



OCCUPATIONAL HEALTH & SAFETY



The main purposes of OHS are;

**** to assure safe and healthful working conditions for employees**

(çalışanların sağlığını korumak)

****to prevent work accidents and occupational diseases.**

(iş kazalarını ve meslek hastalıklarını önlemek)

****to provide security and continuity in production.**

(üretimde güvenliği ve devamlılığı sağlamak)

****to provide a healthy and safe working environment**

(Sağlıklı ve güvenli çalışma ortamı oluşturmak)

As a result, quality and efficiency increase



1) Identify the hazards.

2) Identify the risks.

3) Decide on precautions

4) Record your findings and implement them

5) Review and update



| HAZARD | RISK | Probability | Severity | Present Risk Assessment (probability x severity) | Present measure | Measures to be taken | New Probabiliy | New Severity | New Risk Assessment (probability x severity) |
|-----------------------|--|---------------|---------------|--|-----------------|--|----------------|---------------|--|
| Working with Asbestos | Serious lung diseases if fibres released into air and inhaled. | Very high (5) | Very high (5) | Very high (25) | No | 1) Elimination 2) Substitution 3) Engineering methods 4) Administrative methods 5) PPE | Low (2) | Very high (5) | Low (10) |
| Flammable gases | Fire, Smoke inhalation, Burns | High (4) | Very high (5) | Very high (20) | No | Correct Storage, caution signs, tranings, PPE | Low (2) | Very high (5) | Low (10) |
| Manuel handling | Suffering from back pain | High (4) | High (4) | Very high (16) | No | Use lift truck, porters trollet etc., training | Very Low (1) | High (4) | Very Low (4) |
| Noise | Hearing damages | Very high (5) | Very high (5) | Very high (25) | No | Caution signs | High (4) | Very high (5) | Very high (20) |
| Noise | Hearing damages | Very high (5) | Very high (5) | Very high (25) | No | Using Ear plugs when it exceeds 85 dB | Low (2) | Moderate (3) | Very Low (6) |

Who must do the Risk Assessment?

- 1) Employer
- 2) OHS Expert
- 3) Workplace doctor
- 4) Working agent
- 5) Authorized staff



They all must sign the Risk Assessment

A collection of handwritten signatures in various cursive styles, including 'Jef', 'B.T.', 'W. Jef', 'J.V.', 'Jef', 'Mach', and 'Jef'.

So,
Occupational Health and Safety:

Improves a company's occupational health and safety standards.

Ensures good business,

Protects the physical and mental health of the employee, a better brand image, and higher employee morale etc.

These studies are; systematic and scientific studies that are carried out in order to protect themselves from conditions that may harm health at workplaces.



Because of

Occupational accidents

occupational diseases

Occupational Health And Safety

is required..

