

**Documentation of statistics for  
Absence 2015**

## 1 Introduction

The purpose of the statistics of absence is to describe the amount of work that is lost due to absence. Absence is divided into "Own sickness", "Children's sickness", "Occupational injury" and "Maternity and adoption leave". The statistics is published on a yearly basis and is used for estimating and comparing the level of absence within different groups of employees.

## 2 Statistical presentation

The statistics of absence is published for the governmental sector, the local governmental sector and the private sector. Statistics according to the new sector definition from 2013 are also published for the labour market as a whole. The absence is grouped by the variables occupation, education, industry, region, age and sex. From 2013 own sickness is published by lengths of period. In the governmental and municipal sector all employees are included while the private sector is described by a representative sample of enterprises with 10 or more employees.

### 2.1 Data description

The statistics on absence describes the amount of work that is lost due to absence in both absolute and relative measures. The statistics is published for the governmental sector, the local governmental sector and the private sector. Statistics according to the new sector definition from 2013 are also published for the labour market as a whole. The statistics covers in principal all employees in the governmental sector and the local governmental sector while the private sector is described by a representative sample of enterprises with 10 or more employees. Absence is divided into "Own sickness", "Children's sickness", "Occupational injury" and "Maternity and adoption leave" and is grouped by the variables occupation, education, industry, region, age and sex. "Own sickness" is further more grouped by lengths of period. The absolute and relative measures that are published are:

- Absence rate
- Number of absence days (in full day equivalents)
- Number of periods of absence
- Average no. of absence days per full-time employed
- Average no. of absence periods per full-year employed
- Average no. of calendar days per absence period
- Number of full-time employed
- Number of full-year employed

## 2.2 Classification system

Grouping variables:

- Occupation - Up to and including 2009 the grouping by occupation is based on the variable DISCO-løn. From 2010 the new variable, DISCO-o8, is used instead. DISCO-o8 is a revised version of DISCO-løn and is the Danish version of the international classification ISCO-o8. The DISCO variable is independent of the formal title and the education of the employed, it is only dependent upon the qualifications that are necessary in the job and the type of work that is done. This definition makes it possible to compare persons that have the same occupation.
- Industry - Until 2007 the grouping by industry follows the Danish nomenclature for industry from 2003 (DB03) which is an extended version of EU's nomenclature NACE rev. 1.1 from 2003. From 2007 the grouping by industry follows the new nomenclature for industry, DB07. DB03 and DB07 are in principle classifications of economic activities. It is used as a classification of firms describing their main activities.
- Education - The persons are classified by their highest level of education completed. The information comes from Statistics Denmark's register of the population's education. This register is updated on a yearly basis with information from the educational institutions. In 2015 the Denmark Statistics' education statistics started using a new classification of education called DISCED-15, which replaced the previous, DUN and Forspalte1. For more information see under <https://www.dst.dk/da/Statistik/dokumentation/Nomenklaturer/ny-uddannelsesklassifikation-DISCED-15>
- Area - The grouping is by the region or municipality where the workplace is located.
- Age - Grouping by five years intervals (-19 years (up to and including 19 years), 20-24, 25-29,.....,60+ (including 60 years and on)).
- Sex.
- Sector - From 2013 the new division of sectors are applied. Tables covering the new sector definition group absence by All sectors, General government, Government including social security funds, Municipal and regional government total, Regional government, Municipal government, Corporations and organizations.
- Lengths of period - number of periods and days of absence concerning own sickness is divided by lengths of period measured by calendar days.

## 2.3 Sector coverage

The statistics of absence covers the public sector and the private sector except agriculture, forestry and fishing.

## 2.4 Statistical concepts and definitions

**Number of Absence Days:** Measures the number of days in full day equivalents that fall within the year. Defined as 7.4 hours a day. An absence period of three hours and a absence period of 4.4 hours amount to a whole day.

**Number of Periods of Absence:** Measures the number of absence periods that ends in the year.

**Absence Rate:** Measures the days of absence in percent of the possible days of work - both measured in full day equivalents. The possible days of work are defined as the number of days at work a person could have worked if the person had not been absent and are the sum of the actual days of work and then days of absence.

