

# STATISTICS IN FOCUS

# Population and social conditions

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# **DISABLED PERSONS: STATISTICAL DATA**

In 1991 and 1992, Directorate-General V - Employment, Industrial Relations and Social Affairs (Integration of Disabled Persons) - of the European Commission and the Statistical Office of the European Communities published two volumes entitled: "Disabled Persons: Statistical Data". These publications presented the statistical data available in the Member States and international organizations concerning the socio-economic situation of disabled persons in the Union.

The aim of the study was to provide statistics that would give a better picture of the characteristics of the population of disabled persons so as to identify their needs better and so contribute to a better formulation of policies to assist them.

The publications were updated in 1993. This new publication also sought to improve the comparability of the data between Member States and to provide fresh information on the socio-economic situation of disabled persons<sup>1</sup>. The study also allowed the statistical methods to be improved. This summary presents the main results of this update.

#### Population of disabled persons

The International Classification of Impairments, Disabilities and Handicaps (I.C.I.D.H.) gives a typology of the three dimensions of disability (in the broad sense).

Impairment: impairment is any loss or abnormality of

psychological, physiological, or anatomical

structure or function;

Disability: (in the strict

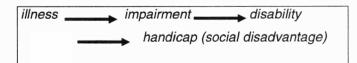
sense)

a disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human

being;

Handicap: (in the strict sense) a handicap is a disadvantage for a given individual, resulting from an impairment or a disability, that limits or prevents the fulfilment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual.

The chain of phenomena linked to the initial illness (including congenital illness and accident) is as follows:



Most surveys concentrate on impairment and disability, and handicap in the strict sense of the word is not always covered.

1) Note that the term "disabled persons" generally refers to the total population of persons with one or more of the three dimensions of "disability".

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For further information please contact: M.DE SMEDT Eurostat, L-2920 Luxembourg, tel. 4301-33673 Fax: 4301-34415 The number of persons with an impairment is very high: 36.7% in Denmark (1991), 19.9% in Spain (1986), 34.9% in the Netherlands (1986-88), 31% or 24.2% depending on the survey in the United Kingdom (1991 and 1989).

An impairment does not always lead to a disability. The number of persons with a disability is therefore lower. Data on the matter are available for some Member States only and are often quite old. Estimates were used in order to make certain projections. Data from surveys gave us the proportion of persons with a disability by age group in the total population. As a stable relationship was observed between this proportion and age, this information was used to estimate the population of persons with a disability for recent years (Germany, Spain, France, Netherlands and United Kingdom).

For those Member States for which no findings from surveys were available, social security data and data from the various services providing aid to disabled persons were used (Belgium, Greece, Italy, Portugal). So that all the population with a significant disability would be covered, information from a variety of sources was used (registers of persons receiving disability, occupational accident, occupational illness and social service pensions, disabled children's allowances, elderly persons' special invalidity benefits, war pensions, etc.). For some Member States (Luxembourg and Ireland), there were too few data available to make estimates of this kind.

So far as the breakdown by sex is concerned, the existing data show a higher rate of disability among women, partly as a result of their longer life expectancy.

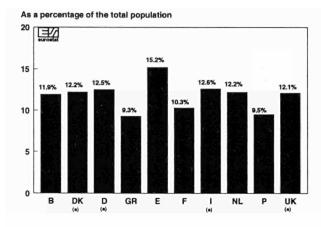
Figure 1 shows the estimate of persons with a disability as a proportion of the total population. This percentage varies between 9.3% and 15.2%. However, most Member States have a percentage close to 12%. This variation may be due for example to:

- methodological differences concerning the definition (impairment disability handicap) and the method of identifying persons with a disability (national surveys and data from social security sources in the broad sense). Spain is the only country whose survey distinguishes between the three concepts of the ICIDH, which may go towards explaining that Member State's high estimate,
- the age structure of the population. We do in fact observe that the proportion of persons with a disability increases very greatly with age,
- the technological and industrial characteristics of each Member State (for example: the rate of occupational accidents varies according to the sector of activity).

