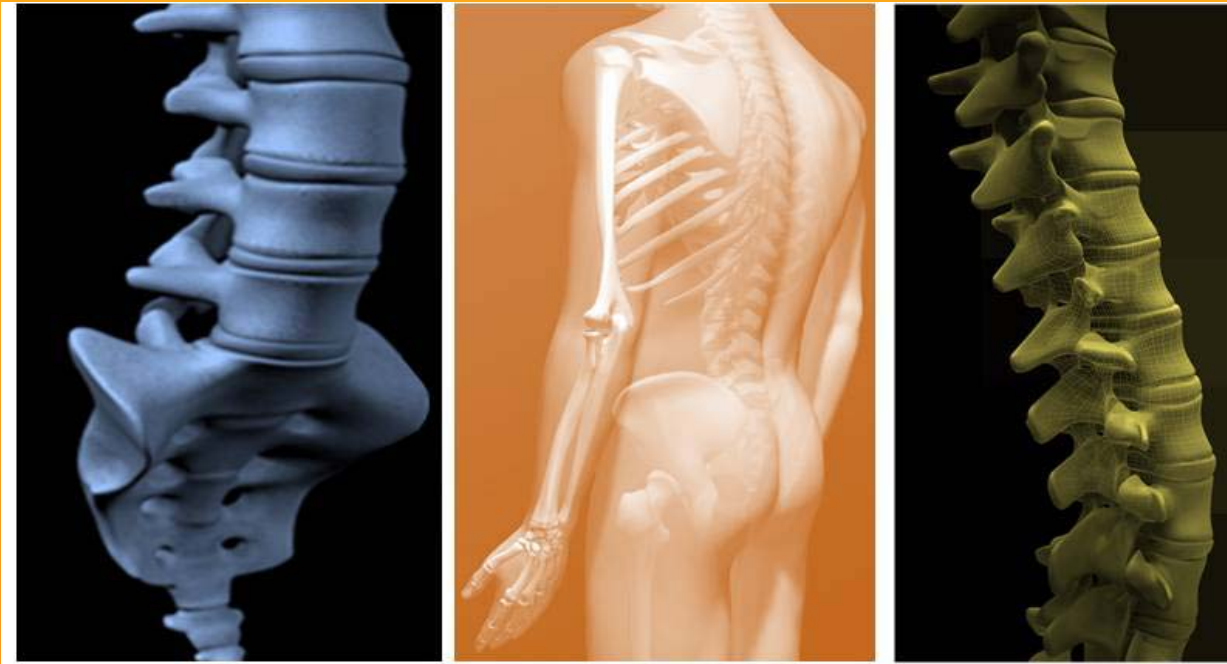


## Work Related Musculoskeletal Disorders - WMSD

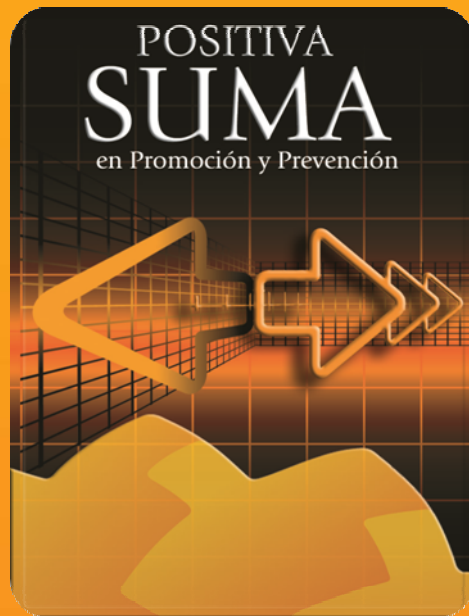
### COLOMBIAN EXPERIENCE IN THE PREVENTION OF MUSCLE-SKELETAL DISORDERS (MSD)



Dr. Alvaro Hernán Vélez Millán

# STRATEGIC INITIATIVE

Design and implementation of protocols for intervening in the prevention of occupational diseases-Muscle-Skeletal Disorders”



