€millions)	Average limits (€millions)	Average cost per €1,000 revenue
Eastern Europe (8)	0.2	10.0	3.0	0.3
Spain (19)	1.0	90.0	13.0	1.0
Italy (16)	2.5	72.5	25.0	1.7
France (16)	4.0	475.0	68.0	2.0
Nordic Region (12)	13.4	214.9	74.0	1.6
UK (17)	1.4	282.8	83.0	0.1
Belgium (12)	2.5	550.0	91.0	2.9
Germany (19)	1.0	1000.00	188.0	2.0
Sweden (2)	*	*	*	*
Netherlands (2)	*	*	*	*

Figure 1

Total revenues (millions)	Minimum limits (€millions)	Maximum limits (€millions)	Average limits (€millions)	Average price per million	Average cost per €1,000 revenue
€0-€200 (75)	€0.2	€222	€19	€6,036	€1.44
€201-€500 (25)	€1	€177	€46	€16,288	€2.61
€501-€1,000 (14)	€7	€235	€101	€22,460	€3.17
€1,001-€5,000 (12)	€50	€590	€231	€28,384	€2.20
€5,001-€10,000 (2)	*	*	*	*	*
10,000+ (1)	*	*	*	*	*

*Numbers in brackets indicate total number of organisations surveyed. *Not enough data for analysis*

Figure 2

The liability environment

The rapid growth in treatments for age-related/degenerative and lifestyle-related diseases has expanded product liability for the life sciences industry. The major example over the last year is Merck's recall in September 2004 of its arthritis painkiller Vioxx, following allegations of associated heart problems. The company faces thousands of lawsuits in the US and around the world that potentially run into billions of dollars. In a judgement against the company in August 2005, the family of a man who died of a heart attack after taking the drug was awarded $253m by a Texas court, although this award is now subject to appeal.[1]

Liability is also escalating for vaccine producers. The rise of various sorts of flu such as Avian flu has created new market demand for vaccines, prompting many existing life sciences companies to step up their research efforts to develop them.

However, given that the stakes are so high when outbreaks of flu occur, producers of vaccines that experience problems in delivering products to the marketplace can face extra regulatory and social censure.

An illustration of this trend occurred in August 2004 when major US flu vaccine maker Chiron announced that millions of vaccines made in Liverpool, England, for the US market were contaminated. The UK government suspended the firm's production licence.[2] Shareholders pursuing a class-action lawsuit against the company allege that Chiron had known about the contamination problem for many years. While vaccines remain an attractive investment for many manufacturers, others are carefully considering whether the potential litigation risks outweigh the benefits of staying in the marketplace.

1 Wall Street Journal, 10 October 2005
2 BBC News (UK), 5 October 2004

Insurance buying in the chemicals and pharmaceutical industries

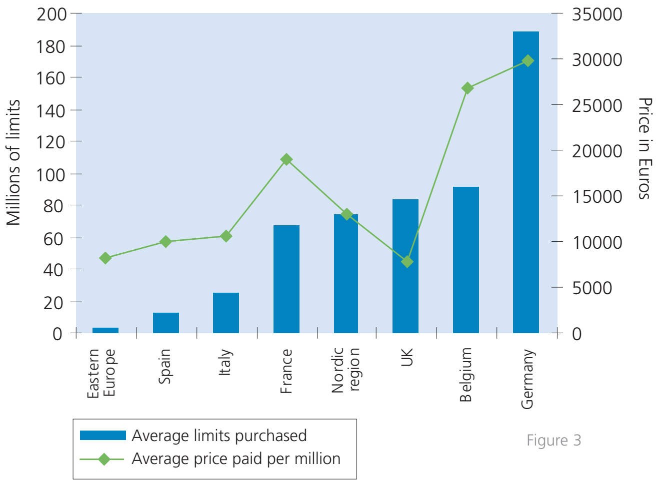


Figure 3

Underwriters stand firm

Over the last 24 months, the insurance community has retreated from covering the sector's product liability risks due to increased losses from several sources. One major US insurer, which used to provide $100m of cover, now provides only $25m. Underwriters are requiring greater levels of self-insurance and more restrictive policy wordings, and are imposing a greater number of substance or product exclusions, even going as far as to exclude whole classes of a drug. The extended reporting period for claims-made policies, which protects companies in the event of a non-renewal of a policy, has been reduced in many cases from five years to only 12 months. Two significant underwriters, AIG and XL, have cut back their participation and are not actively looking to write new business in the sector.