**Number of Full-Time Employed:** A full-time employed is defined as a person who is employed 37 hours per week all year. A person who is employed for 20 hours a week all year and another person who is employed 17 hours a week all year amounts to one full-time employed when combined.

**Average no. of Absence Days per Full-time Employed:** Measures the number of absence days (in full day equivalents) that falls within the year per full-time employed.

**Average no. of Absence Periods per Full-Year Employed:** Measures the number of absence periods that ends in the year per full-year employed.

**Average no. of Calendar Days per Absence Period:** Measures the number of calendar days per absence period that ends in the year.

**Number of Full-Year Employed:** A full-year employed is defined as a person who is employed all year. A person who is employed for three months and another person who is employed for 9 months amounts to one full-year employed when combined.

## 2.5 Statistical unit

The units of the statistics of absence are enterprises and public organizations, each enterprise being a legal unit. In the Statistical Business Register of Statistics Denmark a legal unit is identified by its CVR-number from the Central Business Register. Periods of absence are collected for all employees employed at the units. For the statistics of absence a period of absence for an employed person is the statistical unit.

## 2.6 Statistical population

In the governmental and municipal sector all the employed are in principal included while the private sector is described by a representative sample of about 2600 firms. The sample is selected from a population of enterprises with 10 or more employees. Chronically sick persons and persons in flexible or light jobs are not included.

In the case of all three sectors a number of jobs are excluded from the statistics of absence. This is the case for persons who have only worked for a very short period of time, persons who have only worked very few hours a week or persons for whom the number of hours worked are not known.

## 2.7 Reference area

The statistics covers Denmark.

## 2.8 Time coverage

Statistics according to the changed sector definition from 2013 are published for 2013 till 2015.

- The statistics for the governmental sector covers the period from 2003 and forward.
- From 2005 and forward results for the municipality sector and the regional sector was published together. From 2010 results for the two sectors were published separately.
- The statistics for the private sector covers the period from 2007 and forward.

## 2.9 Base period

Not relevant for these statistics.

## 2.10 Unit of measure

The statistical measures that are included in then statistics are:

- Absence rate - Measures the days of absence in percent of the possible days of work - both measured in full day equivalents.
- Number of absence days (in full day equivalents) - Measures the number of days that fall within the year.
- Number of periods of absence - Measures the number of absence periods that ends in the year.
- Average no. of absence days per full-time employed - Measures the number of absence days (in full day equivalents) that falls within the year per full-time employed.
- Average no. of absence periods per full-year employed - Measures the number of absence periods that ends in the year per full-year employed.
- Average no. of calendar days per absence period - Measures the number of calendar days per absence period that ends in the year.
- Number of full-time employed - A full-time employed is defined as a person who is employed 37 hours per week all year. A person who is employed for 20 hours a week all year and another person who is employed 17 hours a week all year amounts to one full-time employed when combined. A full-time employed is calculated on basis of the hours worked reported to the earnings statistics.
- Number of full-year employed - A full-year employed is defined as a person who is employed all year. A person who is employed for three months and another person who is employed for 9 months amounts to one full-year employed when combined.

For the public sector the number if full-time employees and full-year employees are calculated on basis of the number of jobs that are included in the statistics of absence. For the private sector the number of full-time employees and full-year employees are calculated on basis of the number of jobs that are included in the population to which the sample is enumerated. That is all enterprises with 10 employees or more.

A full day equivalent is defined as 7.4 hours. Possible days of work are defined as the number of working days (in full day equivalents) that a person could have had, had he not been absent. In other words, it is the sum of the actual days of work and the days of absence. Holidays etc. are excluded from the possible days of work.

## 2.11 Reference period

01-01-2015 - 31-12-2015

## 2.12 Frequency of dissemination

The statistics is published on a yearly basis.

## 2.13 Legal acts and other agreements

The information is collected in accordance with the Act on Statistics Denmark § 6 and § 8. The statistics is not based on EU regulation.

## 2.14 Cost and burden

The response burden is minimized by using already collected data material whenever possible. Furthermore, almost all data are collected electronically. Some enterprises already register information on absence. For these enterprises the statistics on absence will not be a considerably extra burden.

## 2.15 Comment

The Statistics of Absence has a [Subject Page](#).

