



International
Labour
Organization

Collection and Use of Labour Inspection Statistics

A short guide



Labour
Administration,
Labour Inspection
and Occupational
Safety and Health

International Labour Organization

COLLECTION AND USE OF LABOUR INSPECTION STATISTICS

A SHORT GUIDE

**Labour Administration
Labour Inspection
Occupational Safety and Health**

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FOREWORD

Labour inspection statistics play an important role in assisting governments, their ministries of labour and labour inspectorates, in the development of national policies, systems, programmes and strategies for labour inspection.

This short guide, produced by the Labour Administration, Labour Inspection and Occupational Safety and Health Branch (LABADMIN/OSH) under the Governance and Tripartism Department of the International Labour Office (ILO), is intended to introduce to governments, in particular ministries of labour and labour inspectorates, the importance of labour inspection statistics and benefits that can be derived from them.

The guide presents information in a user-friendly manner, providing practical information about labour inspection information and statistics. It details why these statistics are useful and ways in which they can increase the efficiency of inspectorates; what areas they should cover; and how they can be produced, interpreted and presented to stakeholders.

Readers of this guide might also be interested in the Guide on the *Harmonization of Labour Inspection Statistics*, published by the ILO in 2016. The guide is intended not only to allow for the development and strengthening of labour inspection statistics but also to facilitate greater cooperation and collaboration between national labour inspectorates, other governments' institutions and all relevant stakeholders.

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1. INTRODUCTION OF THE GUIDE

The constant changes in the world of work and the diversity of businesses, workers, employment relationships, enterprise management models, technologies and occupational hazards make it imperative for labour inspection systems to keep pace with these new developments. Labour inspectorates are also under growing pressure to be accountable and to achieve more with fewer resources.

The aim of this guide is to help labour inspectorates overcome the challenges they face in compiling labour inspection statistics and to assist them in identifying their relevance and worth. The setting up of statistical methodologies will strengthen and enhance each national labour inspection system, while helping to present labour inspection in a more systematic and disciplined way.

The guide is intended to help labour inspectorates use data with a meaningful purpose, and is designed to be a practical tool to assist decision-makers, labour inspectors and other labour administration officers in collecting, interpreting and reporting labour inspection data. It also sets out to help labour inspectorates establish a standardized system to collect, analyse and publish statistics. The guide should be read together with the ILO *Guide on the Harmonization of Labour Inspection Statistics*.¹

2. WHAT ARE LABOUR INSPECTION STATISTICS?

Statistics provide a summary of data that can be collected, organized, interpreted and presented in a meaningful way. They are not an end in themselves but a tool, a means to show what lies behind a given situation.

Labour statistics are used to describe and analyse the size and structure of labour markets and to show changes over time. They include statistics on employment, conditions of work, occupational safety and health and industrial relations. Thus labour statistics form part of the wider set of **official statistics** and overlap with statistics for other areas such as health, education and training, demographics, income, production and national accounts.

Labour inspection statistics are an essential component of the total information provided by labour statistics, which are necessary to understand the overall labour market situation and the behaviour of its actors. They supply very valuable information on issues like occupational safety and health, working conditions, social protection, undeclared work, fundamental rights at work, industrial action, collective bargaining and breaches of law. In fact, some of these topics cannot be easily captured or measured by the more traditional sources for statistics, such as household or establishment surveys.

Labour inspectors have access to very valuable information, given their visits to workplaces, the reports they receive from employers and their other administrative functions. In order for this information to be fully and reliably utilized, it needs to be collected in accordance with certain guidelines, principles and methodologies. Once collected, this data can be processed and tabulated as statistical outputs. Labour inspectorates can then – with these

¹ Available at: http://www.ilo.org/global/about-the-ilo/how-the-ilo-works/departments-and-offices/governance/labadmin-osh/WCMS_506961/lang--en/index.htm.

statistical outputs – interpret the data and develop a story (for example, the history of compliance with a given law).

If labour inspectorates register and record the data required for administrative purposes in accordance with certain guidelines, this data can be converted into statistical outputs that are potentially of great value, as they can help in the diagnosis of issues and the design of responses to priority problems.

3. WHY ARE LABOUR INSPECTION STATISTICS USEFUL?

Labour inspection statistics are relevant for different actors. The following include some examples of why and how statistics can be used. Indeed, they can be utilized for:

- Monitoring and assessing the labour inspection system, its productivity, effectiveness and efficiency;
- Assessing the impact and needs of labour inspection services;
- Evaluating the coverage rate of inspection services in relation to the mandate defined in national laws;
- Increasing probabilities of success in strategies and planning, as decisions will be made on the basis of evidence rather than speculation;
- Measuring the progress of the labour inspection system over time;
- Improving the performance of labour inspectors by providing data on inspection actions;
- Increasing the social prestige of labour inspection, as decisions will be based on accurate information, and reports will be more complete and reliable;
- Providing greater visibility of the work performed, as statistics can be used to supply information on the action of labour inspectorates and their results;
- Providing a powerful resource for labour inspectorates to understand the environment in which they operate, as well as the needs of workers and employers;
- Giving information on where to (optimally) allocate available resources, especially when statistics are analysed by region, branch of economic activity, etc.;
- Preparing, monitoring and evaluating action plans, structures and outcomes based on accurate and updated information;
- Comparing the impact of measures and inspection actions implemented over time;
- Helping design scenarios to anticipate change, prepare approaches to observed trends, and define strategic options;
- Identifying patterns in economic sectors, regions and enterprises;

- Providing background information that facilitates mapping risks on non-compliance;
- Supplying information to appropriate legislative bodies to identify gaps and weaknesses in the legal framework;
- Helping analyse to what extent International Labour Standards are implemented in a given country;
- Assisting public institutions, social partners and researchers to build on expertise relevant to their needs;
- Providing governments with data to design national policies and programmes for occupational safety and health, child labour, and other areas;
- Helping public institutions define national responses to different challenges;
- Guiding employers' and workers' organizations in taking possible approaches to improve labour conditions and hence labour law compliance; and
- Providing support to governments to fulfil their reporting requirements to the ILO on the implementation of ratified Conventions.