More broadly, the insurance community faces significant challenges in understanding newer, cutting-edge medical technologies and pricing risk accordingly. Examples include drug treatments based on an individual's genetic make-up, the growing of body parts from stem-cell technology, and the application of nanotechnology in the world of medicine.

The data for the tables right, showing market capacity and S&P ratings for insurers actively underwriting risk in the life sciences and pharmaceutical industries were collated in September 2005. Many underwriters impose conditions on writing new business, such as a preference for companies domiciled in their own country, a preferred position in the programme, or on condition of additional lines being placed (such as property) at the same time.

Market capacity and S&P rating – life sciences 2005 Figure 4

Market	Capacity (US$ million)	Rating
ACE	100	A+
Allianz	100	AA-
Arch	15	A- (AM Best)
AWAC	25	A+ (AM Best)
Chubb	5	AA
Constable	25	A+
Gerling	100	A-
HDI	75	AA-
Hannover Re	10	AA-
MARP	50	A+
Max Re	25	A- (AM Best)
Newline	15	A+
Partner Re	25	AA-
QBE	25	A+
SCOR	25	A-
STARR	25	AA
Swiss Re	100	AA
Zurich	50	A+

Market capacity and S&P rating – pharmaceutical industries 2005 Figure 5

Market	Capacity (US$ million)	Rating
ACE Bermuda/Dublin	100	A+
Allianz	100	AA-
Arch	15	A-
AWAC	25	A+
Baloise	25	BBB
Endurance	25	A+
Gerling	100	A-
HDI	100	AA-
MARP	25	A+
Max Re	25	A-
SCOR	25	A-
STARR	25	AA
Swiss Re	100	AA
Zurich	10-50	A+

Information for negotiation

Insurers remaining in the marketplace have stepped up their efforts to understand product-related risks. They are demanding more information relating to company culture and attitudes, the effectiveness of other internal risk controls, and the nature of commercial and marketing pressures when new drugs are launched.

The year on year comparisons in figure 6 and 7 are based on all the chemicals and pharmaceuticals companies that participated in our 2004 and 2005 surveys, 128 and 123 respectively, and should not be viewed as trend data.

Year-on-year comparison – average price paid per million limits

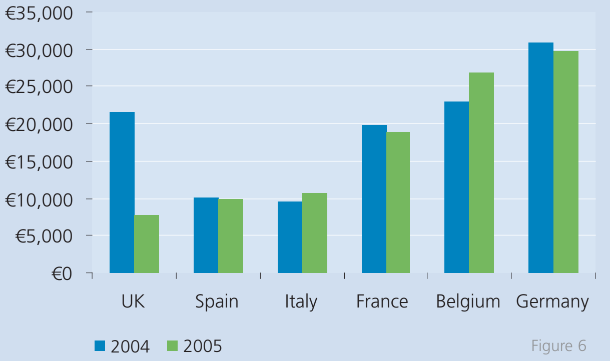


Figure 6

Year-on-year comparison – average limits purchased

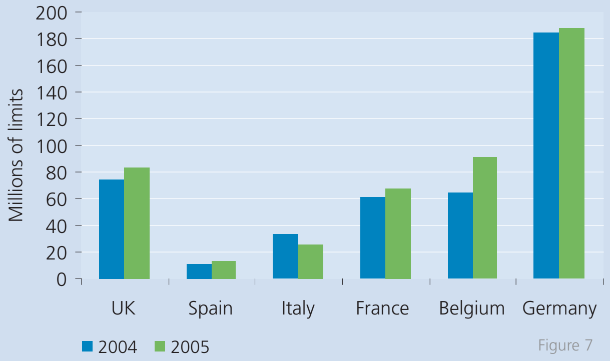


Figure 7

Those firms using risk management techniques to improve the quality of information provided to underwriters, and to demonstrate clear processes and strategies in place to mitigate risks and secure business continuity, are better placed to negotiate for and achieve reduced premiums and deductibles with insurers.

