

## Diseases and conditions

### Reproductive problems

#### HUMAN INFERTILITY

*What the Berlaymont Declaration says:*



*In some EU Member States, large proportions of young men have semen quality so poor that it will seriously affect their chances of siring children.*

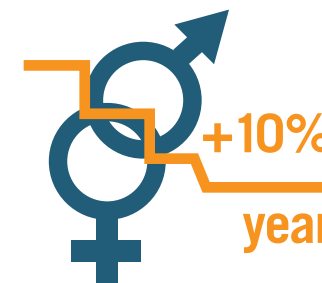
#### Incidence & Costs

By 1992, sperm quality across the European population was reported to have declined by 50% in the previous 50 years. (7) A recent study of 26,600 men in France showed sperm count had fallen by a third between 1989 and 2005. (8) Furthermore, a Spanish study found that even in young men, sperm concentration was falling by an average of two percent a year. (9)

An effect of low sperm count is to reduce the chances of conception in human reproduction, thereby increasing infertility rates across the affected population. Consequently, medical treatment such as Assisted Reproductive Technology (ART) may be sought. Clearly, though, not all ART results from male sperm deficiency. Women in Europe similarly face risks of infertility due to common female reproductive problems. For example endometriosis which increases the risks of infertility may be rising in incidence and appearing in younger women. (5)

An estimated one in six couples seeks help in conceiving a child. (10) The demand worldwide in 2010 was 48.5 million couples seeking treatment. (10) In the UK, one in 50 babies (2%) is born each year as a result of IVF. (11) In Belgium, Slovenia, Denmark, Netherlands and Sweden more than 3% of all babies born are conceived by ART. (10) Another study shows more than one in 25 children (4.2%) being born following ART treatment during 2002. (12)

The rate at which couples are seeking medical assistance due to infertility is increasing at more than 10% per year



The demand for treatment in Europe – as expressed in treatment cycles performed in European countries – has increased by 59% in the five years from 1997 to 2002 (from 204,000 to 324,000 cycles). (13) By 2009, the number of treatment cycles had increased to just over 537,000. (14) Recent reviews of trends in infertility predict that rates will continue to rise. (15, 16)

The 11,000 assisted pregnancies/births taking place in Denmark during 2010 cost more than €40 million. (17) A number of studies have developed a cost of ART per live birth resulting from this treatment, the costs comprising medical treatment costs only. For example in Denmark this is €11,310 (18) and in the Netherlands €51,822 in 2010. (19) Furthermore, ART typically costs up to 0.25% of public health service budgets. (14)

**Table 2**  
Costs and trends in human infertility

Endocrine- related disease or condition	Incidence/ prevalence trends	Cost of illness
Human fertility problems – sperm quality	Sperm quality has declined by 50% over the past 50 years	No cost data available
Human infertility inability to produce a live birth	An estimated one in six couples seeks help in conceiving a child Demand for ART is growing by 1-2% a year in Europe	Total annual ART cycle cost in EU28: €2.4 billion - €3.1 billion