Labour inspection statistics can help to analyse which branches of economy or country regions appear to be more problematic in terms of observance of a given law. The statistics might reveal, for instance, that some branches of economic activity are more prone to having occupational accidents, or to committing (serious) infringements. An analysis of these statistics would support the labour inspectorate's action to reorganize its proactive inspection visits with a view to concentrating more efforts on the branches of economic activities or regions – or even groups of enterprises – that seem to need them the most, and to free resources from areas that are less vulnerable.

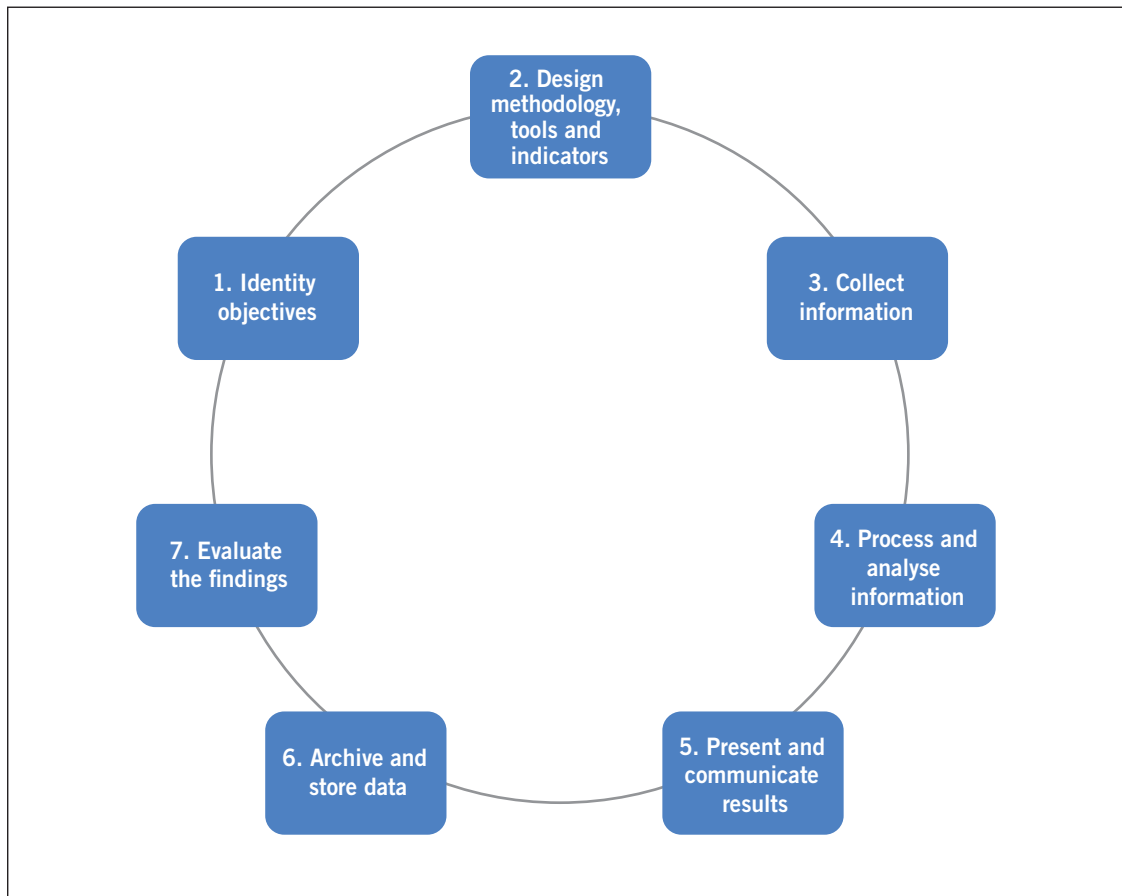
4. THE PROCESS TO DEVELOP LABOUR INSPECTION STATISTICS

The process to develop statistics from traditional statistical sources, such as censuses and surveys, which sets out to produce statistics on specific issues, involves a number of stages (figure 1).

The process is slightly different in the case of statistical sources that are not designed primarily as data collections with a view to deriving statistics, although they still have great statistical potential. For instance, administrative records – and particularly, labour inspection records – can be used to derive statistics as a by-product, despite having been created for administrative purposes.

The information or data has to be collected, compiled and presented using standard concepts, definitions and classifications, and will preferably be entered into a database. This will maximize comparability and compatibility with statistics from other data sources, and facilitate data access and handling.

Figure 1. Stages involved in the process to develop labour inspection statistics



It is essential that:

- The statistical efforts of all relevant government institutions are **coordinated**, and that these institutions work in collaboration – in particular with the national statistical office. Ministries of labour, health, social security, taxes, immigration and national statistical offices all have data that are of potential interest to the other agencies.
- The various stakeholders, ministries and primary data users, including the social partners, are **involved** in the design of the process. Labour inspectors (as the actual data collectors in the field) should also be directly involved, as should representatives from the different regional offices.
- The **reporting tools** are easy to use and complete. If the forms are simple and clear, this will not only reduce the reporting burden and delays in processing but also minimize data errors and omissions. Pre-coded boxes will speed up the process and suggest the type of answer and level of detail required.
- Labour inspectors and other relevant staff receive adequate basic **training** on the process and procedures regarding data collection, and that they understand the reasons for this collection. This training should include such topics as data collection procedures, the systematic recording of information, data quality and the treatment of missing values. It is vital that it also cover the reporting tool to be used.