# 3 Statistical processing

On a yearly bases information on absence is collected from all of the public sector and from a sample 2600 private enterprises with 10 or more employees. The absence periods are connected to the job from which the person was absent. The information about the extent of the employment is found in the earnings statistics. The information on absence from the private sector is enumerated to the total population of enterprises with 10 employees or more.

## 3.1 Source data

### *Absence data*

The data for the governmental sector are collected by the Ministry of Finance on a quarterly basis from the whole governmental sector. The information from the local government sector are collected in association with KRL; an actor in the local government sector. The data for the private sectors are collected in collaboration with the employer unions, Danish Employers' Confederation and Danish Employers' Association of the Financial Sector.

### *Earnings data*

The absence periods are matched with the job from which the person has been absent. The data from the earnings statistics are used to create the jobs.

### *Other*

The register of People receiving public benefits is used to exclude persons in flexible jobs or light jobs. The register of benefits during sickness or in connection with childbirth is used to exclude chronically sick persons, to create the periods of maternity leave in the central government sector and to validate the periods of absence. .

### **3.2 Frequency of data collection**

Data is collected on a yearly basis.

### **3.3 Data collection**

The data for the governmental sector are collected by the Ministry of Finance on a quarterly basis. The information from the local government sector are collected in association with KRL; an actor in the local government sector. The data for the private sectors are collected in collaboration with the employer unions, Danish Employers' Confederation and Danish Employers' Association of the Financial Sector. The information are registered in the enterprises own earnings and absence system or a spread sheet.

The sample of private enterprises has the following structure:

- All firms with 250 or more full-time employee must register information on absence.
- No firms with less than 10 full-time employee will be requested to register information on absence.
- For firms between 10 and 250 full-time employee the likelihood of being chosen to be in the sample depends on the size (measured in number of full-time employee) and industry.

### **3.4 Data validation**

The submitted data undergoes an error control. In some cases enterprises are contacted in order to clear up questions to the data or to get data resubmitted. The validation causes that some data must be left out in cases where it is not possible to correct the errors.

Typical errors would be that the same absence period is reported twice or several times or that two or more periods overlap. It is especially the long periods that have these problems. In these cases absence periods are left out so that no overlapping periods occur.

For the private sector a number of absence periods are not correctly reported. The starting date and the ending date of the absence period might be registered wrongly. The absence hours might be reported at one day regardless of how long the period has been. The absence hours might be reported summarized for a month, a quarter or a hole year. The enterprises do in some cases use systems to register absence data that are intended for other purposes than collecting absence data for Statistics Denmark. This cause data with systematic errors. The reported data are if possible corrected but in some cases data from entire enterprises have to be left out. The errors are corrected by for instance deleting the starting date or the ending date of the absence period by recalculating the date using the number of absence hours. In other cases the absence hours are deleted and recalculated according to the length of the period or in cases of errors caused by systems the absence hours are recalculated depending on the errors.

For most of the private enterprises, from an increasing part of the local government sector and from the central government sector where the period of absence is less than one whole day, we receive the actual number of hours of absence. For all other absence periods people are assumed to work 5 days a week. This is a necessary assumption in cases where we only receive registration of absence periods and not hours of absence.

To minimize the burden of registering we reuse the data form the earnings statistics to derive the number of working hours that a person could have been working had he not been absent. These hours of work are called possible hours of work. The possible hours of work are used when the absence rate is calculated. To be able to reuse the earnings data each absence period must be attached to its belonging job. The mach will not be possible if the person who has been absent does not exist in the earnings data or if the absence period does not lie within the duration of the job. Due to this some absence periods has to be dropped.

For the municipality sector the identification variables that are used to attach the absence periods to their belonging job are validated. This is especially necessary in case of changes of organization as for instance the reform of municipalities in 2007 and in case of changes of systems to register absence data - especially if it happens in the middle of the year.

For the private enterprises it is evaluated whether each enterprise has reported absence for the entire enterprise and for all groups of employees. It is further more evaluated whether the number of jobs that are reported to the statistics of earnings correspond with the number of employees that are reported to the statistics of absence.



### **3.5 Data compilation**

The data for the governmental sector are collected by the Ministry of Finance and they send the information to Statistics Denmark. The information from the local government sector are collected in association with KRL; (an actor in the local government sector) primarily via the two big registration systems KMD and Silkeborg Data..

