

Wages of Persons with Disabilities

Annual Results

Use of the Annual Wage Structure Survey and of the State Database of Persons with Disabilities

Methodology and overview of the statistical operation

June 2014

1 Introduction

The group of persons with disabilities has been a priority line of action among the different social policies developed in recent years. One of the essential purposes of said policies is the integration of these persons within the workplace.

In order to evaluate the different action plans adopted, it is necessary to have data available enabling the assessment of the effectiveness of said plans. In addition, it is necessary to have updated data available regarding the situation of persons with disabilities.

Among the sources the INE has available on disability are the Disability, Independence and Dependency Situations Survey 2008 (EDAD 2008) and the 2002 and 2011 ad hoc modules for the Economically Active Population Survey (EAPS), regarding Persons with disabilities and their relationship with employment, and regarding Health Problems and their relationship with employment, respectively. These surveys provide a wealth of information regarding the group of persons with disabilities, but due to their frequency, it is not possible to ascertain the short-term impact of social policies geared towards this population group.

For this reason, in 2009, the CERMI, the ONCE Foundation, the IMSERSO and the INE signed a partnership agreement and created a working group whose purpose was to obtain information regarding disabilities and the labour market through the integration of administrative records with existing surveys.

As a result of this agreement, in 2010, the "Employment of Persons with Disabilities (EPD)" statistics were published for the first time with data relating to 2008, which provides up-to-date information that is comparable over time, regarding the employment situation of persons with disabilities, through the integration of data from the Economically Active Population Survey (EAPS) with that of the State Database of Persons with Disabilities (BEPD), provided by the IMSERSO.

The BEPD is a database with a national scope which registers the assessment files of persons with disabilities. It provides information regarding the features of those citizens who have officially been recognised as persons with disabilities by the State administrative bodies with jurisdiction.

The Employment of Persons with Disabilities has become an annual continuous statistical operation, and has been completed by introducing data regarding sheltered employment, benefits and dependency, the data being obtained through new cross-matching with administrative registers from the Social Security General System (Tesorería General de la Seguridad Social), the National Social Security Institute of Spain (INSS) and the SAAD, a 'System for Personal Autonomy and Care of Dependent Adults', dependent on the IMSERSO (Institute of Social Services and the Elderly).

In view of the importance of maintaining and expanding the performance of these studies regarding persons with disabilities, in such a way that efforts are combined and work, knowledge and experience are shared on an ongoing basis,

the four institutions, to which the Directorate General for Coordination of Sector Policies on Disability (part of the Ministry of Health, Social Policy and Equality) was incorporated, they have renewed the partnership agreement annually and have broadened its analysis objectives, by proposing a new study in order to determine the feasibility of obtaining wage data relating to the group of persons with disabilities, by means of the joint use of the BEPD and the Wage Structure Survey (WSS) for 2010, conducted by the INE. The ONCE (Spanish National Organization for the Blind) Foundation partially funded this study.

Said work led to the implementation of a new statistical operation called "Wages of Persons with Disabilities (WPD)", published for the first time in 2013.

The WPD has been established as an annual continuous survey. Since the WSS is a four-yearly survey, in the years in which it is not carried out, the Annual Wage Structure Survey is performed, which provides estimates for the annual gross earnings per worker comparable to WSS data. As a result, the Wages of Persons with Disabilities survey must be adapted to the AWSS, in the years in which the latter is carried out.

The methodology employed is presented in the following chapters of this document.

2 Information sources

Three different information sources have been used for compiling this survey:

1.– The **Annual Wage Structure Survey (AWSS)**, which is an annual statistical operation that obtains information on wages, comparable with the Wage Structure Survey, though less detailed, is carried out in order to complete the data from the Wage Structure Survey in the years in which the latter is not performed.

The information from the AWSS is obtained from the joint use of the General Data File on Affiliation to Social Security and of the statements from Model 190: Annual summary of Withholdings and Payments on Account of income tax, from the Spanish Tax Administration Agency (AEAT) and the Regional Treasury of Navarra, along with the occupation and time worked variables from the survey, attached to the Quarterly Labour Cost Survey carried out by the INE.

2.– The **State Database of Persons with Disabilities began in 1992** with the data on those persons whose disabilities had been recognised as of the beginning of the 70s.

It contains data for all persons resident in Spain who have applied to have their degree of disability assessed, with persons considered to have disabilities when the degree thereof is greater than or equal to 33% (requirement for qualifying for certain benefits, tax breaks, discounts on social security contributions, parking cards and others) ¹.

3.– The **General Social Security System (TGSS)**, which provides information regarding the measures undertaken in order to encourage the employment of persons with disabilities. Among these measures, worth noting are those aiming to stimulate ordinary employment by means of incentives, such as grants, subsidies and reductions in social security contributions.

¹ Article Point 1.2 of Law 51/2003, of 2 December, LIONDAU, Spain's Law of Equal Opportunities, Non-Discrimination and Universal Access for Persons with Disabilities, sets out that those persons recognised to have a degree of disability greater than or equal to 33% shall be recognised as persons with disabilities.