The data collected to generate statistical outputs need to be:

- **Relevant:** The data must be related to the objectives of the institution concerned and meet its needs, or help to identify present or upcoming needs. There is no point in collecting vast information on numerous topics if there is no clear use for this data within the institution and/or among its partners.
- **Accurate and reliable:** The data must accurately describe the situation they are trying to measure. Users should be able to trust and not question the data.
- **Timely:** Information needs to be collected with a specific periodicity, updated and reported regularly. The timeliness of information will influence its relevance. Some indicators are reported on a continuous basis; others are only reported once a trimester or once a year. Time references are of particular importance for the production of statistics. There are possible time lags between when an event *happens*, when it is *reported* to the system and when it is *recorded* in the database.² Ideally, in these cases, information should be available on the three different dates.
- **Complete:** The coverage of the data should be comprehensive. That is, all the units in the universe of the source should be covered; there should not be any missing units. Ideally, there should also be as few missing variables for each unit as possible, and the main variables should never be missing. Data can only be comparable and reliable if they are complete and comprehensive.
- **Accessible:** The data contained in the register should be readily available, and stored in a format that favours their use for statistical purposes, such as a database. A suitable format for the register would also facilitate the regular updating of its data.
- **Consistent:** The labour inspectorate needs to use standardized data collection methods and concepts to ensure that they are consistent across records within the labour inspectorate and with sources from other agencies. This would ensure comparability of data across sources and robustness over time, and prevent misinterpretations.
- **Confidential:** The labour inspectorate should protect personal and business privacy.³ Statistical analysis does not require access to names, addresses or other uniquely identifying data that are particularly sensitive. Some countries have strict controls on the release of database information in order to protect personal and business privacy.
- **In accordance with International standards:** The use of international concepts, classifications and methods promotes the consistency and efficiency of statistical systems at all official levels. Bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statistics in all countries.⁴

² For example, when an infraction was committed, when it was detected and when the detection or any inspection action is registered.

³ See Article 15 of the Labour Inspection Convention, 1947 (No. 81) http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C081; and Article 20 of the Labour Inspection (Agriculture) Convention, 1969 (No. 129) http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C129.

⁴ It is suggested that member States adapt their labour inspection statistics to the concepts and minimum indicators presented in the ILO publication: *Guide on the Harmonization of Labour Inspection Statistics* (Geneva, 2016), available at: http://www.ilo.org/global/about-the-ilo/how-the-ilo-works/departments-and-offices/governance/labadmin-osh/WCMS_506961/lang-en/index.htm.

5. LABOUR INSPECTION STATISTICS – SUBJECT MATTER

The information collected by labour inspectorates differs from country to country, depending on the specific mandate of each national labour inspectorate, the specific subtopics covered, the national level of statistical development and the relations among national agencies (labour inspectorate, labour ministry, national statistical office, etc.). When labour inspectorates decide which data to include, they tend to think in the following terms: What do we “need to know”? What “would be nice” to know? What information can we easily obtain? Basically, they weigh the costs against the benefits: how many resources will it take to obtain this information; what will we use it for; who can benefit from it?

The Labour Inspection Convention, 1947 (No. 81) and the Labour Inspection (Agriculture) Convention, 1969 (No. 129), require the submission of annual reports containing data on the staff of the labour inspection service, the workplaces liable to inspection and their respective number of employees, inspection visits, violations and penalties imposed, industrial accidents and occupational diseases.

In addition, the Labour Inspection Recommendation, 1947 (No. 81)⁵ states that these annual reports should, in so far as possible, supply information on:

- Staff of the labour inspection service: aggregate number of inspectors and number of inspectors disaggregated by sex, and inspectors of different categories;
- Geographical distribution of inspection services;
- Workplaces liable to inspection and number of persons employed therein, including: the average number of persons employed during the year, and particularities of the persons employed, such as men, women, young persons, and children;
- Inspection visits: number of workplaces visited, number of visits by day or by night, number of persons employed in the workplaces visited, workplaces visited more than once a year;
- Violations and penalties: number of infringements reported to the competent authorities, classification of such infringements according to the legal provisions to which they relate, number of convictions, and nature of the penalties imposed;
- Industrial accidents: number of accidents notified disaggregated by industry and occupation, cause, whether fatal or non-fatal;
- Occupational diseases: number of cases notified disaggregated by industry and occupation, and cause or character, such as the nature of the disease, poisonous substance or unhealthy process to which the disease is due.

The list of topics covered by labour inspection statistics depends on the national characteristics of the labour inspection system and the procedures in place, but should always be as extensive as possible (within the limits of relevance).

⁵ Available at: http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:R081.

6. WHAT ARE INDICATORS?

Indicators enable us to measure something. They are another way of saying “how much” or “how many” or “how fast” or “how well”. The indicators used will help measure the progress made towards achieving the goals that are desired. Indicators can be measurements in total figures, ratios or percentages.