Figure 2 shows an estimate of the number of persons (not retired) receiving financial aid linked to a disability. In order to keep double counting to a minimum, financial aids granted in addition to a main measure have been excluded. Only the data for Germany and the Netherlands are free of double counting. In order to make the data more comparable, only pensions paid to persons aged 60 or under are included. The note on Figure 2 explains the methodology behind its construction.

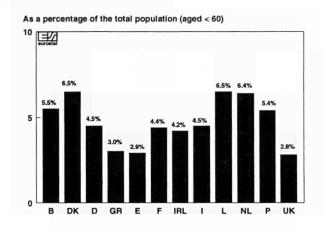
Figure 2 shows that the percentage of persons (not retired) receiving financial aid linked to a disability varies between 2.8% and 6.5% of the total population (aged < 60), most of the cases being between 4 and 5%.

Figure 1: Estimate of the population of persons with a disability



Source: Estimates based on data taken from national surveys: D, E, F, NL and UK. The other estimates are based on social security data. (a): 1991.

Figure 2: Estimate of the population of disabled persons receiving financial aid linked to a disability, 1991 (aged < 60)



Source: Ministries and institutions administering social security in the Member States. See the explanatory notes to the chart on page 3

#### Notes to Figure 2

**Belgium**: We took: persons under 60 years of age drawing invalidity pensions; persons aged no more than 59 drawing disabled adults' allowances (not retired); 10% of persons drawing war pensions; persons aged no more than 59 drawing occupational illness benefits; 36% of persons drawing occupational accident allowances and pensions; persons drawing family allowances for disabled children. The total of these beneficiaries includes some double counting. The total includes persons with a slight or severe disability.

**Denmark**: We added together: persons aged under 60 drawing the early retirement pension; persons drawing invalidity allowances; new occupational accident pensions for the last ten years; families benefiting from aid linked to a disability. The statistics used may overestimate the number of disabled children by including those with temporary problems. It should be noted that the total includes persons with no disability but who are socially disadvantaged.

**Germany**: The number of persons with a recognized severe disability includes beneficiaries under the "Law on Severely Disabled Persons" aged under 60. To this we added an estimate of the number of beneficiaries with less than 50% disability. The data available do not include the "New Länder".

**Greece**: We took into account the number of persons drawing invalidity pensions and invalidity allowances and 10% of persons drawing the military invalidity pension.

**Spain**: We took account of the number of persons aged under 60 drawing permanent invalidity pensions; temporary invalids; beneficiaries under the law on the social integration of disabled persons, and disabled children's allowances.

**France**: We took into account: the number of persons drawing invalidity pensions; persons receiving the grant for disabled adults aged under 60; 10% of military invalidity pensions; occupational accident pensions. In order to exclude retired persons, we took only 40% of the total; children receiving the special education allowance. The total includes some double counting.

*Ireland:* We included: persons aged under 66 drawing the invalidity pension; persons drawing the disability allowance; persons drawing the maintenance allowance; 50% of persons drawing occupational accident and occupational illness pensions, and children receiving care allowances. This total includes some double counting.

Italy: We took: persons aged under 60 drawing invalidity pensions; disabled persons aged under 60 drawing assistance pensions; 10% of persons receiving war pensions, and occupational disablement pensions paid to persons under the age of 60. It should be noted that a person may draw both the invalidity pension and the occupational disablement pension.

**Luxembourg**: We added together: persons aged under 60 receiving the invalidity pension; persons drawing the special allowance; 50% of persons drawing occupational accident pensions, and disabled and infirm children. The total includes some double counting.

**Netherlands**: We included: persons receiving the sickness allowance and persons aged under 60 receiving the invalidity allowance.