## Management Model in Promotion and Prevention



# OBJECTIVES OF THE INITIATIVE

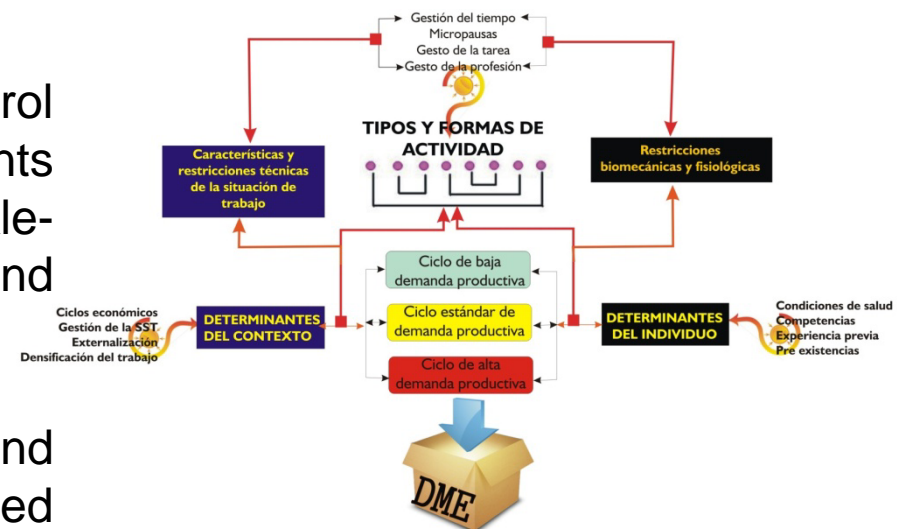


## General objective

To design and implement intervention protocols by economic sector and firm size in order to control the events associated with the development of Muscle-Skeletal Disorders, such as backaches and other upper MSD, considering a comprehensive diagnosis of work situations with the highest morbidity.