There are four different groups of indicators:⁶

- **Context indicators** provide general data pertaining to the labour market. They include information on: the characteristics of the employed population, employees and types of establishments; who is covered by and liable to labour inspection; and occupational accidents, diseases and injuries. In many cases, this information is not collected or calculated by the labour inspection service but derived from administrative records maintained by other institutions or agencies, official estimates, population censuses, labour force surveys (or other types of household surveys) or establishment surveys. Nonetheless, it is still of great interest to the labour inspectorate to assess the context in which it operates.
- **Resource indicators** provide information on the resources that are available to the labour inspectorate to carry out its mandate. It includes rates and percentages regarding human resources, financial resources and working conditions of the labour inspection staff. Most of the information of this group will be collected or calculated by the labour inspectorate - but the data concerning financial aspects may be provided directly by the related institutions or administrations.
- **Indicators of the work carried out** provide specific information on the labour inspectorate’s usual and current activities, including information on inspection actions. Indicators in this group include, for example: the number of proactive and reactive visits; the number of infringements identified; the complaints filed and treated; the reports completed; the accidents and injuries investigated; and the results and impact of labour inspection actions. These indicators are either collected or calculated by the labour inspectorates through internal reporting procedures.
- **Efficiency and quality indicators** provide information on how the labour inspectorate is doing its work. They supply information on the reaction time of the labour inspectorate; the scope of the activities that it undertakes; the efficiency of the labour inspectors; and the impact that the labour inspection has on working conditions and the labour market. These indicators are either collected or calculated by the labour inspectorates by means of internal reporting procedures.

7. WHO COLLECTS THE DATA?

The staff of the labour inspectorate are responsible for collecting the majority of the data used to create labour inspection statistics. The data are collected by labour inspectors during visits, or by auxiliary staff through reporting processes.

⁶ Full details of suggested indicators for labour inspection statistics can be found in the ILO publication *Guide on the Harmonization of Labour Inspection Statistics*, op.cit.

Some data are collected by other institutions or agencies and subsequently used by the labour inspectorates for their own statistics. This may be due to the fact that there are reporting obligations. For instance, employers may be obliged to report industrial accidents or to register new workers with specific agencies and ministries; and unions may have to register with the authorities.

A number of countries may set up an integrated system of labour statistics that includes information obtained from:

- Labour inspection records
- Labour force surveys
- Other types of household surveys
- Population censuses
- Establishment surveys
- Administrative records from the Ministry of Labour
- Administrative records from other agencies including, for example, information on: the personal income tax system, unemployment compensation, the migrant work permit system, the registration of employers' and workers' organizations, the notification of industrial disputes, the social security scheme, the workers' compensation scheme, or the reporting systems of occupational accidents and diseases.

Regardless of who is collecting the information and who has the reporting obligation, it is vital to use reporting forms. When designing the forms for this purpose it must be ensured that:

- They are simple enough to facilitate an accurate recording of the required information.
- Any information needed to complete the forms is readily available.
- Those filling the forms understand why the information is required.
- The formats are the same regardless of the region or registers used.

Labour inspectors are in a privileged position to collect data on labour-related topics on account of their visits to workplaces and their inspection actions.

8. MANUAL OR ELECTRONIC SYSTEMS?

With regard to the use of a manual or electronic system to produce labour inspection statistics, there are two steps involved that must be considered: collecting the information and processing the information.

As a general rule, labour inspectors collect the information manually – and then they also introduce the data manually into tables or electronic databases. If labour inspectors in

the field are provided with mobile electronic devices⁷ with Internet access, and the labour inspectorate has the overall register in an electronic format, the process will be more efficient because it eliminates the transcription stage. However, this system is currently only available in a limited number of countries.

Other actors with reporting obligations might also be able to submit the information themselves through electronic means⁸ (for example the Internet), or to send or present the information personally. It is then up to the relevant administration to record and process this information.

Table 1 lists the advantages and disadvantages of manual and electronic systems for collecting and processing the information.

Table 1. Advantages and disadvantages of manual and electronic systems

	Electronic system	Manual system
Cost	More expensive. Initial installation costs and changes to operating systems. Hardware and computer system maintenance will be required.	Less expensive. Does not require equipment, Internet or any technology.
Human resources	Saves human resources. Experienced analysts will be required to ensure that an efficient system is designed and implemented. The computer skills available may be inadequate to undertake some tasks. The inclusion of new data items, changes in coding systems and modifications in procedures, may require reprogramming and retraining.	Increased human resources. Very time-consuming to record, review, process and analyse information.
Quality of data	Eliminates the possibility of transcription errors. Data quality is improved	Increased possibility of transcription errors.
Ease of use of data	Data readily and immediately available to the competent persons. Facilitates the use, analysis and interpretation of data. Accelerates the process of producing statistics. Easier for users to extract statistical information and tables. Users can conduct analysis they deem useful. Allows for faster updating. Leads to higher levels of efficiency and reactivity of the labour inspectorate	Does not allow for cross-sectional data analysis, thus limiting analytical capacities of the inspectorate. Reports and information provided are less accurate and complete.
Other practical considerations	Easier to store information. Enables the handling of larger quantities of data. Difficult to destroy or lose information. The database will need to be restructured if the codes for a particular field are expanded or new data items added. Advanced systems should allow for the easy inclusion / deletion / edition of variables, indicators, etc.	Requires a physical archive. Registrations maintained in paper format are prone to being easily damaged or destroyed. May be more flexible to adapt to needs.

⁷ For example Labour Inspectors in Sri Lanka use 'LISA' a Labour Inspection System Application. Further information is available at http://www.ilo.org/asia/info/public/features/WCMS_353256/lang--en/index.htm

⁸ Employers in the United Kingdom use the Internet or telephone to report specified incidents for example accidents, dangerous gas fittings etc. <http://www.hse.gov.uk/riddor/report.htm>

9. CREATING TABLES

There are different ways to create a table; the simplest is by totalling results into cells (table 2). Data may be progressively added onto worksheets to produce the total of all cells in a given row - for each row in a table. A mark is inserted on the table for each record. When all data have been fully inserted, the sum of the values entered into the cells in each row is calculated.