**Portugal**: We took: persons aged under 60 drawing invalidity pensions; persons aged under 60 drawing an invalidity pension as social assistance; persons aged under 60 drawing an annuity; 50% of persons drawing occupational illness or occupational accident pensions, and persons receiving the supplementary allowance for disabled children and young persons.

**United Kingdom**: We took the number of persons drawing: disablement benefit aged under 60; severe disablement allowance aged under 60; the reduced earnings allowance; 10% of persons drawing war disablement pensions, and the industrial disablement benefits paid to persons under 60 years of age. Most of the statistics noted relate to Great Britain only. The percentage is therefore calculated with reference to the population of Great Britain. The above total includes some double counting.

The percentage of persons with a disability differs from the percentage of persons receiving financial aid. This difference is due in particular to the following factors:

- the disability rate refers to the total population, whereas the percentage of beneficiaries refers to persons under 60. The rate of disability of persons under 60 years of age often varies between 6 and 8%,
- the granting of an aid is subject to certain conditions and most often to a minimum degree of disability.

Finally, we found that there is a relatively small number of women among the beneficiaries of pensions paid to active persons. On the other hand, they are more numerous than men among persons receiving social aid allowances. The difference is significant for occupational accident pensions, because men have a higher rate of professional activity and especially because of a concentration of male labour in certain industries where the occupational accident rate is relatively high.

### Origin of impairments

Surveys and social security data often distinguish between three types of origin of impairments:

- a) congenital and perinatal,
- b) accident and
- c) illness, ageing and "gradual progression".

"Illness" (including "ageing" and "gradual progression") is the main source of impairments. This origin correlates closely with age. In most Member States it explains around 80% of cases.

Occupational accidents and occupational illnesses explain around 5% of the impairments of the population aged 60 or under. This proportion declines when retired persons are included in the comparison basis, but increases if it is confined to persons active on the employment market.

Analysis of the annual number of new cases of permanent disability per 1000 employees reveals that agriculture, the extractive industries and building are the sectors which have the highest rates of accident and occupational illness.

# Breakdown by age group of persons with a disability

Observation by age group of the percentage of persons with a disability shows a stable and uniform relationship between this rate and age. A function with the following characteristics was estimated by econometric methods for Germany, Spain, France, the Netherlands and the United Kingdom:

- the rate of congenital and perinatal disability is a specific constant for each Member State,
- the percentage of persons with a disability increases with age,
- the growth rate of the proportion of disabled persons by age group is stable.

In all cases, the results are very significant and the estimators significantly different from zero.

Figure 3 shows the characteristic trend of the estimated prevalence rate.

For the estimate of the rate of disability, we used either data from national surveys or social security data (registers of persons drawing pensions).

In the former case (Germany, Spain, France, Netherlands and United Kingdom), the estimates give very significant results.

In the latter case (Belgium, Greece, Italy and Portugal), the statistics include beneficiaries with a minimum degree of disability. This method can give only a rough estimate of the prevalence of disability within an age group.

The rate of disability ranges from 1% for the very young to around 90% for the very elderly. Thus we see that the structure of the population by age group is a determining factor for the rate of disability at national level.

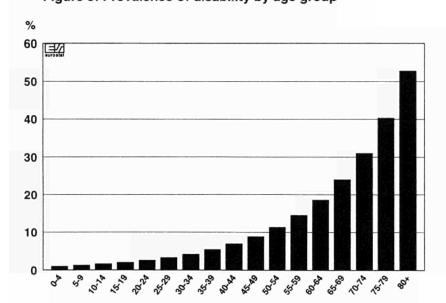


Figure 3: Prevalence of disability by age group

Relationship with the least squares method (of) the function h = Aexp(ct), where h = percentage of persons with a disability by age group, t = age, "A" and "c" are parameters to be estimated. The estimator of "A" measures the rate of congenital and perinatal disability, the estimator of "c" measures the growth rate of the percentage of persons with a disability by age group. The regression was made on the disability prevalence rate by age group. The data for France were used, being the most representative. Then these estimators were used to calculate the number of persons with a disability in 1992.