The private sector is described by a representative sample of about 2600 firms. The sample is selected from a population of enterprises with 10 or more employees. The sample is drawn proportionally which means that the probability of being a part of the sample rises the bigger the enterprise. The sample of private enterprises has the following structure:

- All firms with 250 or more full-time employee must register information on absence.
- No firms with less than 10 full-time employee will be requested to register information on absence.
- For firms between 10 and 250 full-time employee the likelihood of being chosen to be in the sample depends on the size (measured in number of full-time employee) and industry.

The data in the private sectors are collected in collaboration with the employer unions, Danish Employers' Confederation and Danish Employers' Association of the Financial Sector. The information are registered in the firm's own earnings and absence systems or a spread sheet made by Statistics Denmark.

To minimize the burden of registering we reuse the data form the earnings statistics to derive the number of working hours that a person could have been working had he not been absent. These hours of work are called possible hours of work. The possible hours of work are used to calculate the absence rate. To be able to reuse the earnings data each absence period must be attached to its belonging job. The mach will not be possible if the person who has been absent does not exist in the earnings data or if the absence period does not lie within the duration of the job. Due to this some absence periods has to be dropped.

Holidays, special holidays and care are excluded from the possible days of work. Special holidays and care are reported directly to the statistics of absence. Holidays are calculated on the basis of the duration of the employment. This does not necessarily correspond to the actual vacation taken. The result is that the measures of absence are overestimated for persons who are new on the labour market or who does not take all the vacation that they are entitled to.

The absence for the private enterprises is enumerated in two steps. In the first step is enumerated to the population of enterprises that report to the statistics of earnings. For this enumeration a number of background variables for the enterprises and their employees are used. The background variables are gender, region, education, occupation, industry and type of salary-earners which are all variables that have an influence on the level of absence. In the second step the absence is enumerated to the total population of private enterprises with 10 employees and more. The enumeration is based on information on number of full-time employees and industry from the Central Business Register.

### **3.6 Adjustment**

No adjustments are made other than what is already described under data validation and data compilation.

## **4 Relevance**

Absence has both personal and economic consequences that have an impact on both employees, employers and the community. The statistics are of interest for the central government, municipalities and regions, private business enterprises, non-governmental organizations, researchers and news media. The statistics are tools used in estimating and comparing the level of absence within different groups of employees, and can be a foundation on which economic and political decisions are made.

### **4.1 User Needs**

Absence has both personal and economic consequences that have an impact on both employees, employers and the community. The statistics are of interest for the central government, municipalities and regions, private business enterprises, non-governmental organizations, researchers and news media. The statistics are tools used in estimating and comparing the level of absence within different groups of employees, and can be a foundation on which economic and political decisions are made. The statistics of absence can for instance be used for comparing absence within sectors, industries, occupation etc., for monitoring the development of absence and for benchmarking an enterprise in relation to others in the same industry.

The statistics of Absence is published by sectors. In connection with publishing the statistics 2013 according to the new sector definition, the statistics of absence is published for the labour market as a whole for the first time. In connection with publishing the statistics 2014 own sickness is published by lengths of period for 2013 and forward.

### **4.2 User Satisfaction**

No survey on user satisfaction is conducted.

### **4.3 Data completeness rate**

Agriculture, forestry and fishing is not included in the statistics of absence for the private sector. Some information are not published due to confidentiality or quality issues.

The statistics is not covered by EU regulations.

## **5 Accuracy and reliability**

The governmental and local government sector in principle includes all employed persons. For these sectors there is immeasurable inaccuracy mainly caused by measuring errors.

The private sector is based on a representative sample of about 2600 enterprises. The inaccuracy can be divided into sampling inaccuracy and the immeasurable inaccuracy that derives from measuring errors. The total absence rate for own sickness is determined with a 95 percent confidence interval to vary around +/- 0.08 percent. Sampling errors for divisions on e.g. gender or industry are considerably higher.

## **5.1 Overall accuracy**

The accuracy of the level of detail at which data are published is assessed to be good for the public sector. However, the statistics on absence are still relatively new and especially the earliest years, the statistical system and data quality have been improved.