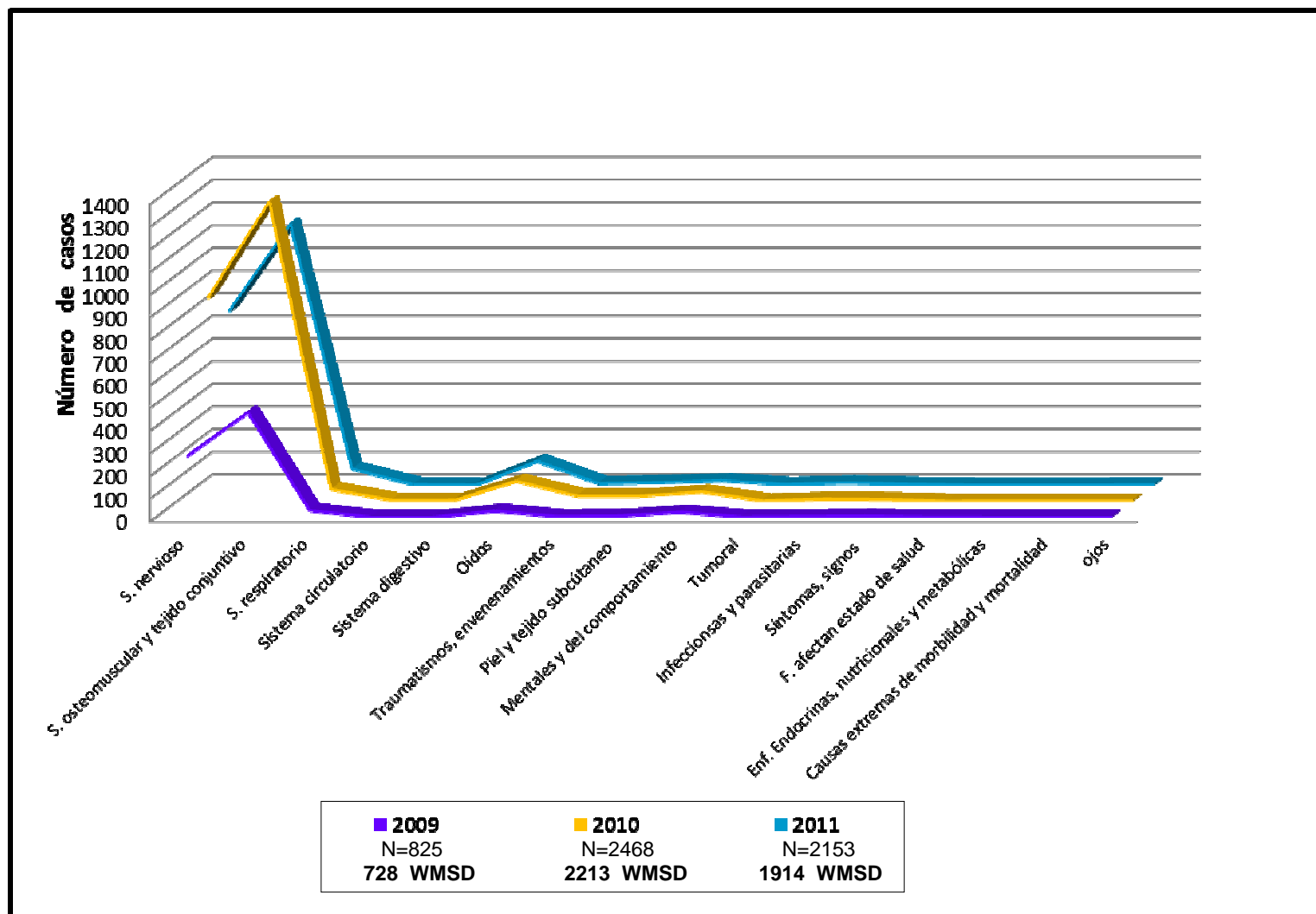
# Specific objectives

- To develop a model for evaluating the events associated with the development of Muscle-Skeletal Diseases, for the economic sectors with the highest morbidity.
- To develop prevention and control strategies in order to counteract the events associated with the development of Muscle-Skeletal Diseases by economic sector and firm size.
- Training and certification in the use and application of protocols, for the group related with implementation and monitoring.
- To validate and implement the aforementioned protocols in firms.