Alternatively, the records for each group may be sorted into piles, and their values also summed up. At the end of the sorting process, the sum of values entered into the cells in each column is calculated, and the total is entered into the appropriate cell of the table.

Table 2. An example of a manual table

	GROUP I	GROUP II	GROUP III	TOTAL
GROUP A	II	I	IIII	7
GROUP B	III	III	III	9
GROUP C	IIII IIII	III	IIII	18
GROUP D		II	II	4
TOTAL	15	9	14	38

This type of manual table is used when the tables envisaged are small in size and simple in content.

In some countries, basic tables are prepared at the local or provincial level and are then aggregated at national level. It is therefore important that local-level tables are consistent across the country; they must have an identical layout and design. When designing a table, it is important to ensure that:

- Relatively few columns/rows are used.
- The columns and rows are clearly labelled.
- The table has been designed in consultation with a statistician and the end users.
- The table can be filled in and used by someone with basic training - and with minimal supervision.

In computerized tabulation, there are a number of different software packages that permit tabulation and generate related graphs. Basically, software packages work in the same way as manual tabulation systems; however, this is invisible to the user of the programme.

Despite all the advantages inherent in electronic systems, it is sometimes impossible to introduce them. Tables that are produced manually are generally simpler in content than those generated by computers. Complicated manual processing requires more time and people (and efforts to ensure data quality); consequently, fewer data items are extracted for manual tabulation.

10. AVOIDING MISTAKES

Since it is vital for data to be accurate and comprehensive, frequent data quality checks should be performed.

Beware of errors occurring:

- a. **In reporting** - Information may be misreported (sometimes even intentionally, in order to avoid penalties or to increase the likelihood of receiving a benefit);
- b. **In recording reported information** - The person filling in a questionnaire may misunderstand the information given and record something else, or may tick the wrong box by mistake, or may rephrase the given answer in such a way that the recorded information differs from the information received;
- c. **In coding information to facilitate tabulation** - Coders may misclassify a recorded answer on account of tiredness, laziness or a misunderstanding;
- d. **In transcribing recorded information into computer-readable form** - Errors may occur in data entry for similar reasons as above or because the person involved may misread the handwriting.

To minimize the risk of errors, it must be ensured that:

- Simple materials, tools and forms are provided;
- Advice and guidance are provided when requested;
- All personnel are adequately trained;
- Regular spot checks are conducted; and
- Adequate working conditions (including reasonable deadlines, appropriate work instruments and a motivating work environment) are provided.

11. ANALYSING DATA

Statistics are not an end in themselves but a tool, a means to expose certain issues or to show what lies behind a given situation. Hence, the usefulness of the data collected lies more in their production as statistics and their interpretation, rather than in the actual data themselves. In the context of labour inspection statistics, the indicators and tabulations discussed above have a great potential to characterize a labour inspection system.

The way in which the data are processed and interpreted is more important than the actual data. This procedure involves, for example, simplifying data; summarizing the data and creating tables, graphs and charts; and later presenting the information in a report to inform decision- and policy-makers.

Statistical information provides the means to identify patterns or trends. When analysing the trends, the information obtained can be used to predict future events, or even to explain occurrences in the past.

The following include a number of tips to help identify trends and analyse them:

- Calculate proportions, rates, ratios and averages. Patterns appear more evident when looking at relative figures such as ratios - rather than absolute values.

- Place the information in tables or charts. It is usually easier to identify trends graphically.
- Compare results with established benchmarks or reference values.

Table 3. Example of presentation of labour inspection statistics

Performance of labour inspection systems, selected countries ⁹								
Year	Data relating to:	Australia	Costa Rica	Dominican Republic	El Salvador	Guatemala	Honduras	Ireland
2007	Inspection actions	19 600	10 332	79 484	29 450	5 515	14 723	13 631
	No. of inspectors	220	88	192	159	239	118	127
	Inspection actions per inspector	89	117	414	185	23	125	107
2008	Inspection actions	33 600	12 235	85 265	29 948	11 127	17 392	16 009
	No. of inspectors	310	90	202	159	238	120	127
	Inspection actions per inspector	108	136	422	188	47	145	126
2009	Inspection actions	30 418	14 385	88 816	29 728	13 131	15 277	18 451
	No. of inspector	330	93	203	159	238	120	127
	Inspection actions per inspector	92	155	428	187	55	127	145
2009/07 % change	Inspection actions	55.2	29.2	9.2	0.9	138.1	3.8	35.4
	No. of inspectors	50	5.7	5.7	0	-0.4	1.7	0
	Inspection actions per inspector	3.5	31.7	3.3	0.9	139.0	1.8	35.8

Inspection actions: The total number of individual workplace visits, follow-up visits and document reviews, as well as advisory or preventive services and consultations carried out by labour inspectors during the given period.

No. of inspectors: The total number of persons of either sex who, for the given period, are formally recognized as labour inspectors and/or who exercise inspection functions.

Inspection actions per inspector: This figure is a rudimentary efficiency indicator, showing the average number of inspection actions carried out in a country by each labour inspector in the given period.

The following figures (2, 3 and 4) depict information from table 3 in a different manner.

⁹ Table 3 contains a sample of statistics collected by the Office on the activities of selected national labour inspection systems (LIS) between 2007 and 2009. Figures on LIS were primarily drawn from article 22 reports on the Labour Inspection Convention, 1947 (No. 81), submitted to the Committee of Experts on the Application of Conventions and Recommendations. Other sources included the Eurostat Health and Safety at Work database, websites of national labour ministries responsible for labour inspection, replies to an Office questionnaire, ILO technical memoranda and project information on national labour inspection systems. Data obtained from http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---lab_admin/documents/resourcelist/wcms_160321.pdf.