3 Objectives of the project

The main purpose of this project is to obtain data about the earnings of workers with disabilities, and to compare such data with data for workers without disabilities.

The aim is to provide the wage distribution for persons with certified disabilities, depending on:

- The personal features of those workers: sex, age, nationality.
- The characteristics of the job post and the company: occupation, type of contract (permanent, temporary), type of working day, size of the company, activity sector.
- The disabilities: type of disability, degree of disability, measures to promote employment (grants and specific contracts for persons with disabilities).

4 Characteristics of the project

As mentioned, this research is obtained from the cross-matching of a register (State Database of Persons with Disabilities) and a survey (Annual Wage Structure Survey).

Disabilities are an atypical phenomenon that affects a low percentage of population, but that has significant effects on the participation of the persons affected in the labour market.

In addition, the database from which the data regarding the wages of persons with disabilities is obtained, the Annual Wage Structure Survey, was designed for objectives other than those related to disabilities.

As a result, the sample size obtained is limited, preventing a detailed use at certain breakdown levels. The main scopes of these statistics are as follows:

4.1 Population scope

This includes the wage earners that make Social Security contributions under the following conditions:

- They are registered in the Social Security General System, and their economic activity is registered in Sections B to S of CNAE-2009.
- They are registered in the Special Category for Offshore Workers, and their economic activity is Sea transport (Division 50 of CNAE-2009).
- They have been registered in Social Security for at least 2 months during the reference year, one of these months being October.

It excludes people employed in the Agriculture, Households as employers of domestic personnel, Extraterritorial organizations and bodies and civil servants recipients of the Public Administration mutual insurance.

It also excludes all chairpersons, members of administrative boards, and in general, all personnel whose remuneration is not mainly in the form of wages, but rather commissions or benefits.

4.2 Geographical scope

The entire national territory is studied.

Since disabilities are an atypical phenomenon, the size of the available subsample of persons with disabilities is not enough to be able to have independent data available for each Autonomous Community. Thus, information is provided by aggregating Autonomous Communities, and this aggregation is made by following the European standard, at the NUTS1 level.

4.3 Reference period

The reference period is the calendar year, so only annual results may be obtained.

4.4 Units of analysis

The random unit selection procedure corresponds to a stratified two-stage sampling, in which:

- The first-stage units are the Social Security Contribution Accounts.
- The second-stage units are those Workers associated with said Accounts.

The Social Security Contribution Account is an administrative concept traditionally used in wage and labour cost surveys. It comprises a group of workers employed by others, who carry out their labour activity in one or more workplaces of the same company, within the same province, and in general, although not necessarily so, as part of the same main activity and with uniform features as regards Social Security contributions.

Among the studied wage-earners, we focus on persons with disabilities.

4.5 Target variables of study

4.5.1 WAGE VARIABLES

The wage data is obtained using the data from the Annual Wage Structure Survey (AWSS), and therefore, the terminology related to wages totally corresponds to that of the AWSS.

The main wage concepts considered are:

- **Wage earnings or simply earnings:** these comprise the total wages received in cash and remunerations in kind. The gross accrued income is used, that is, before making deductions from Social Security contributions by the worker or Income Tax withholdings.
- **Earnings per worker per year:** the total payments received per worker during one year.
- **Earnings per hour and year:** the total payments received over the course of one year, divided by the hours agreed per year.
- **Wage ratio** (between two categories): this is defined as the quotient between those earnings corresponding to the first category, and the earnings corresponding to the second category.

When this ratio equals 1, there is equal pay for both categories. The further the ratio deviates from 1, the greater the pay inequality is; the earnings are higher for the first category when the value is over 1, and they are higher for the second category when the value is under 1.

The Wages of Persons with Disabilities statistics provides information in the wage ratio between persons with and without disabilities, in terms of annual earnings.

4.5.2 DISABILITY VARIABLES

With regard to the disability terminology, this is a complex phenomenon which reflects an interaction between the features of the human organism and those of the society in which a person lives.

Since this study is based on the use of administrative registers, the definition of disability used here is restricted to the legal concept.

Thus, the concepts used relating to the group of persons with disabilities are:

- **Disabilities:** for the purposes of these statistics, those persons with a degree of disability greater than or equal to 33%, according to the evaluation process established by RD 1971/1999 and amended by RD 1856/2009, are considered to be persons with disabilities.

The consideration of persons with disabilities is established in point 1.2 of Law 51/2003, of 2 December, LIONDAU. This article establishes that those persons for whom a degree of disability greater than or equal to 33% has been recognised shall be considered persons with disabilities.

The process for recognising the degree of disability is established in RD 1971/1999, amended by RD 1856/2009.

- **Impairment:** any organic or functional disorder leading to a disability.
- **Measures to promote employment:** One way to counteract the negative trends of the economic activity situation of this group of persons is by adopting measures aiming to promote their inclusion in ordinary employment, that is, favouring their preferably permanent hiring and their job tenure.