# Degree of disability and nature of impairment

So far as the breakdown of disabled persons by degree of disability is concerned, the data available show that the distribution is not uniform. In general, persons with slight disabilities represent a high proportion. Generally speaking, a smaller number of disabled persons corresponds to a higher degree of disability.

The conclusions that can be inferred from this for the breakdown by type of impairment are approximate. Comparability of the data is in fact made difficult by:

- the use of different classifications: as mentioned earlier, the International Classification of Impairments, Disabilities and Handicaps (ICIDH) is not used by all Member States, nor by all services within a country,
- the coverage of different populations by the data available: some include small groups (such as persons in establishments), others do not.

Persons with an intellectual or mental impairment represent between 5 and 15% of the disabled population, those with a sensory impairment 10 to 18%, and those with a physical impairment 50 to 80%. Among the latter, impairment of the locomotor system is predominant.

## Education of disabled young persons

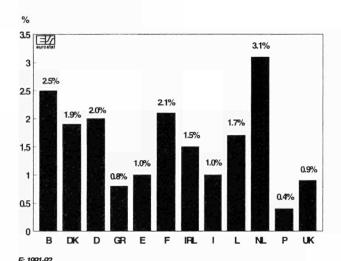
There are very few data on the number of disabled pupils in ordinary education. The information available shows that such pupils are mainly in primary school classes. They are generally pupils with slight learning difficulties or a language and speech impairment.

So far as disabled pupils in special education are concerned, Figure 4 shows the number of pupils in special education as a proportion of total numbers in education (including university) in the various Member States. The figures do not include special classes integrated within ordinary schools. While a high proportion may reveal a highly developed system of special education, it may also indicate the absence of a policy of integration.

In general, among pupils in special education a high proportion of young persons have an intellectual impairment (40 to 68%). The proportion of pupils suffering from a physical impairment varies between 6 and 7% in general, whilst that of pupils with a sensory impairment varies between 5 and 7%.

The level of education reached by the total population of disabled persons is often low. In some Member States (Greece, Italy, Spain), over 80% of disabled persons are either illiterate or have not progressed beyond primary level.

Figure 4: Pupils in special education as a proportion of the total number in education (including university) (1990-91)



Source: Ministries of Education

### **Employment of disabled persons**

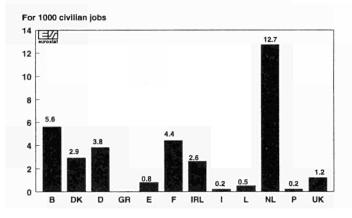
**Sheltered employment** provides a professional activity in a sheltered workshop or an "occupational therapy centre". It is one of the main policies for the professional integration of disabled persons who cannot be integrated into an ordinary work environment.

Figure 5 shows the proportion of disabled workers in sheltered employment to 1000 civilian jobs. Two groups of countries can be distinguished: in the first (Denmark, Germany, France, Ireland), this proportion is between 2‰ and 5‰. In the second (Spain, Italy, Luxembourg, Portugal, United Kingdom), sheltered employment is not very well developed (proportion close to or below 1‰). Finally, the data for the Netherlands show a very high proportion of disabled persons in sheltered workshops.

In general, the large majority of persons in sheltered workshops are aged between 20 and 40 and are intellectually impaired.

In some Member States, the **employment obligation** (quota system) requires firms of a certain size to employ a set percentage of disabled persons. This system is one of the main instruments for the professional integration of disabled persons into the ordinary work environment.

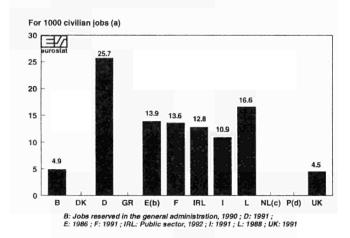
Figure 5: Sheltered employment (1991)



Source: Ministries of Employment

Figure 6 shows that the quota is generally between 10% and 15% of total civilian employment. If we take account of the fact that SMEs are not covered by the employment obligation, the actual rate is higher. Further research would be desirable to establish more detail about the characteristics of persons employed under the quota system and the firms who employ them.