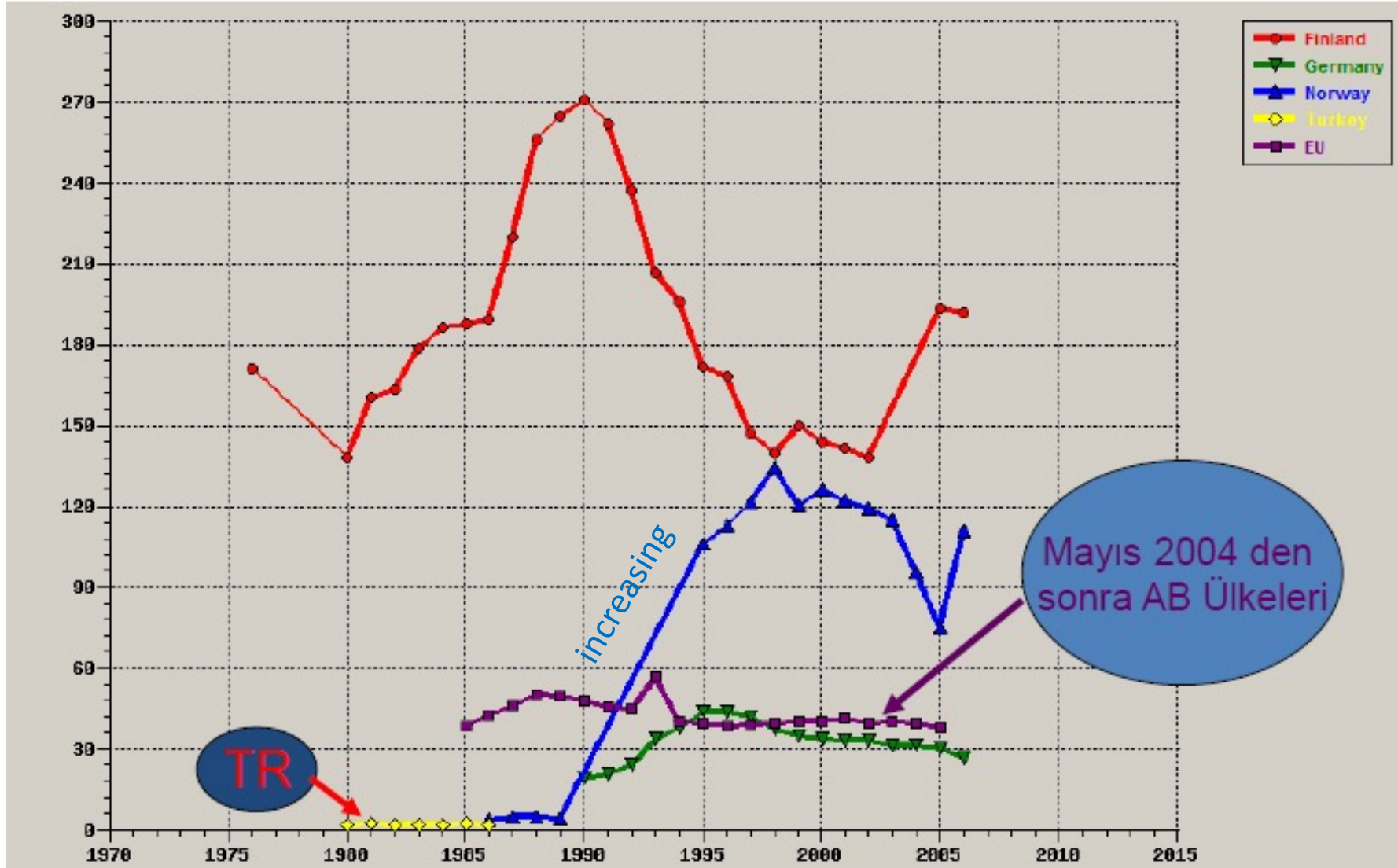
Occupational diseases can be avoided completely = 100 %.

98% of Work accidents can be avoided.



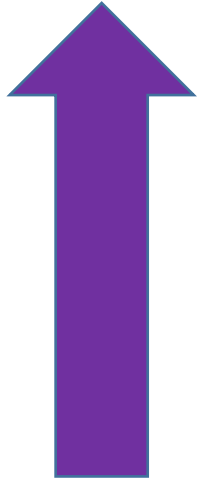
2009

Lets have a look at Occupational Disease Statics in world



According to these data;
Turkey has no data about
occupational diseases.

?



Development in
OHS



Labor laws from past to present



**DEVELOPMENT OF CONCEPT AND RULES OF
OCCUPATIONAL HEALTH AND SAFETY
IN WORLD AND TURKEY**

Historical Development of OHS in the World

- Before the industrial revolution:



- Production techniques and forms have also changed throughout the production process, *beginning with the first human.*
- The development of **stone and soil**, the development of **mining** techniques, the possession of **fire**, the increasing use of **steam** power, and the development of **work tools and production tools** have been significant influences.
- Studies to solve the problems brought about by the developments in the working life have been fundamental elements in the development of worker health and work safety.
- For this reason, the history of establishing a relationship between work and health depends on ancient times.

Hammurabi Law (The first Law)

first law in the area of Occupational Health and Safety.



- In the B.C. 2000s, **Hammurabi**, the founder of the Babylonian Empire (1819-1950 BC) prepared **Hammurabi Laws**. **This law** included Health and Safety provisions on OHS.