Among the said measures, worth noting are the reductions in social security contributions, both for wage-earning workers and for freelance or self-employed workers.

Regarding wage-earning workers, there is an additional measure adopted to promote ordinary employment: the specific contract modality for workers with disabilities, in which, not only does the employer obtain bonuses in social security contributions, but certain grants are considered as well.

4.6 Classification variables

1. Sex
2. Age groups
3. Type of working day
4. Type of contract
5. Occupation groups
6. Size of the unit
7. Activity sector
8. Groups of Autonomous Communities (NUTS1)
9. Type of disability
10. Degree of disability
11. Subsidies or reductions due to disability
12. Specific contract for workers with disabilities

5 Information processing

The State Database on the Employment of Persons with Disabilities (BEPD) is filtered in order to ensure the correct identification of all of its records, and to delete the records of deceased persons and of residents in group establishments. To this end, it has used the Continuous Municipal Register and the Death Statistics files for contrasting purposes.

The following crosses the AWSS sample file with the BEPD, adding the information from the administrative source to the survey information.

On the other hand, due to the Social Security Registration File submitted by the General Social Security System (TGSS), the variables relating to measures encouraging employment (specific contracts for persons with disabilities and reductions/discounts in the contribution quotas) have been incorporated, and in addition, the subsample has been completed of persons with disabilities within the AWSS sample with those persons who could not be identified with disabilities through the BEPD, but who, nevertheless, appear in the TGSS with a degree of disability greater than or equal to 33%.

It must be indicated that the validity of all these crossings is controlled using the joining of the following measures, whose union provides admission/refusal criteria of the crossings carried out:

- a) Measurement of similarity of name and surnames (INE routine of comparing alphanumeric strings defined and implemented in the Employment Area of persons with disabilities)
- b) Measurement of the comparison of the date of birth
- c) Measurement of the similarity of the Individual Identifier (IPF)

Once the variables relating to disabilities are linked to the sample of the AWSS, said information is sent to the State Tax Administration Agency and to the Treasury of Navarra (through the Statistics Institute of Navarra) for crossing with the Annual Summary of Withholdings and Advance Payments on Account of Income Tax (Model 190).

Because the samples are from random contribution accounts and workers, through an elevation process, we will obtain the average values of the annual earnings, by economic activity, Autonomous Community, etc. Wage distributions will also be able to be obtained.

6 Estimators and sampling errors

6.1 Sample

The random sampling process of units in the Annual Wage Structure Survey corresponds to a stratified two-stage sampling, where the first-stage units are the Social Security contribution accounts, while the second-stage units are the workers.

The strata include each first-stage unit according to its Autonomous Community, economic activity (according to the national classification in force) and size.

Eight size brackets are considered. These are as follows:

1. 1 to 4 workers
2. 5 to 9 workers
3. 10 to 19 workers
4. 20 to 49 workers
5. 50 to 99 workers
6. 100 to 199 workers
7. 200 to 499 workers
8. More than 500 workers

This last size group is studied comprehensively, and in some very large contribution centres, 50 workers are selected.

The list of units selected in the first stage is submitted again to the General Social Security System (TGSS), which obtains the list of workers who have been registered for at least 2 months in Social Security, one of these months being October of the reference year. Workers are selected from this list as the second-stage units.

Lastly, the subsample of persons with disabilities is identified within the sample of workers, via the crossing of the latter with the State Database of Persons with Disabilities and with records from the General Social Security System (TGSS).

6.2 Estimators

Separated ratio estimators are used, with the auxiliary variable being the number of workers in each establishment, according to the directory of Social Security Contribution Accounts.

For the economic data of worker j from establishment i , in economic activity r , of size h and Autonomous Community t , the first- and second-stage elevation factors are, respectively:

$$F_{1j} = \frac{\sum_{i=1}^{N_{rth}} D_i}{\sum_{i=1}^{n_{rth}} D_i} \quad y \quad F_{2j} = \frac{B_i}{b_i}$$

Where D_i is the number of workers in the directory in establishment i , B_i is the number of workers in establishment i affiliated with Social Security during the entire month of October in the reference year, and b_i is the number of workers according to the sample collected.

Then:

$$GH_c = \frac{\hat{X}_c}{\hat{Y}_c} \quad y \quad GT_c = \frac{\hat{X}_c}{\hat{Z}_c}$$

are the earnings per hour and the earnings per worker for any cell C of the table to be created (by economic activity, occupation, sex, Autonomous Community, etc.).

Being:

$$- \hat{X}_C = \sum_{j \in C} F_{1j} * F_{1j} * X_j \quad (\text{Ganancias anuales})$$

$$- \hat{Y}_C = \sum_{j \in C} F_{1j} * F_{1j} * Y_j \quad (\text{Horas})$$

$$- \hat{Z}_C = \sum_{j \in C} F_{1j} * F_{1j} \quad (\text{Trabajadores})$$

j refers to the records that meet the conditions of cell C .