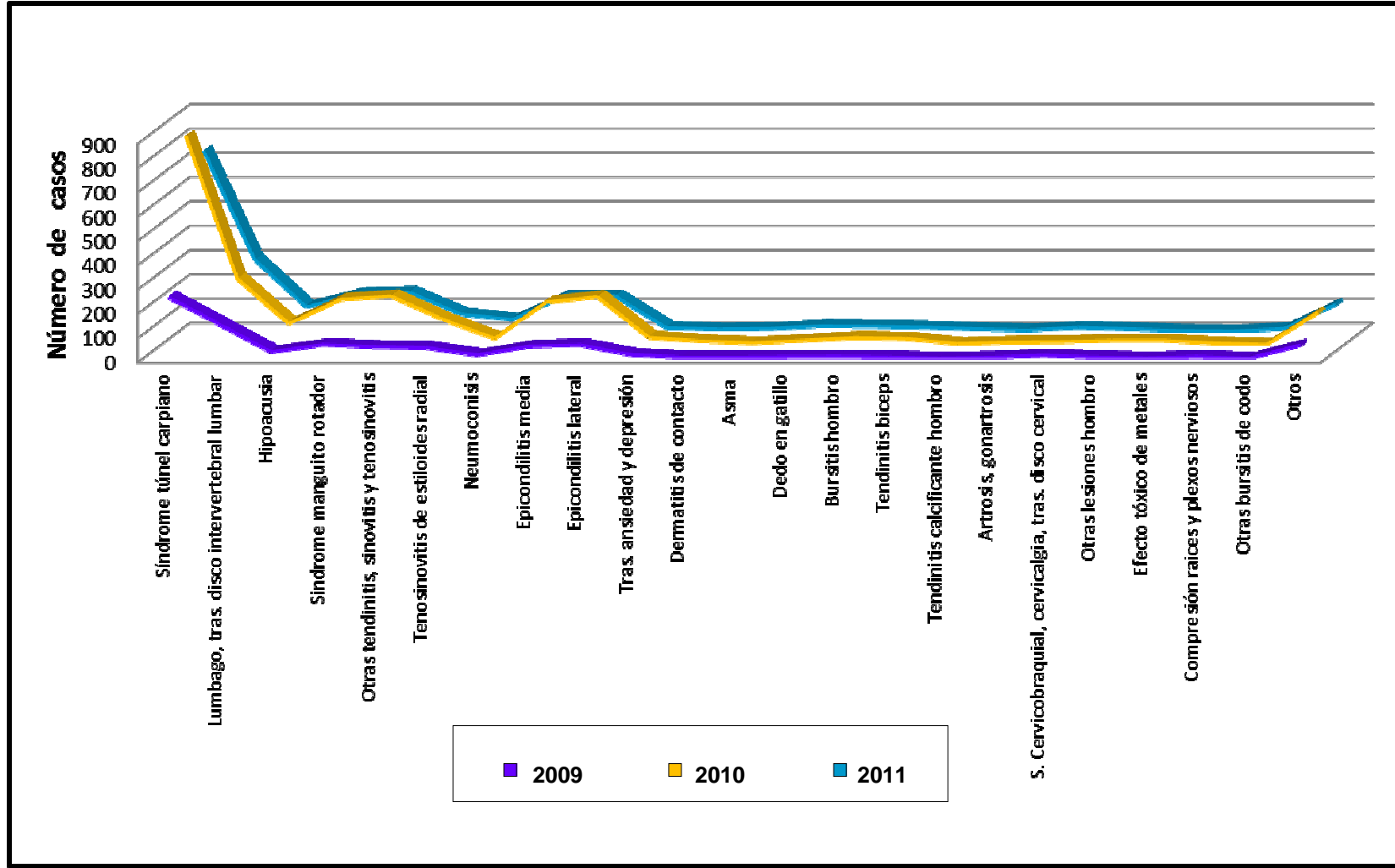


# CONTEXT OF THE MSD PROBLEMATIC IN AFFILIATED FIRMS

## EP Qualified by Diagnosis Group CIE-10. - 2009 to 2011



## EP qualified by CIE 10. Positiva Compañía de Seguros/ARP - 2009 to 2011



## Costs projection of *EP* for affiliated workers to the General System of Professional Risks in Colombia



Every year 20.457 professional diseases would be expected, with support costs of 13 billion pesos and economic benefits for more than 66 billion pesos.

Based on information of the International Labor Organization (ILO), it is estimated that **40% of the costs generated by professional illnesses are due to MSD<sup>[1]</sup>**.

<sup>[1]</sup> ORGANIZACIÓN INTERNACIONAL DEL TRABAJO. Salud Ocupacional éticamente correcta, económicamente adecuada, Citado por TAFUR S., Francisco Informe de enfermedad profesional en Colombia 2001-2002, una oportunidad para la prevención. Bogotá: Ministerio de la Protección Social, 2004. p. 65.

## METHODOLOGY

The Risk Research and Control Management Office projected the intervention design and implementation Protocols for the prevention of MSD for 14 economic sectors.

Project contextualized in the framework of **long lasting prevention.**





## Long Lasting Prevention of MSD

- Global approximation of the problem
- Combinations of analysis fields and short, medium and long-term actions (transformations of great importance)
- Integration of social and economic problems



# Sample

Sample by convenience (**386 firms**)

## Inclusion criteria:

- To present MSD cases qualified as professional, an aspect that showed the exposure to occupational events related to the problematic.
- Firms located in the Branches with the highest MSD morbidity of the country.
- To be part to the economic sectors under study.
- To be a large, medium or a small firm.