*Bu kanun İş Sağlığı ve Güvenliği kapsamındaki **ilk kanun** kabul edilir.*

Historical Development of OHS in the World

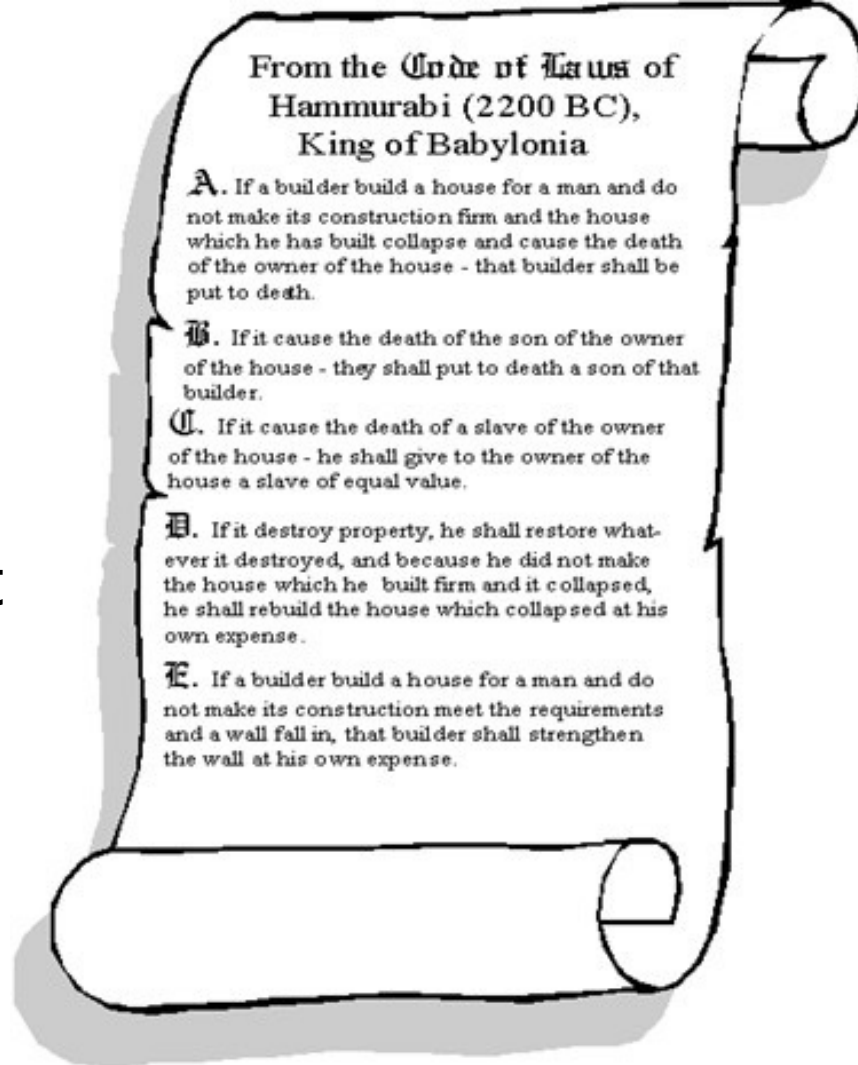
- According to Hammurabi Laws:

- 'If a builder built a house for someone, and did not construct it properly, and the house which he built collapsed and killed its owner, then that builder would be put to death'

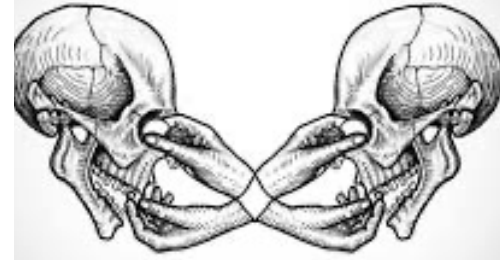
[Law 229]

- 'If it killed the son of the owner, the son of that builder would be put to death' **[Law 230]**

- 'If it killed a slave of the owner, then he would pay for a slave to the owner of the house' **[Law 231]**



*An eye for an eye,
a tooth for a tooth*



Historical Development of OHS in the World

In ancient times, most of the manual labor was performed by slaves. Slaves were unfortunately considered to be valuable capital assets.



Working in mining regions was so dangerous. So it was considered suitable **for only slaves.**