6.3 Sampling errors

Calling h the crossing of the Autonomous Community, economic activity and size variables, yields:

$$\varepsilon(\hat{X}_C) = \frac{\sqrt{\hat{V}(\hat{X}_C)}}{\hat{X}_C} * 100$$

where

$$\hat{V}(\hat{X}_C) = \sum \hat{V}(\hat{X}_{Ch}), \quad \hat{X}_{Ch} = \sum_{j \in h, C} F_{1j} * F_{2j} * X_j$$

and

$$\hat{V}(\hat{X}_{Ch}) = \frac{N_h(N_h - n_h)}{n_h} * \frac{\sum_{i=1}^{nh} (\hat{X}_{C_i} - R_{Ch} * D_i)^2}{nh - 1} + \frac{N_h}{n_h} * \sum_{i=1}^{n_h} \frac{B_i(B_i - b_i)}{b_i} * S_{C_i}^2$$

being

$$- \hat{X}_{C_i} = \frac{B_i}{b_i} * \sum_{j=1}^{b_i} X_j \quad \text{donde } X_j = 0 \text{ si } j \notin C$$

$$- R_{C_h} = \frac{\sum_{i=1}^{n_h} \hat{X}_{C_i}}{\sum_{i=1}^{n_h} D_i}$$

$$- S_{C_i}^2 = \frac{\sum_{j=1}^{b_i} \left(X_j - \frac{\sum_{j=1}^{b_i} X_j}{b_i} \right)^2}{b_i - 1}$$

The most relevant estimator variation coefficient tables are published, distinguishing between the total population, with and without disabilities.

7. Publication of results

Dissemination of the information from the Wages of Persons with Disabilities is performed via a press release in which the main data is mentioned. At the same time, the results tables are available in INEbase. Their index is provided below. This addresses the objectives of the project:

- On the one hand, it aims to compare the wages of persons with disabilities with the wages of persons without disabilities
- On the other hand, it provides detailed information regarding the wage distribution of persons with disabilities, analysed depending on the main features of the disability.

In addition, it includes sampling errors for the main analysis variables, in order to have the reliability reference of the estimates.

It should be borne in mind that, due to the nature of the operation (one of the sources of which is a company survey) and the small sample size, it is not anticipated that microdata will be provided, since its dissemination would compromise statistical secrecy.

Overall index of tables:

- 1 **Annual Earnings:** for wage earners, depending on whether or not they have disabilities
- 2 **Wage Distribution:** for wage earners, depending on whether or not they have disabilities
- 3 **Population Percentages:** by salary band, according to the general wage distribution
- 4 **Annual Wage Differences:** wage gap between persons with and without disabilities
- 5 **Sampling Errors:** variation coefficient for the annual wage per worker variable

For further details and a breakdown of these tables, please see Annex III of this document.

8 Annexes

Annex I: Use of the Wage Structure Survey and of the State Database of Persons with Disabilities

Annex II: Analysis variables and their categories

Annex III: Breakdown of the results tables

Annex IV: Classifications used

Annex I

Use of the Wage Structure Survey and of the State Database of Persons with Disabilities

Annual Wage Structure Survey

The Annual Wage Structure Survey (AWSS) is an annual statistical operation that arises out of the need to have information available on annual wages, classified by sex.

The predecessors of this survey can be found in the previous Wage Survey in Industry and Services, in which information was requested, broken down by sex, for the four quarters of each year from 1989 to 2000.

The need to include, in the questionnaire, the rest of the labour costs in addition to wages (to fulfil the requirements of the European Regulations on the Labour Cost Index), and the elevated reporting burden on companies that is implied by requesting this broken down information, gave rise to the suppression of the breakdown by sex in the Quarterly Labour Cost Survey beginning in the year 2000.

On the other hand, by virtue of Regulation No. 530/1999 regarding the structural statistics of Labour Costs and Wage Income of the EU, which is mandatory for all Member States, the Wage Structure Survey (WSS) is carried out every four years. This survey collects the wages of individual workers, and together with them, a large number of variables, such as age, education, years of service in the company, type of contract... and of course, sex. Given the large volume of information requested, it has been carried out every four years since 2002.

Thus, an information gap remained for the years in which the WSS was not performed. The Annual Wage Structure Survey arose for the purpose of filling said gap. In addition, the AWSS uses the information from the Social Security and income tax administrative registers, together with a simple survey carried out by the INE, in order to obtain this information in the least costly way possible for the companies.

OBJECTIVES

The main objective of the Annual Wage Structure Survey is to ascertain gross annual earnings, classified by different characteristics of the worker, such as sex, occupation, economic activity, age, etc.

SURVEY UNITS

The random unit selection procedure corresponds to a stratified two-stage sampling, in which:

- The first-stage units are the Social Security Contribution Accounts.
- The second-stage units are those workers associated with said Accounts.