Figure 2. Evolution in the number of inspectors

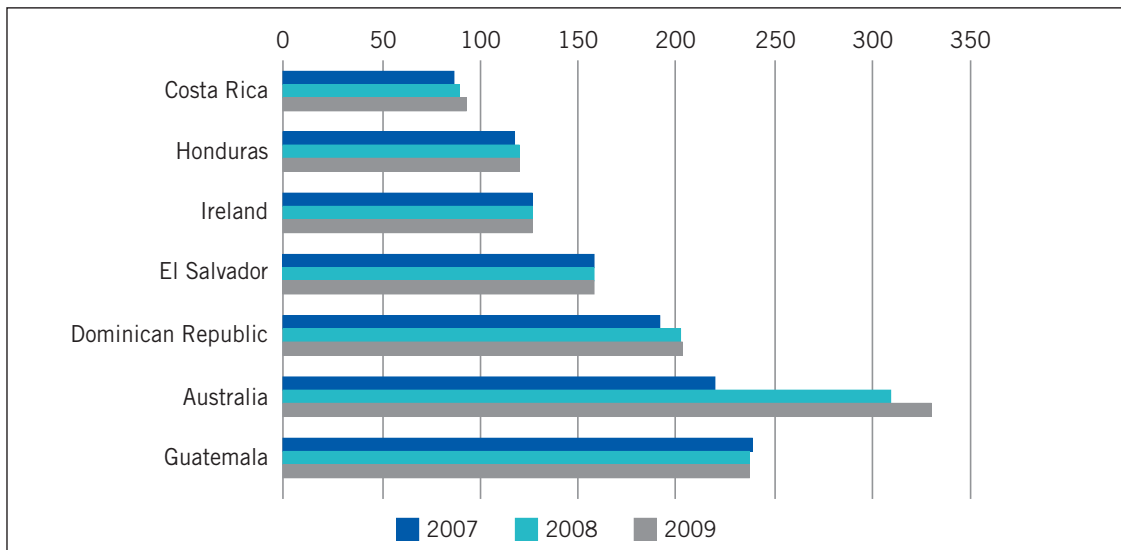


Figure 3. Ratio of inspectors / inspection actions

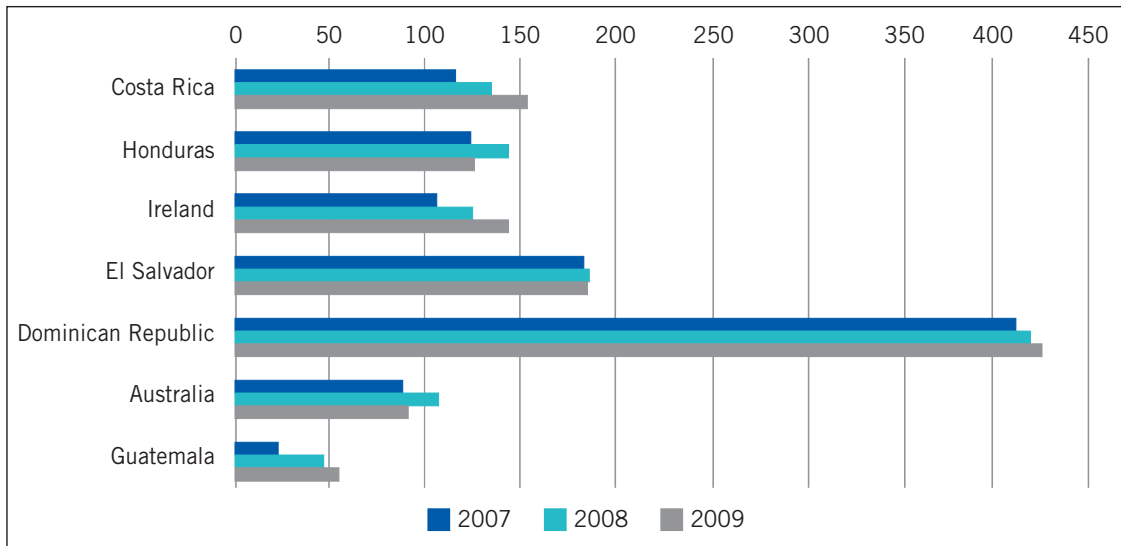
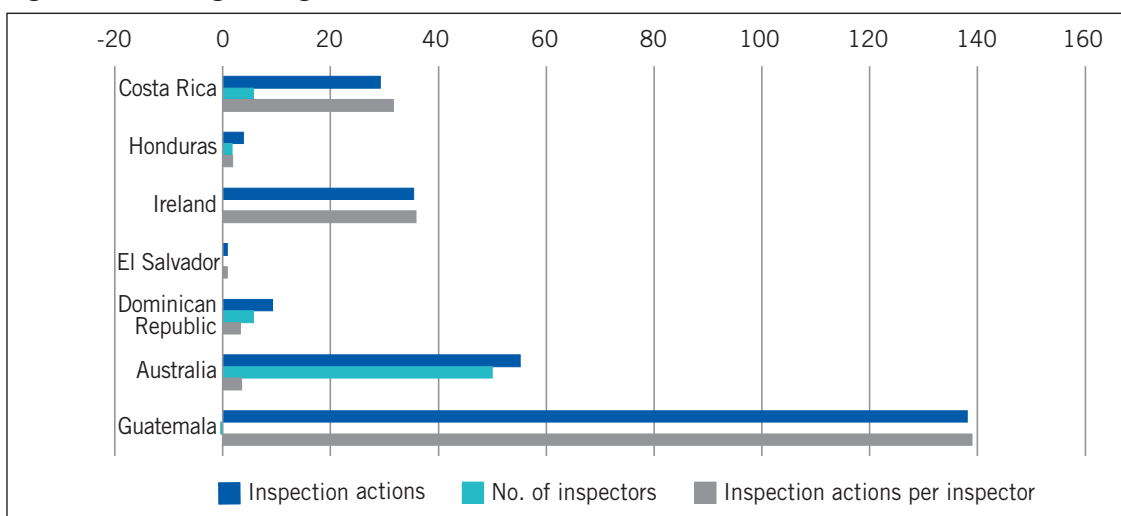