In order to cope with growing product liability exposures, life sciences firms are becoming more rigorous in their clinical trials and interpretation of data. They are also more wary of how they discuss issues of drug safety internally, given that internal emails and other documents can be used against them in a courtroom. Email evidence played a key role in the Texas Vioxx lawsuit mentioned earlier, for instance.

Product related risk increases

Product recall is a particular problem area for large global companies. Regulators are sensitive to consumer and media pressure where it is suggested that there is a product which may have harmful qualities. Pressure to withdraw a product can be immense, and will be at huge cost to the manufacturer. Smaller companies in the sector face fewer complications, although these firms tend to suffer more when facing product liability claims, given their limited financial resources and greater need for (often unavailable) risk transfer.

Another important issue currently facing underwriters in this sector is 'off-label products' – products used by doctors for treatments unintended by the manufacturer. More and more cases of harmful side effects associated with such treatments are coming to attention, giving rise to lawsuits from victims. Given that they can potentially pay out more in damages than individual doctors, manufacturers become targets, to the irritation of insurers who are forced to pay claims. Liability has become attached to manufacturers even though their drugs have more written warnings indicating that products should not be used for other medical treatments.

Chemicals manufacturers await REACH outcome

In a context where environmentalists, pressure groups and sections of the media increasingly warn against the potential risks associated with chemicals, product liability risks are also rising for chemical companies. Many demand the application of the 'precautionary principle' when new chemicals are introduced. This principle states that full knowledge about risk is not necessary in order to control or prohibit a substance, technology or product. Even though there may be thorough testing of a substance, the existence of doubt about its safety may be enough to restrict its presence in the marketplace.

The precautionary principle is embodied in the European Union's proposed regulatory framework for the chemicals industry – REACH (Registration, Evaluation and Authorisation of Chemicals). REACH is intended to replace over 40 existing EU directives in an attempt to uncover and outlaw dangerous chemicals and to raise health and environmental standards. It will require the testing and risk assessment of all new chemicals, and those chemicals that were placed on the market before 1981 for which little information exists.

Given that the REACH regulatory framework raises expectations about safety throughout society, businesses can expect to face broadening liability risk exposures. Class action product liability lawsuits may become a possibility, given that databases with detailed properties of products may be publicly accessible, coupled with the fact that under the EU's strict liability regime, unknowingly marketing a product would provide no defence in the event of a claim. Vendors and downstream producers will need to label all their products with full safety and usage information. However, any errors could lead to litigation. For their part, employees may be more inclined to sue if it is argued that chemicals used in the workplace are unsafe.

The next 12 months

- Product liability markets are likely to remain difficult as the insurance market seeks to achieve a balance between the manufacturer's desire to transfer risk and the insurance industry's ability to respond with a product that is affordable and provides coverage that meets the manufacturer's needs.
- The final shape of the REACH legislation will become clearer. At present it is subject to much wrangling between environmentalist groups and pro-industry bodies.

Using risk management to improve insurance buying

Companies that retain a focus on managing risk achieve significant discounts on premiums, and better negotiation on deductibles. In general terms, insurance market pricing operates around three interconnected areas:

- what is the available data, and what does it mean
- that the claim event was unpredictable, and was not caused deliberately by the insured
- economic efficiency.

Good risk management can help organisations provide insurers with greater awareness, not just in terms of data, but around the process in place and efforts to mitigate risk.

1. Risk management focus on providing information for insurers

Detailed, quantifiable risk information and loss estimates do impact insurance terms and conditions. Property surveys and business interruption reviews enhance the quality of underwriting information and provide maximum loss estimates to help the underwriter fix capacity and rating levels. They also audit the existing insurance programme and, subject to more detailed analysis, can help to create an understanding of an organisation's supply chain risk and single point of failure dependencies.

2. Risk management activities directed at improving the risk quality

An organisation can demonstrate its commitment to manage major exposures, such as fire protection, business continuity management and employers' liability. Clearly defined plans and procedures provide underwriters with evidence that the organisation is taking risk management seriously. They reduce the maximum loss potential to underwriters by ensuring that properly worked-out recovery strategies are in place.