In the private sector the data on absence is calculated on basis of a sample of enterprises. Especially during the first years we do not expect to receive data on absence from a great number of enterprises. A lot of enterprises have not established a system for registering the periods of absence in time and several have not registered the data correctly. Furthermore registering the data is time-consuming and not necessarily a task of interest for the enterprise itself. Consequently the registration of the periods of absence is not always complete. The first data for the private sector referred to 2006 but due to poor quality the previously published data for 2006 was removed from the Statbank Denmark.

Periods of maternity in the central government sector are based on data from the register of benefits during sickness or in connection with childbirth, as a great number of the respondents have not reported any periods of maternity leave. Periods created on the basis of payment of benefits are longer but not as numerous. Absence due to maternity leave in the central government sector, especially for women, is considerably larger than in the municipal sector. At present, it cannot be ruled out that this difference is caused by the use of different sources of data.

Due to the reform of municipalities in 2007 the connection between the absence period and the corresponding job has caused great problems in 2006, 2007 and 2008. Consequently, comparisons between years should only be made with caution.

Change of systems to register absence data - especially if it happens in the middle of the year - might cause problems with the quality of the reported periods of absence and consequently the results of the units concerned might be uncertain. This has been the case for parts of the local government sector from 2010 and forward.

## **5.2 Sampling error**

The surveys of the governmental and local government sector are supposed to be universal which means that all employees are in principle included. Consequently there is no sampling error.

The private sector is based on a representative sample of about 2600 enterprises. The total absence rate for own sickness is determined with a 95 percent confidence interval to vary around +/- 0.08 percent. Sampling errors for divisions on e.g. gender or industry are considerably higher.

### **5.3 Non-sampling error**

The results of the Statistics of Absence are especially dependent on the fact that both absence and wages are reported for all employees in the enterprises, governmental and municipal institutions etc. Especially concerning the Statistics of Absence it is difficult to establish whether absence is reported for all employees. In order to calculate the different measures of absence the absence periods are matched with the belonging job. It is important that the information on the persons are reported to both statistics and that the identification variables are the same in both statistics.

In cases where the actual hours of absence are not reported people are assumed to work 5 days a week and to be absent the whole day. The hours of absence are calculated on basis on the degree of employment from the Statistics of earnings. The actual hours of absence are not reported for the governmental sector when it comes to periods that last a whole day. For certain municipalities and regions hours of absence are not reported and for the private sector this is the case for defective periods of absence.

### **5.4 Quality management**

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

### **5.5 Quality assurance**

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

## 5.6 Quality assessment

The accuracy of the level of detail at which data are published is assessed to be good for the public sector. However, the statistics on absence are still relatively new and especially the earliest years, the statistical system and data quality have been improved.

In the private sector the data on absence is calculated on basis of a sample of enterprises. Especially during the first years we do not expect to receive data on absence from a great number of enterprises. A lot of enterprises have not established a system for registering the periods of absence in time and several have not registered the data correctly. Furthermore registering the data is time-consuming and not necessarily a task of interest for the enterprise itself. Consequently the registration of the periods of absence is not always complete. The first data for the private sector referred to 2006 but due to poor quality the previously published data for 2006 was removed from the Statbank Denmark.

Periods of maternity in the central government sector are based on data from the register of benefits during sickness or in connection with childbirth, as a great number of the respondents have not reported any periods of maternity leave. Periods created on the basis of payment of benefits are longer but not as numerous. Absence due to maternity leave in the central government sector, especially for women, is considerably larger than in the municipal sector. At present, it cannot be ruled out that this difference is caused by the use of different sources of data.

Due to the reform of municipalities in 2007 the connection between the absence period and the corresponding job has caused great problems in 2006, 2007 and 2008. Consequently, comparisons between years should only be made with caution.

Change of systems to register absence data - especially if it happens in the middle of the year - might cause problems with the quality of the reported periods of absence and consequently the results of the units concerned might be uncertain. This has been the case for parts of the local government sector from 2010 and forward.

## 5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the [Revision Policy for Statistics Denmark](#). The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

## 5.8 Data revision practice

Only final figures are published.

## 6 Timeliness and punctuality

The statistics of absence refers to the whole year to which the absence periods belongs The statistics is published on a yearly basis at the end of October following the reference period. The information is normally published without delay compared to schedule.