Figure 4. Percentage change from 2007 to 2009



Labour inspection statistics may reveal patterns and trends that can be utilised by the labour inspectorate for guiding its actions, for example:

- The statistical analysis might reveal that some branches of economic activity or some country regions are more prone to having occupational accidents, or to committing (serious) infringements. This data can help the labour inspectorates to prioritize certain proactive inspection visits and to plan the subject matter to be covered.
- Statistics on the main types of infringements detected might show that some particular violations are happening more frequently. Once in receipt of this information, labour inspectorates might therefore opt to address these violations, perhaps with specific advisory or awareness campaigns, or through targeted enforcement action on the topic – or by adopting any other response liable to promote compliance.
- Statistics on the number and share of complaints and reports not treated, or the time needed to respond to these, could signal the need to reorganize the labour inspection tasks and resources in a different manner to increase efficiency.
- An in-depth analysis of the statistics might also contribute to a better allocation of resources. Comparing the existing means with the results obtained, and the efficiency with which they were obtained, for example among country regions, can help to assess which resources seem to have the greatest impact on the tasks carried out.
- Statistics on the average number of visits carried out per labour inspector per month could potentially provide information regarding geographical constraints (long distances between workplaces to visit), intensity of the visits (there might be some very thorough, extensive visits carried out), equipment constraints (lack of suitable transportation to the workplaces to visit), etc.
- Statistics from labour inspections will measure the proportion of businesses in breach of labour law – i.e., their level of compliance to labour law and labour standards. Such data may highlight the need for stricter enforcement or a strengthening of the labour inspection system, or an increased need for awareness-raising campaigns. But they may indicate that the existing system is working well and that standards are being adequately maintained; or they may suggest that the existing law should be reviewed.

Statistics can also help to map those enterprises that have a higher record of violations over a given period; those in which work accidents are above the average in a given sector; and those in which a higher percentage of vulnerable workers are at risk of abuse. Consequently, they provide a solid basis for operational planning.

12. HOW ARE THE DATA PRESENTED?

The presentation of the data collected is as crucial as the quality of the data itself, since it influences the interpretation of the statistics. Labour inspectorates usually provide the statistics in a report that can take the form of a printed publication or be distributed electronically¹⁰ (through the Internet, email, CD-ROM, etc.).

¹⁰ For example, The Ministry of Labour, Ontario, publishes information on the Internet. See: <http://www.labour.gov.on.ca/english/hs/pubs/enforcement/index.php> (accessed 12/2/2016)

The report prepared on the labour inspection statistics should not be all about numbers or words. Explanations should be provided to ensure that the audience understands the interpretation of the information. The report should explain to the reader what happened, when and where it happened, and why and how it happened. Labour inspection statistics must be as user-friendly as possible and minimize any possible confusion.

Is it vital to identify the target audience before presenting statistics, as this will determine what details to include in the report, as well as the narrative style, the visuals employed, and the channel used to transmit the information.

It is important to ask the following questions. Does the target audience consist of internal users? Or it is composed of members of the labour inspectorate, or more generally the Ministry responsible for enforcement and compliance? Or does it consist of policy analysts and decision-makers, the general public, employers' and workers' organizations, or the media? Is it the ILO? Will readers be well educated, but not necessarily experts on the subject? Will they be experts and specialists? Or will the statistics be aimed at a less literate audience?

It is likely that the statistical report may have different target audiences and therefore require some basic steps to ensue that it is accessible to all. For instance, it would be relevant to:

- Identify the internal users;
- Identify the external users;
- Map the information that you think the users will find useful;
- Create feedback mechanisms for users; and
- Establish mechanisms for recording the feedback.

The labour inspection report should tell the story of what has happened in a user-friendly manner. Explain the numbers and provide visuals to help users interpret the data.

Especially in those cases where the report's target audience consists of external users, it is important to:

- Draft the report in simple and plain language that everyone can understand.
- Avoid official language or jargon that is unfriendly or unclear.
- Convey clear and concise messages.

The report should combine both text and visuals. Tables, charts, graphs, diagrams, maps and other pictorial elements are very useful tools to present key results or to illustrate a point. It is much easier to understand data if they are presented in simple visuals.

Visuals are important because:

- They help present numbers in a concise manner.
- They help organize the data to support the content.
- They eliminate the need to discuss insignificant variables that are not essential.
- They make it easy for users to find and identify information.

Choosing what visual tool to use will depend on the messages you want to convey. Statistics are sometimes more comprehensible when they are presented in a chart rather than a table. In other cases, tables are more appropriate because they allow the inclusion of more data that the users need to see. When it is important to show numbers, tables may be used; if it is vital to demonstrate trends, this can be done with symbols (for examples bars or lines), as well as charts or graphs. The latter display the data quickly and give a clear picture of trends and comparisons.

For instance, charts are preferable to tables when:

- Demonstrating a comparison of data;
- Indicating changes over time;
- Showing how items are distributed and their differences;
- Indicating correlations or demonstrating how variables relate to each other; and
- Signifying how one item compares to the total.