The Social Security Contribution Account is an administrative concept traditionally used in wage and labour cost surveys. This is composed of a group

of workers employed by others, who carry out their labour activity in one or more workplaces for a single company, within a single province and generally under a single main economic activity, although not necessarily so, and with standard features as regards the Social Security contribution.

GEOGRAPHICAL SCOPE

The geographical scope is the whole national territory.

POPULATION SCOPE

The population scope comprises all workers employed by others who provide services in contribution centres, regardless of their size, and who have been registered with Social Security for at least 2 months during the reference year of the information, one of which is the month of October. It excludes all chairpersons, members of administrative boards, and in general, all personnel whose remuneration is not mainly in the form of wages, but rather commissions or benefits.

As per sectorial coverage, the survey studies contribution centres whose economic activity is included in the three large sectors: Industry, Construction and Services. The survey excludes agricultural, livestock and fishing activities; in part, the Public Administration, Defence and Compulsory Social Security (this includes public employees belonging to the General Social Security System, and it excludes civil servants attached to Mutual provident societies); domestic staff and extra-territorial organisations.

REFERENCE PERIOD

The reference period is annual.

MAIN DEFINITIONS

The main concept analysed in the AWSS is annual earnings, including total wages received in cash and remunerations in kind. This calculates the gross accrued income, that is, before making deductions from Social Security contributions by the worker or Income Tax withholdings.

CLASSIFICATIONS

The main classifications used in the Survey may be consulted in Annex IV of this document.

State Database of Persons with Disabilities

The State Database of Persons with Disabilities began in 1992 with the data on those persons whose disabilities had been recognised as of the beginning of the 70s.

It contains data for all persons resident in Spain who have applied to have their degree of disability assessed, with persons regarded as disabled when the degree thereof is greater than or equal to 33% (requirement for qualifying for certain benefits, tax breaks, discounts on social security contributions, parking cards, etc.)²

The information collected in the Database is a result of the evaluations performed by the Base Centres of the Territorial Directorates of the IMSERSO in Ceuta and Melilla, and by the bodies with jurisdiction regarding evaluation in the Autonomous Communities, pursuant to the procedure established in Royal Decree 1971/1999, of 23 December (amended by RD 1856/2009, of 4 December).

The purpose of the Royal Decree is to regulate recognition of the degree of disability, establishment of new applicable scales, determining the organisations with jurisdiction for performing said recognition, and the procedure to follow, all with the purpose of the assessment and classification of the degree of disability affecting the person being uniform throughout the State, thereby guaranteeing equal conditions for access by citizens to benefits, economic rights and services granted by public bodies.

The assessment of disabilities is carried out in accordance with the scale established in Annex 1.A of the aforementioned RD 1971/1999. Said annex establishes the guidelines for determining the limitations of an activity caused by **permanent impairments**, associated with a given health condition. The assessment considers all impairments suffered, including the three most important impairments in the Database.

In their ruling, experts collect medical, psychological or social reports necessary for determining the degree of disability, which may be subject to review in the two years following its recognition, so long as a reasonable improvement is validated, a misdiagnosis is accredited or "substantial" changes occur in the circumstances that gave rise to recognition of the disability.

Assessment guidelines are not so much focused on the extent of the impairment, as on its effect on the ability to carry out everyday tasks. In this sense, illnesses that occur as outbreaks and interfere with the daily lives of persons suffering them are also subject to assessment. In order to apply for certification, it is necessary to visit the corresponding Department of Social Affairs, collect an

² Tax exemption in the acquisition of a vehicle, aid for the purchase of a dwelling, mobility subsidy for transport expenses, health care and pharmaceutical assistance, etc. In turn, the Autonomous Community or local institutions may consider other individual aid for the adaptation of the household or acquisition of technical aid, as well as reserved parking zones or priority in access to a job.

application form and undergo a medical examination, under the legally established terms. Subsequently, the interested party awaits the outcome.

For the purposes set out in the Royal Decree, disability situations are qualified in degrees, according to the scope of the limitations of activities and/or restrictions of participation.

The degree of disability is obtained by applying the pre-established scales, and it is corrected with an assessment of the complementary social factors (family situation, economic resources, employment situation, cultural level and social environment).

FILE STRUCTURE: CONTENT OF THE DATABASE

The main variables covered in the BEPD are:

Variable	Observations
Numerical identifier	The foreign population is identified with the NIE (identification number for foreign nationals), passport number or residence card. The letters D or R preceding the DNI indicate the existence of a "legal representative". When the person acting as representative has one or two assessed representees with no ID, 1 or 2 is added.
Sex	"M/F" (male/female)
Name	(available as of 2011 for BEPD2009, 2010, etc.)
Surname(s)	(available as of 2011 for BEPD2009, 2010, etc.)
Residence	(available as of 2011 for BEPD2009, 2010, etc.)
Municipality	(available as of 2011 for BEPD2009, 2010, etc.)
Date of birth	"DDMMYYYY"
Date of evaluation	"DDMMYYYY"
Impairment	According to the Table of Impairments
Degree of disability	Greater than or equal to 33%, and less than or equal to 100%

UPDATING OF THE DATABASE

The degree of disability is subject to revision whenever a reasonable improvement in the circumstances causing its recognition is expected, and the deadline by which said revision should be carried out must be established.