### 6.1 Timeliness and time lag - final results

The statistics on absence is published on a yearly basis at the end of October following the reference period. Only final figures are published.

## 6.2 Punctuality

The information is normally published without delay compared to schedule.

## 7 Comparability

The statistics of absence for the central governmental sector covers the year 2003 and forward, while the first data for the local governmental sector was published for the year 2005. The statistics for the private sector covers the period from 2007 and forward. From 2010 the municipality sector and the regional sector are published separately. Before 2010 the two sectors were only published together.

The method and quality of data have continuously been improved especially the first years of the statistics. Comparisons between sectors and years (especially the earliest published data) should only be made with reservations.

### 7.1 Comparability - geographical

No comparable results from other countries are available. though, some countries have statistics on absence which are based on other sources. This could be information from The Labour force survey or information on sickness benefits.

### 7.2 Comparability over time

**2015 New classification of education:** In 2015 the Denmark Statistics' education statistics started using a new classification of education called DISCED-15, which replaced the previous, DUN and Forspalt1. This causes a break in the time series, thus the series FRA021 is discontinued. The new series for earning by highest level of education is called FRA021A, from where tables for 2015 and beyond may be extracted. DISCED-15 is the Danish version of the ISCED 2011 classification, which was developed by UNESCO in consultation with relevant international organizations and partners, such as Eurostat and the Organisation for Economic Cooperation and Development (OECD). The ISCED-classification is meant to contribute to the production of even more reliable and comparable international statistics on education, reflecting the ongoing evolution of education systems worldwide. For more information see <https://www.dst.dk/da/Statistik/dokumentation/Nomenklaturer/ny-uddannelsesklassifikation-DISCED-15>

*Displacements of certain occupation groups:* In 2014 the wage and salary administrations for the municipal- and regional sector were able to report occupation codes for their employees. This still brings about a few dislocations within a few occupation groups.

*Changed sector definition from 2013:* This publication presents the Statistics of Absence for the first time according to the new European national accounting manual ESA2010. The naming of sectors has changed from Private sector to Corporations and organizations, from governmental-, the municipality- and the regional sector to Government including social security funds. In addition to the changed naming the substantial definitions of the sectors are changed. (See News from Statistics Denmark 2014 no. 270[[www.dst.dk/nytudg/18045](http://www.dst.dk/nytudg/18045)] and News from Statistics Denmark 2014 nr. 321[[www.dst.dk/pukora/epub/Nyt/2014/NR321.pdf](http://www.dst.dk/pukora/epub/Nyt/2014/NR321.pdf)]. Publications according to the new sector definition are not comparable to previous publications according to the old sector definition.

*Changes in the education nomenclature* Between 2013 and 2014, there are many changes in education nomenclature. This gives some differences between some education groups in 2014. The changes concern all sectors.

*Occupation codes, municipalities 2014* In all municipal payroll systems it is now possible for the users themselves to insert occupation codes for their employees. Previously the grade of employee was used to decide the occupation codes. This gives some differences between some occupation groups in 2014.

*Central government sector 2013* Periods of maternity and adoption leave in the central government sector are based on data from the register of benefits during sickness or in connection with childbirth, as a number of the respondents have not reported any periods of maternity leave. In connection with moving the administration of benefits concerning childbirth from the municipalities in December 2012 some registrations concerning childbirth have not been correct. The published maternity leave for the central government sector for 2013 is consequently based on data where some of the periods have not been correct. The published maternity leave for 2013 is estimated to be underestimated. This is probably especially the case for the women's maternity leave.

*Municipalities 2013:* Due to the lockout of certain groups of teachers in spring 2013, the quality of the monthly earnings data is not satisfactory for these groups. Statistics Denmark has tried to identify the jobs that have been affected by the lockout. The weeks that the lockout occurred are excluded from data for the identified jobs.

The statistics on absence reflects the structure of absence which means that the statistics reflects the level of absence for different groups of employees at a certain period of time - in this case on a yearly basis. The statistics doesn't take structural changes into account - changes that might have happened within groups of employees between two years. New enterprises are established, old enterprises close down while some enterprises change their primary activity. Furthermore, within the enterprises some significant changes of the staff might have taken place, for instance dismissals or changes in the characteristics of the employees. These so called structural changes between two years are some of the terms of structural statistics in general and specific of the statistics of absence. Comparisons between years should fundamentally only be made with reservations.