Figure 6: Employment of disabled persons in an ordinary environment (quota)



Source: Ministries of Employment

#### Notes to figure 6

(a): The basis for comparison includes all civilian jobs. If we take only jobs in firms covered by the employment obligation, the actual rates are as follows: D: 44%, F: 30%, UK: 7% (private sector).

(b): The data are not really comparable with those for the other Member States. They are taken from surveys and not from registers.

(c): Persons drawing an invalidity pension with a job in an open environment represented 5.3‰ of total civilian employment in 1991.

(d): The 1992 survey estimates the number of disabled workers to be 9‰ of total civilian employment.

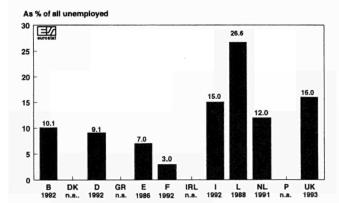
### Disabled persons unemployed

The available data concerning the unemployment of disabled persons come mainly from the registration of the disability with the employment services. Some persons with a slight amount of disability might however not reveal their disability so as to avoid "stigmatization" reducing their chances of finding a job.

The statistics on employment and unemployment do not allow us to establish the rate of unemployment among disabled persons for recent years. Also, most of the data on employment are concerned with the quota system. This reduces the basis for an unemployment-employment comparison. We therefore preferred to calculate the disabled persons unemployed as a proportion of the total unemployed population.

Figure 7 shows that in general disabled persons are over-represented in the total unemployed population. The proportion of disabled persons unemployed is in fact generally higher than 10% of all unemployed persons, whereas the proportion of disabled persons of working age in the total population of the same age group varies between 6 and 8%.

Figure 7: Disabled persons looking for a job as a proportion of all unemployed



D : Old Länder only. P : severely disabled unemployed persons represented 1% of the unemployed in 1992. UK : figure for Great Britain only

Source: Ministries of Employment

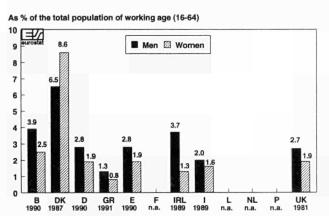
It should be noted that it is difficult to make such a comparison of the situation between Member States if those States follow different economic cycles. Interpretation of Figure 7 must in fact take account of the following: in an economy close to full employment, disabled persons may form a high proportion of the total population of the unemployed. As the economy moves away from full employment, two stages can be distinguished: in the first stage, assuming that disabled persons are the first to be made redundant, then the proportion of disabled persons unemployed increases; in the second stage, the rise in the unemployment rate and mass redundancies may cause the proportion of disabled persons to fall. A high proportion of disabled persons may therefore be encountered either in a situation of full employment or at the start of a process of redundancies.

So far as the breakdown by sex of unemployed disabled persons is concerned, the available data (Germany, Spain, France and United Kingdom) show that there are fewer women in absolute terms than men. Analysis of the employment of disabled persons moreover shows that there are also fewer women in the total. The number of disabled women who are active (with a job or unemployed) is in fact small.

# Disabled persons who are economically non-active

The available data come mainly from the Member States' labour force surveys (Figure 8).

Figure 8: Economically non-active disabled persons in the total population of working age



Source: Statistical Offices

In general, economically non-active disabled persons represent 2% of the total population of working age. The proportion of disabled men is higher than that of women.

#### For further information, contact:

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### See also:

"Classification internationale des handicaps: déficiences, incapacité et désavantages. Un manuel de classification des conséquences des maladies", W.H.O. - CTNERHI - INSERM, diffusion P.U.F., Paris 1988.

"Disabled persons: statistical data - Second edition (1995)" - French version is available. English and German versions to be published.

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