In all other cases, revision of the degree due to worsening or improvement may not be commenced, until at least a minimum period of two years has elapsed since the date on which the resolution was handed down, except in cases in which there is sufficient evidence of a misdiagnosis or substantial changes have occurred, giving rise to recognition of degree, whereby it will not be necessary to wait until a minimum period of time has elapsed.

The updated Database includes those persons who have requested an evaluation for the first time, and will likewise include the revisions of the degree of disability of those individuals already evaluated, so long as they are in the circumstances described in the paragraphs above.

Similarly, changes in residence, personal situation of the individual, etc., will be updated so long as the interested party notifies the body with jurisdiction in this respect.

The Database is updated annually.

DISABILITY CLASSIFICATION

The BEPD has its own system for classifying the typology of impairments and their causes. Although the concept of impairment is the same as that which the Classification of Impairments, Disabilities, and Handicaps of the WHO defines for first-level consequences of illness (“any loss of or abnormality in a psychological, physiological or anatomical function”), it has been necessary to adapt the structure of the WHO to the data contained in the decisions in order to reliably collect the information recorded in proceedings for recognising the condition of persons with disabilities. To this end, the classification has been simplified, categories have been grouped and they have also been adjusted to incoming applications for information arriving at the IMSERSO.

Thus, the BEPD has 3 codes with which it endeavours to sort pathological situations that may be suffered by those applying for recognition of the disability condition:

1 Impairment Code

This records both the structural and the functional alterations which have given rise to the disability. It contains a total of 106 different impairments (identified by a numeric 4-digit code) which, in order to aid data processing, are grouped according to the altered structure or function, in accordance with the following classification:

- a) Physical and other:
 - Osteoarticular system
 - Neuromuscular system
 - Cardiovascular, immunological and respiratory systems
 - Digestive, metabolic and endocrine systems
 - Other
- b) Intellectual
- c) Mental

d) Sensory:

- Visual system
- Auditory system

2 Diagnostic Code

This describes the pathologies giving rise to the anomaly in the organism structure or in its functions. It contains 684 diagnoses, encoded to 3 digits, which may be organised into 13 groups.

3 Aetiology Code

This covers the large aetiological groups, for the purpose of having access to data regarding the origin (congenital, traumatic, etc.) of the assessed disabilities. It covers 14 groups (encoded to 2 digits).

Annex II

Analysis variables and their categories

This annex presents the categories considered for the study and classification variables, derived from those with such variables in the sources used to construct the "Wages of Persons with Disabilities" (WPD) statistics.

The following table features the complete list of WPD analysis variables, together with their categories.

Variable	Values
Workers	Total Persons without disabilities Persons with disabilities
Sex	Both sexes Men Women
Age groups	All ages 16 to 29 years old 30 to 44 years old 45 years old and over
Occupation groups	All occupations Low-level occupations Mid-level occupations High-level occupations
Type of working day:	Total Full-time Part-time
Type of contract:	Total Permanent Temporary
Size of the Unit:	Total 1 to 49 workers 50 to 199 workers 200 or more workers

Variable	Values
Groups of Autonomous Communities	National total Northwest Northeast Comunidad de Madrid Centre East South Canarias
Activity Sector	All activity sectors Industry and Construction Services
Type of Disability	Total Physical and other Intellectual Mental Sensory
Degree of Disability	Total 33% to 44% 45% to 64% 65% to 74% 75% and over
Discounts or Reductions due to Disability	Total Wage earners without discounts or reductions in their contribution quotas Wage earners with discounts or reductions in their contribution quotas
Specific Disability Contract	Total Specific contract for persons with disabilities Other contracts

Annex III

Breakdown of the results tables

Index of broken down WPD results tables

1 ANNUAL EARNINGS

For wage earners, depending on whether or not they have disabilities

- 1.1 Sex and age groups
- 1.2 Sex and type of working day
- 1.3 Sex and type of contract
- 1.4 Sex and occupation groups
- 1.5 Sex and size of the unit
- 1.6 Sex and economic activity sector
- 1.7 Annual earnings by groups of Autonomous Communities (NUTS1)
- 1.8 Sex and type of disability
- 1.9 Sex and degree of disability
- 1.10 Sex and discounts or reductions due to disability
- 1.11 Sex and specific disability contract

2 WAGE DISTRIBUTION

For wage earners, depending on whether or not they have disabilities

- 2.1 Sex
- 2.2 Age groups
- 2.3 Type of working day
- 2.4 Type of contract
- 2.5 Occupation groups
- 2.6 Type of disability
- 2.7 Degree of disability