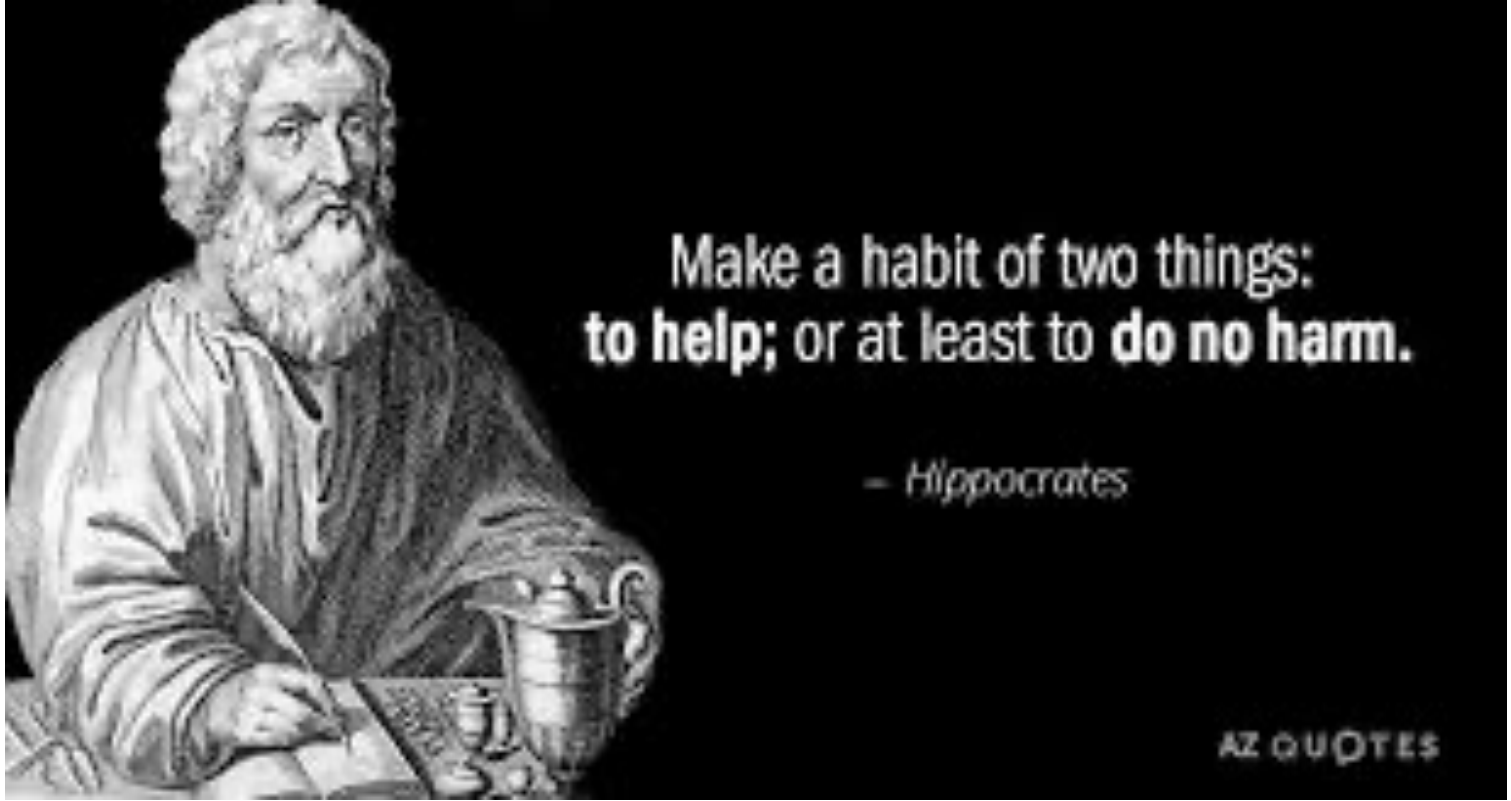


- **Pliny the Elder (AD 23-79)**: wrote a book about the diseases of slaves.

He recorded the danger of breathing of fumes and vapors to the miners.



HIPPOCRATES
B.C. 460 - 370



He mentioned the harmful effects of
Lead (Pb) element
for the first time



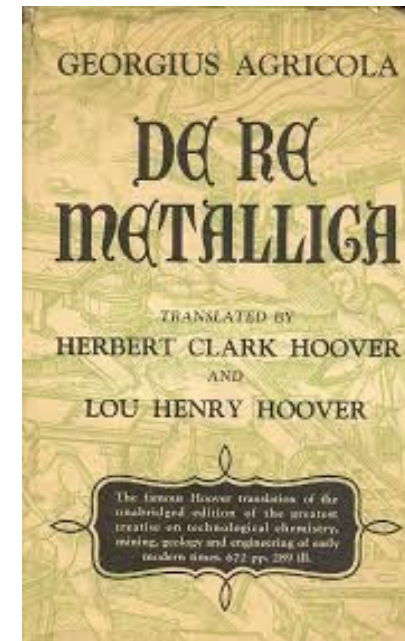
Kurşun zehirlenmesini tanımladı.