## Economic sectors that are included

1. Manufacture industries
2. Public management and military/defense enterprise; mandatory social security institution
3. Real estate, entrepreneur and rental activities
4. Agriculture, livestock, hunting and forestry
5. Social and health services
6. Commerce and retail
7. Education
8. Other activities of community services, other social and personal activities
9. Transportation, storage and communications
10. Electricity, gas and water supply
11. Exploitation of mines and quarries
12. Construction
13. Hotels and restaurants
14. Financial sector

## Selected prevention method

An active and comprehensive global approximation, which estimate the events associated with the development of MSD, taking into account scientific evidence.

The method is characterized by integrating different actors of the organization in the activities which are part of the Consulting and Support Technique that is offered by a team of competent professionals.



## Cooperation dynamic approach



In order to guarantee a long lasting prevention, it is unavoidable to develop a long-term plan, in which a diversity of internal and external actors related with health and safety at work management should be taken into account.



Construcción social de la prevención  
**Construcción social de la prevención**

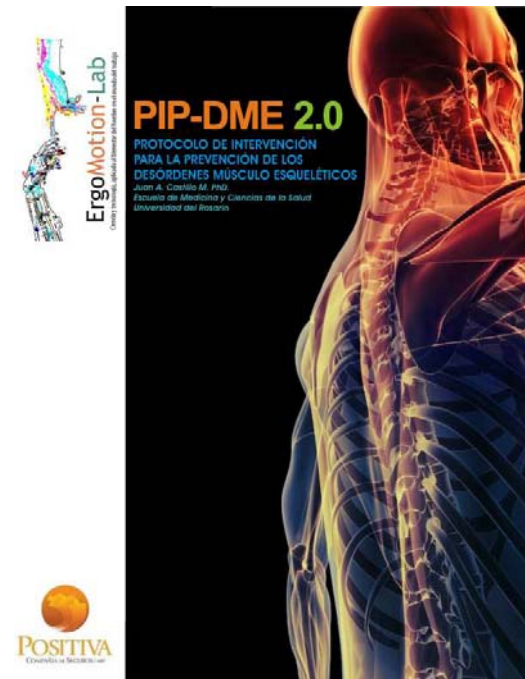
## Understanding of MSD problematic



Insofar as the complexity of MSD and the disorders it causes in the productive system and working population are understood, an organization will be able to construct a customized/ad-hoc plan adapted to each particular situation, to guarantee the impact in a comprehensive spectrum of components.

## ACHIVEMENTS

- Intervention protocols for the prevention of MSD according to the characteristics and necessities of the affiliated firms.
- Intervention strategies by economic sector and firm size.
- Information handbooks for the evaluation of health and work conditions.
- Information handbooks for the systematization and statistical and epidemiological analysis of the problem.
- Impact is becoming evident in some firms that are included, taking into account the in advance shared management for the prevention of these kind of pathologies.
- Resources reinforcement for the MSD prevention competences.



### FASE 1 - 2010

#### Protocols for 7 economic sectors:

Real estate activities  
Public management  
Manufacture industries  
Agriculture, livestock  
Other service sectors  
Education  
Transportation and communications

#### Protocol implementation in 108 firms

(consultancy and technical assistance)

(135 firms are invited to participate)

### FASE 2 - 2011

#### Protocols for 4 economic sectors:

Social and health services  
Hotels and restaurants  
Commerce/Trade  
Electricity, gas and water supply

#### Protocols validation

Protocols for small enterprises– 7 economic sectors  
Protocol for medium and large firms - mining in the fresh air

#### Protocols implementation in 137 firms

( More than 203 firms are invited to participate)

### FASE 3 - 2012

#### Protocols for 3 economic sectors:

Mining  
Financial sector  
Construction

#### Protocols validation

#### Protocols implementation

Projection: Inclusion of 138 firms



**Socialization with the industrial community and the academic world**



## Main team

**Positiva Compañía de Seguros/ARP**  
**Vicepresidencia de Promoción y Prevención**  
**Gerencia de Investigación y Control del Riesgo**

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*ithank you!*



**POSITIVA**  
COMPAÑIA DE SEGUROS