Regardless of the visuals used, it is important, when designing them, to:

- Create their layout in a way that it is self-explanatory;
- Make sure that the focus is on the substantive points to be conveyed in data;
- Avoid trying to say too much in one design;
- Avoid overcrowding the visuals with statistics that are not needed for the message being conveyed;
- Use one graphic for each message or issue being analysed;
- Try to use round numbers and not decimals (unless they are needed to illustrate subtle differences);
- Label the visuals in a straightforward fashion;
- Ensure they fit across a page – otherwise they are difficult and confusing to read.

Ensure that all the tables or graphics include:

- A title that states what is being tabulated;
- The units of measurement;
- The classifications that are involved and how they are used;
- The reference period;
- The source of the data.

It might be useful to include footnotes that clarify any concepts used, and to highlight features that might affect the statistics. The source of the data should also be included in a graph or in a footnote.

The tabulation of the data should be carefully designed to show, at a glance, all the interesting observations and conclusions that can be drawn.

13. HOW WILL THE STATISTICS BE DISSEMINATED?

Before disseminating the statistical reports on the various subjects – for example, annual performances, inspection campaigns, inspector numbers, etc. – the following questions have to be raised: how will the report be made available to the public? Will printed copies be distributed? Will the report be available in electronic format – to be distributed via emails and social media, or posted on the ministries' or inspectorates' websites? An attempt must be made to disseminate the information through channels that are the most likely to ensure its availability to the widest group of users, so that labour inspection statistics are easy for the interested parties to find and use.

The Internet has become an important tool for disseminating this type of information and making it easier for all users to access it, regardless of their location. Most labour inspectorates that publicize their labour inspection statistics post their reports – and at times other raw data – directly onto their websites. Some inspectorates provide electronic-only documents, tables and databases, or spread sheets. Sometimes they also allow for access to web-based applications, which make it possible to manipulate or sort the data.

A number of labour inspectorates rely on the media to help them communicate labour inspection statistics to the general public. Labour inspectorates provide the information to journalists so they can also act as intermediaries and convey the messages. The journalists refer their readers to the original sources of the data if they require more detail. Some labour inspectorates hold public meetings with the media to present annual reports, campaign results or various initiatives (for example, sectorial programmes).

Other labour inspectorates hold seminars, workshops and group discussions with their main stakeholders so that they communicate the statistics to them, and create a mechanism allowing for feedback on the labour inspectorate work and labour inspection indicators.

Make labour inspection statistics easy for the interested parties to locate and use.

14. STORAGE OF DATA

Finally, in respect of data processing, do not overlook the importance of storing data records properly. This involves sorting paper records by reference dates and identification number, and packing them in small, clearly marked piles to ensure easy retrieval. Paper records and computer files should be kept in a secure but easily accessible storage facility so that they can be easily retrieved for further action, if required. They should be stored in locations that are secure against theft, physical damage (fire, flooding, and humidity) and natural catastrophes (earthquakes and cyclones).

Computer files can be accidentally or intentionally damaged and special action should be taken to protect electronic data. The data should be backed-up regularly on a separate disk and transferred to new media when equipment or systems are changed. Some database software packages provide locks, passwords, etc. to prevent unauthorized access and tampering. Statisticians and administrators should consult their computer systems analyst to ensure adequate security back-up and protection of data.

15. MONITORING AND EVALUATING THE PROCESS

It is essential that time is spent on monitoring and evaluating the framework or system put in place to collect, process, analyse and disseminate the labour inspection statistics.

This evaluation will provide managers with the appropriate information for decision-making in the statistical development process. This process will ensure greater efficiency in the collection, analysis and use of the information produced to make informed decisions.

The monitoring process will involve:

- Reviewing the procedures.
- Identifying the challenges and their causes.
- Suggesting possible solutions.

Some of the key questions that should form part of the evaluation process include:

- How much time does it take to collect the information? And to analyse it?
- Is the process efficient?
- Are the data accurate? Are there errors? Why?
- Are data collected in a timely manner? Do regional offices submit their information on time?
- Do the people responsible for collecting and analysing the information have the appropriate training and resources to complete their work? What is the capacity of staff to deliver these outputs?
- Are schedules being followed? Are there delays?
- Are indicators still relevant? Should new indicators be included? Are there many indicators left unused? If so, why is that?
- Are the data disaggregated appropriately?
- Are users satisfied about their access to the information?
- Are stakeholders using the data? If so, why – or why not?
- Are decision-makers using the information to improve the work process? If not, why not?

Ideally, the evaluation process should include the participation of and feedback from the people involved in all steps of the process – collection, analysis and dissemination – as well as the internal and external users. These people should comprise, for example, those responsible from Head Offices, the regional offices, the Ministry of Labour, the general statistics office, and other ministries, as well as the social partners. This participative process can take the form of interviews, workshops, meetings, or progress reports to ensure that all persons are aware of the value of statistics and that appropriate attention be given to the subject.

This short guide, produced by the Labour Administration, Labour Inspection and Occupational Safety and Health Branch (LABADMIN/OSH) under the Governance and Tripartism Department of the International Labour Office (ILO), is intended to introduce to governments, in particular ministries of labour and labour inspectorates, the importance of labour inspection statistics and benefits that can be derived from them.

The guide presents, in a user-friendly manner, practical advice about labour inspection information and statistics. It details why these statistics are useful and ways in which they can increase the efficiency of inspectorates; what areas they should cover; and how they can be produced, interpreted and presented to stakeholders.

Readers of this guide might also be interested in the *Guide on the Harmonization of Labour Inspection Statistics*, published by the ILO in 2016. It is intended not only to allow for the development and strengthening of labour inspection statistics but also to facilitate greater cooperation and collaboration between national labour inspectorates, other governments institutions and all relevant stakeholders.



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