3 POPULATION PERCENTAGES

By salary bracket, according to the general wage distribution

- 3.1 Population percentage of persons with wages below the percentiles, by sex
- 3.2 Population percentage of persons with wages below the percentiles, by age group
- 3.3 Population percentage of persons with wages below the percentiles, by working day

- 3.4 Population percentage of persons with wages below the percentiles, by type of contract
- 3.5 Population percentage of persons with wages below the percentiles, by occupation group
- 3.6 Population percentage of persons with wages below the percentiles, by type of disability
- 3.7 Population percentage of persons with wages below the percentiles, by degree of disability

4 ANNUAL WAGE DIFFERENCES

Wage ratio between persons with and without disabilities

- 4.1 Sex
- 4.2 Age groups
- 4.3 Type of working day
- 4.4 Type of contract
- 4.5 Occupation groups

5 SAMPLING ERRORS

Variation coefficients for the annual wages per worker variable

- 5.1 Activity sector
- 5.2 Groups of Autonomous Communities (NUTS1)
- 5.3 Type of disability
- 5.4 Degree of disability

Annex IV

Classifications used

Type of disability associated with impairments

In 1991, the IMSERSO implemented a new classification of impairments, in order to adapt it to the required information and to the contents of the assessment or evaluation. The objective is to register, in the BEPD, those alterations that have led to the disability (impairment codes).

It contains a total of 106 different impairments (identified by a numeric 4-digit code) which, in order to aid data processing, are grouped according to the altered structure or function, in accordance with the following classification:

- a) Physical and other:
 - Osteoarticular system
 - Neuromuscular system
 - Cardiovascular, immunological and respiratory systems
 - Digestive, metabolic and endocrine systems
 - Other
- b) Intellectual
- c) Mental
- d) Sensory:
 - Visual system
 - Auditory system

Table of impairments (4 digits)

(next)

Group	Impairment group	Code	Denomination
1	Osteoarticular	1101	Misalignment in the spinal column without functional limitation
		1102	Misalignment in the spinal column with functional limitation
		1103	Functional limitation of the backbone
		1104	Absence of fingers or phalanges
		1105	Absence of upper right limb or its essential parts
		1106	Absence of upper left limb or its essential parts
		1107	Absence of lower limbs or their essential parts
		1108	Functional limitation of the right hand
		1109	Functional limitation of the left hand
		1110	Functional limitation of both hands
		1111	Functional limitation of upper right limb
		1112	Functional limitation of upper left limb
		1113	Functional limitation of both upper

Group	Impairment group	Code	Denomination
			limbs

Table of impairments (4 digits)

(next)

Group	Impairment group	Code	Denomination
		1114	Functional limitation of one foot
		1115	Functional limitation of both feet
		1116	Functional limitation of one lower limb
		1117	Functional limitation of both lower limbs
		1118	Functional limitation of one upper limb and one lower limb
		1119	Functional limitation of both upper limbs and one lower limb
		1120	Functional limitation of both lower limbs and one upper limb
		1121	Functional limitation of the four limbs
		1122	Functional limitation of the extremities and the spinal column
		1123	Short stature
		1124	Morpho-thoracic anomaly
		1125	Disability of the osteoarticular system
2	Neuromuscular	1201	Paralysis of the peripheral nerve
		1202	Paresis of the peripheral nerve
		1203	Paralysis of the cranial nerve
		1204	Paresis of the cranial nerve
		1205	Monoplegia of the upper right limb
		1206	Monoparesis of the upper right limb
		1207	Monoplegia of the upper left limb
		1208	Monoparesis of the upper left limb
		1209	Monoplegia of a lower limb
		1210	Monoparesis of a lower limb
		1211	Diparesis
		1212	Diplegia
		1213	Paraplegia
		1214	Paraparesis
		1215	Right hemiplegia
		1216	Left hemiplegia
		1217	Right hemiparesis
		1218	Left hemiparesis

		1219	Tetraplegia
		1220	Tetaparesis
		1221	Generalised seizures
		1222	Generalised non-seizure crises
		1223	Partial crises
		1224	Coordination disorder

Table of impairments (4 digits)

(next)

Group	Impairment group	Code	Denomination
		1225	Balance disorder
		1226	Coordination and balance disorder
		1227	Vasomotor disorder
		1228	Neurovegetative dysfunction
		1229	Disability of the neuromuscular system
3	Chronic illness	6001	Disease of the respiratory system
		6002	Disease of the circulatory system
		6003	Disease of the digestive system
		6004	Disease of the endocrine-metabolic system
		6005	Disease of the blood and hematopoietic organs
		6006	Disease of the genito-urinary system
		6007	Disease of the skin
		6008	Disorder of the immune system
		6009	Transplant patient
		6010	Terminal patient
		6011	Chronic illness
		8002	Surgical removal of an organ
		8003	Partial surgical removal of an organ
4	Mental retardation	2100	Profound mental retardation
		2101	Severe mental retardation
		2102	Moderate mental retardation
		2103	Slight mental retardation
		2104	Limited intelligence
		2105	Developmental delay
5	Mental disorder	2106	Developmental disorder
		2107	Cognitive disorder
		2108	Affection disorder
		2109	Alteration of behaviour
		2300	Mental disorder