Our case studies demonstrate real benefits achieved by firms that understand how risk management can improve their organisation's performance, profitability and growth:

Integrated risk management saves company £1.5m

Following an Initial Public Offering (IPO), a Marsh client in the chemical sector was required to provide evidence of effective corporate governance through developing a framework for managing risk. Marsh ran a series of Board-level workshops to identify the main risks to the business. A risk register was produced and subsequent controls allocated to senior management. The exercise integrated the risk management activity that had previously taken place in silos, and the cumulative effect was to save the company approximately 25% of the total cost of risk (£1.5m).

Creation and implementation of an enterprise risk management system

Marsh was asked to develop a corporation-wide risk management framework for a major European pharmaceutical company. This was needed to support and deliver best practice in corporate governance/risk management through the integration of bottom-up and top-down risk processes. Using our risk auditing tools, we were able to systematically analyse the company's risk profile. This resulted in risk identification and validation of key risks, the creation of an inventory of current controls and the implementation of new controls for both risk and financing to support legal and regulatory compliance. The output and resulting presentation of the company and its risks led to significant savings on its annual insurance premiums.

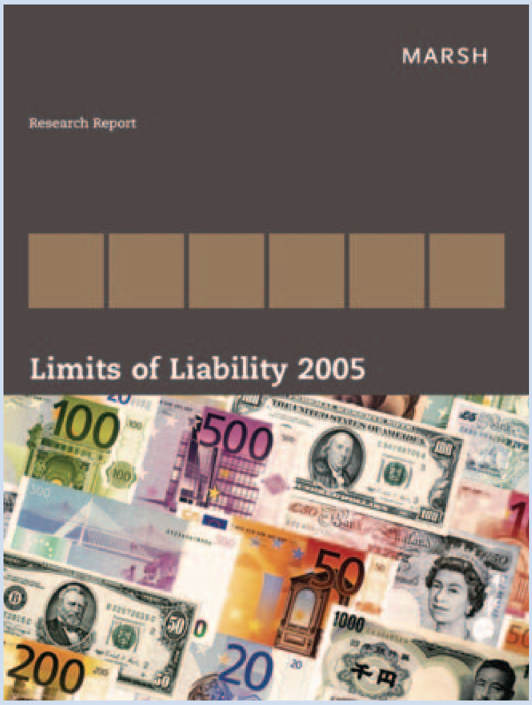
About Marsh

The Chemical and Pharmaceutical Industry Practice within Marsh is dedicated to providing risk management, risk financing, risk consulting services and insurance broking to companies operating within the sector. Our international industry experts are among the world's leading authorities on risk to these industries. In Europe we serve over 700 chemicals and pharmaceutical sector companies, working with them to 'improve' their risks, and representing them in the region's underwriter community. As part of the world's number one risk and insurance services firm, we deliver solutions for every aspect of risk and insurance facing European organisations, giving them access to the breadth and depth of services and solutions available across our global business.

By developing our expertise in this sector we are able to:

- identify trends affecting the industry and any associated risk issues as they emerge
- work with clients to evaluate and effectively manage their risks
- share best practice by analysing indemnity limits, claims trends and retention levels across the industry
- strengthen relationships and understanding with sector insurers
- design insurance programmes and service packages around each client and their specific need at an advantageous rate
- provide a unique methodology for business interruption risk analysis and quantification specific to the chemical and pharmaceutical industry, encompassing all elements – including business continuity planning – to improve risk profiles.

Marsh is the world's leading risk and insurance services firm, and a major brand of MMC, a global professional services firm with annual revenues exceeding $12 billion. MMC is also parent to Guy Carpenter, the world's leading risk and reinsurance specialist; Kroll, the world's leading risk consulting company; Putnam Investments, one of the largest investment management companies in the United States; and Mercer, a major global provider of consulting services. More than 60,000 employees provide analysis, advice, and transactional capabilities to clients in over 100 countries. Its stock (ticker symbol: MMC) is listed on the New York, Chicago, Pacific, and London stock exchanges. MMC's website address is www.mmc.com.



This chemicals and pharmaceuticals industry report, a component of the *Liability Insurance Buyers Report – Europe 2005*, supplements Marsh's global *Limits of Liability 2005* report, which is available on request. Limits of Liability contains data and analysis of 341 companies operating in the chemicals and pharmaceuticals industry around the world.

www.marsh.co.uk/insurancebuyersreport/

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