Furthermore the quality of the data from enterprises, municipalities, governmental institutions etc. are expected to improve over time. An increase in absence from one year to another might to some extent be caused by improved registrations of absence. Comparisons between years concerning the earliest years should in general be made with caution.

Since 2005 data for the central government sector include absence of less than whole days, unlike the previous years. Consequently, the real change from 2004 to 2005 is considerably lower than the numbers indicate.

Data on absence in The City of Copenhagen municipality in 2005 are not as reliable, as it has been difficult to match reports on absence with employment data.

From 2006 the method of linking periods of absence has been improved concerning holidays. This has an influence on the number and length of the periods of absence.

In connection with the reform of municipalities upper secondary schools were in 2007 transferred from the municipal sector to the governmental sector. Furthermore, due to the reform of the municipalities the match between the absence periods and their belonging job has caused great problems. Consequently, comparisons between years should only be made with caution. In 2008 it has been especially difficult to attach absence periods to its belonging jobs in the health sector.

Change of systems to register absence data - especially if it happens in the middle of the year - might cause problems with the quality of the reported periods of absence and consequently the results of the units concerned might be uncertain. This has been the case for parts of the local government sector from 2010 and forward.

Due to a strike within some municipal areas in the spring of 2008, the quality of the monthly data reports on earnings is not satisfactory for some groups of employees. This might have an impact on the number of absence periods that it has been possible to connect to the belonging job.

Usually the industrial classification of the local kind of unit is used to classify the enterprises and their employees in the statistics of absence. In 2007, when the new industrial classification (db07) was introduced, it was not possible to use the industrial classification of the local unit. Instead the industrial classification of the enterprise was used.

Up to and including 2009 the grouping by occupation is based on the variable DISCO-løn. From 2010 the new variable, DISCO-08, is used instead. DISCO-08 is a revised version of DISCO-løn. There is no unique translation between DISCO-løn and DISCO-08. For this reason earnings by occupation is not comparable between 2010 and previous years.

For part of the local government sector absence for employees who have worked reduced time due to sickness has not been included in the statistics. From 2012 and forward this kind of absence is included for the entire local government sector. Absence caused by 'Reduced time' is included in 'Own sickness'. The changes involve Region Sjælland and the municipalities that use KMD for registering absence data. 'Reduced time' has not been included previously because we only to a smaller extend have received the actual number of hours of absence for these periods of absence. For Region Sjælland and then municipalities involved the level of absence has been underestimated previous to 2012. With this change the standard of reference for the level of absence has been improved.

From 2012 days of for child care etc. and Constitution Day have been deducted from the possible days of work. This has an impact on the absence rate where the hours of absence are now divided with a smaller number of possible hours of work. On the other hand, the change has no impact on the average no. of absence days per full-time employed.

### **7.3 Coherence - cross domain**

KRL, an actor in the municipal sector, publishes a statistic on absence for the municipality and the regional sector based on the same data that the statistics from Statistics Denmark is based on. However, the methods and definitions differs and consequently the results of the two statistics are not comparable. Moderniseringsstyrelsen (The Agency for the Modernisation of Public Administration) publishes a statistic on absence for the central government sector. Due to differences in methods results of the two statistics are not comparable. Danish Employers' Confederation (DA) and Danish Employers' Association of the Financial Sector (FA) publish a statistics on absence for their members. The data submitted to these two organizations is the basis for the statistics of absence together with the absence data submitted to Statistics Denmark.

### **7.4 Coherence - internal**

Different systems are used for registering absence. This is the case between the different sectors but also within individual sectors. In the private sectors enterprises have for instance the possibility to use a wide variety of systems. This means that the absence is not necessarily registered consistently. There are, however, prepared similar guidelines for registration of absence for all sectors in order to ensure a consistent registration as possible.



## **8 Accessibility and clarity**

The latest results are published once a year in a press release *News from Statistics Denmark* and in Statistiske Efterretninger, *Fravær*. Selected tables are published in [Statistical Yearbook]] (<https://www.dst.dk/en/Statistik/Publikationer.aspx>). All data are published in the on-line database [Statbank](#). It is possible to buy more detailed results and to get access to micro-data through Statistics Denmark's Research services. The statistics of absence has a [subject Page](#).