6	Visual disability	3101	Slight loss of binocular visual acuity
		3102	Moderate loss of binocular visual acuity
		3103	Severe loss of binocular visual acuity
		3104	Serious loss of binocular visual acuity
		3105	Blindness
		3106	Vision loss in one eye
		3107	Decrease of visual efficiency

Table of impairments (4 digits)

(next)

Group	Impairment group	Code	Denomination
7	Auditory	3201	Slight hearing loss
		3202	Moderate hearing loss
		3203	Severe hearing loss
		3204	Profound hearing loss
		3205	Deafness
		3206	Deaf-muteness
		3207	Total loss of hearing in one ear
		3208	Tinnitus
		3209	Disability of the auditory system
8	Expression	4101	Aphasia
		4102	Dysarthria
		4103	Dysphemia
		4104	Dysphonia
		4105	Muteness
		4106	Laryngectomy
		4107	Disability in expression
9	Mixed	5200	Polymalformation syndrome
		8001	Multiple disabilities
10	Other	7000	Unknown impairment
		8000	Without disabilities
		9000	Non-assessable acute process

Degree of disability

The population is divided into two categories, according to the percentage of the degree of disability:

- Less than 33%
- 33% and over

The WPD has considered only those records of persons with a degree of disability greater than or equal to 33%.

45% and 65% are the degrees of disability that establish limits regarding the receipt of pensions or the granting of pre-retirement.

For tabulation purposes, the following classification for the degree of disability variable shall be considered:

- 33% to 49%
- 50% to 64%
- 65% to 74%
- 75% and over

Occupation

The following groups based on classification NCO-11 are considered:

- High (groups 1-3 of NCO-11)
- Medium (groups 4-7 of NCO-11)
- Low (groups 8-9 of NCO-11)

NCO-11 National Classification of Occupations 2011¹

Code	Description
1	Directors and managers
<i>A</i>	<i>Directors and managers</i>
2	Scientific and intellectual technicians and professionals
<i>B</i>	<i>Scientific and intellectual technicians and professionals in health and education</i>
<i>C</i>	<i>Other scientific and intellectual technicians and professionals</i>
3	Technicians; support professionals
<i>D</i>	<i>Technicians; support professionals</i>
4	Accounting, administrative and other office employees
<i>E</i>	<i>Office employees who do not deal with the public</i>
<i>F</i>	<i>Office employees who deal with the public</i>
5	Workers in catering, personal, and protection services and trade salespersons
<i>G</i>	<i>Workers in catering and trade services</i>
<i>H</i>	<i>Health services and personal care workers</i>
<i>I</i>	<i>Protection and security services workers</i>
6	Skilled agricultural, livestock, forestry and fishing sector workers
<i>J</i>	<i>Skilled agricultural, livestock, forestry and fishing sector workers</i>
7	Craftspersons and skilled workers in manufacturing and construction (except installation and machinery operators)
<i>K</i>	<i>Skilled workers in construction, except machinery operators</i>
<i>L</i>	<i>Skilled workers in the manufacturing industries, except installation and machinery operators</i>

¹ The complete classification may be viewed at www.ine.es

8	Installation and machinery operators and assemblers
<i>M</i>	<i>Installation and fixed machinery operators and assemblers</i>
<i>N</i>	<i>Mobile machinery drivers and operators</i>
9	Basic occupations
<i>O</i>	<i>Unskilled services workers (except transport)</i>
<i>P</i>	<i>Agricultural, fishing, construction, manufacturing and transport industry labourers</i>
0	Military occupations
<i>Q</i>	<i>Military occupations</i>

Economic activity

The following activity sectors based on CNAE-2009 are considered:

- Industry and construction (sections C-F of CNAE-2009)
- Services (sections G-O of CNAE-2009)

CNAE-2009: National Classification of Economic Activities³

Code	Description
A	Agriculture, livestock, forestry and fishing
B	Mining and quarrying industries
C	Manufacturing industry
D	Supply of electrical energy, gas, steam and air conditioning
E	Water supply, waste management and decontamination activities
F	Construction
G	Wholesale and retail trade; repair of motor vehicles and motorcycles
H	Transport and storage
I	Accommodation
J	Information and communications
K	Financial and insurance activities
L	Real estate activities
M	Professional, scientific and technical activities
N	Administrative and support services activities
O	Public administration and defence; compulsory social security
P	Education
Q	Health and social services activities
R	Arts, recreation and entertainment activities
S	Other services
T	Activities of households as employers of domestic personnel; activities of households as producers of goods and services for their own use
U	Activities of extraterritorial organisations and bodies

³ The complete classification may be viewed at www.ine.es

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