### **8.1 Release calendar**

The publication date appears in the release calendar. The date is confirmed in the weeks before.

### **8.2 Release calendar access**

The Release Calendar can be accessed on our English website: [Release Calendar](#).

### **8.3 User access**

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

### **8.4 News release**

The results are published in [News from Statistics Denmark](#).

### **8.5 Publications**

The results are published in Statistiske Efterretninger. Selected tables are published in [Statistical Yearbook](#).

## 8.6 On-line database

All figures are published in the on-line database [Statbank](#) where the following tables can be found:

Old sector definition:

- FRA011 - Absence by sector, sex, cause of absence, occupation and indicator of absence.
- FRA02 - Absence by sector, sex, cause of absence, education and indicator of absence.
- FRA033 - Absence by sector, sex, cause of absence, industry and indicator of absence.
- FRA044 - Absence by sector, sex, cause of absence, area and indicator of absence.
- FRA05 - Absence by sector, sex, cause of absence, age and indicator of absence.
- FRA10 - Absence in governmental sector by region, sex, cause of absence, industry (DB07) and indicator of absence
- FRA11 - Absence in the governmental sector by region, sex, cause of absence, occupation and indicator of absence
- FRA12 - Absence in the municipality sector by region, sex, cause of absence, occupation and indicator of absence
- FRA13 - Absence in the regional sector by region, sex, cause of absence, occupation and indicator of absence
- FRA14 - Absence in the private sector by industry (DB07), occupation, sex, size class, indicator of absence and cause of absence
- FRA15 - Absence in the private sector by occupation, sex, indicator of absence and cause of absence

New sector definition:

- FRA020 - Absence by sector, sex, cause of absence, occupation and indicator of absence.
- FRA021 - Absence by sector, sex, cause of absence, education and indicator of absence.
- FRA021A - Absence by sector, sex, cause of absence, education and indicator of absence.
- FRA022 - Absence by sector, sex, cause of absence, industry and indicator of absence.
- FRA023 - Absence by sector, sex, cause of absence, area and indicator of absence.
- FRA024 - Absence by sector, sex, cause of absence, age and indicator of absence.
- FRA025 - Absence in governmental sector by region, sex, cause of absence, industry (DB07) and indicator of absence
- FRA026 - Absence in the governmental sector by region, sex, cause of absence, occupation and indicator of absence
- FRA027 - Absence in the municipality sector by region, sex, cause of absence, occupation and indicator of absence
- FRA028 - Absence in the regional sector by region, sex, cause of absence, occupation and indicator of absence
- FRA029 - Absence in the private sector by industry (DB07), occupation, sex, size class, indicator of absence and cause of absence
- FRA030 - Absence in the private sector by occupation, sex, indicator of absence and cause of absence
- FRA031 - Absence due to own sickness by sector, sex, indicator of absence and lengths of period

## 8.7 Micro-data access

Micro-data are available for scientists through Statistics Denmark's Research services. The information is stored on the single absence period together with information on the employees jobs. Identification number of the employees and the enterprises are anonymized.

## **8.8 Other**

Not relevant for these statistics.

## **8.9 Confidentiality - policy**

In the compilation of the statistics of absence the confidentiality policy of Statistics Denmark is followed. Further more results that cover less than 50 employees are not published as the results are considered to be less accurate. For the private sector results that covers less than 50 employees either before or after enumeration are not published. Where the level of detail is high many results will be left out due to confidentiality or quality issues.

## **8.10 Confidentiality - data treatment**

In the compilation of the statistics of absence the confidentiality policy of Statistics Denmark is followed. Further more results that cover less than 50 employees are not published as the results are considered to be less accurate. For the private sector results that covers less than 50 employees either before or after enumeration are not published. Where the level of detail is high many results will be left out due to confidentiality or quality issues.

## **8.11 Documentation on methodology**

Further information can be found in 'Statistiske Efterretninger'.

## **8.12 Quality documentation**

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

## **9 Contact**

The administrative placement of this statistics is in the division of Personal Finances and Welfare. The persons responsible are:

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