Historical Development of OHS in the World

- **Georgeius Agricola (1494-1555):**, the first known mineralogy scientist, published a book in 1530 "**De Re Metallica**" (based on *the Nature of Metals*)

It is about the state of the art of mining, refining, and smelting metals.

The book was an important chemistry text in the history of chemistry.



Question. Who wrote the «De Re Metallica» book?
Answer: Agricola

Bernardino Ramazzini: father of OHS

(1633-1714- ITALIAN)



Bernardino Ramazzini, padre della Medicina del Lavoro

He wrote a book: «De Morbis Artificum Diatriba»

He focused on the worker's health problems in a systematic way.

He described diseases associated with various occupations.

He described metal poisoning in miners.

He tried to build-up a relationship between disease and job tasks. ★

★ «what is your occupation?» question was asked by him.



The period of *industrial revolution*

There are other laws to regulate the working hours and to make arrangements for who can work in mining operations and how many hours they can work.

1802: 'Health and Moral Acts of Apprentices

In England



Fisrt law regulating the workin hours

No children & women , 58 hours/week

Some limitations to working hours in mining operations.

1833: Factory Regulations for Machine Guarding

- Can't employ children younger than 10
- Younger than 18 can not be employed more than 12 hours

• **1847:** Employment Age regulated

- Max 10 hours working

1867: the law enacted for child workers.

Tanzimat Period:

1865: Dilaverpaşa Regulations (DİLAVERPAŞA NİZAMNAMESİ)
during II. Mahmut period.

**The first legal regulation on
OHS in Turkey!!**



Development of OHS in TURKEY



- According to Dilaverpaşa Nizamnamesi;

- 1) **Coal** employers should provide accomodation for workers
- 2) working hours were determined as maximum 10 hours.
- 3) A physician should work in the mine



An obligatory !



There are other laws to make regulations for workers

1869 : **Maadin Nizamnamesi** : is the second regulation after Dilaverpaşa Nizamnamesi.

But it was not applied to work life and realized.

1871: Ameleperver Cemiyeti

1895: Osmanlı Amele Yardımlaşma Cemiyeti

- *Tersane-i Amiriye ve Mensip İşçilerin Emeklilikleri Hakkında Tüzük,*
- *Hicaz Demir Yolu Memur ve Hizmetlerine Hastalık Kaza Hallerinde Yardım Tüzüğü,*
- *Askeri Fabrikalar Tüzüğü (daha çok sosyal yardım amaçlı hükümler içermiştir)*

Republic Period

1924: Hafta tatili hakkında kanun

1926: Borçlar Kanunu

1930: Belediyeler Yasası

DURING THE REPUBLIC PERIOD



First Labor law:  LAW NO 3008 in 1937

LAW NO 931 in 1967

LAW NO 1475 in 1971

LAW NO 4857 in 2003



LAW

Law on Occupational Health and Safety

First OHS LAW: 30 June 2012

(ilk iş sađlığı ve güvenliđi kanunu)



OHS Law No 6331

<http://iskanunu.com/portal/wp-content/uploads/2012/07/6331-sayili-is-sagligi-guvenligi-kanunu.pdf>

<https://www.lawsturkey.com/law/occupational-health-and-safety-law>

OHS Law No 6331



5- sections *(Bölüm)*

39- Articles *(Madde)*

8- Temporary Articles *(Geçici Madde)*

36- Regulations *(yönetmelik)*

5- Communique *(Tebliğ)*

Özetle;

1937 yılı



3008
Sayılı



İş yerinde sağlığın korunması ile ilgili yasa ilk kez 3008 sayılı İŞ KANUNU ile çıktı!

1967 yılı



931
Sayılı

1971 yılı



1475
Sayılı

2003 yılı



4857
Sayılı

2012 yılı



6331
Sayılı

1. İŞ SAĞLIĞI KANUNUDUR

Recommended Literature:

- <https://www.researchgate.net/publication/286003416> Hippocrates the father of clinical medicine and Asclepiades the father of molecular medicine
- <https://www.researchgate.net/publication/11817798> Bernardino Ramazzini The Father of Occupational Medicine
- <https://www.researchgate.net/publication/339000991> PHYSICIAN HUMANITIES OCCUPATIONAL HEALTH AND SAFETY IN THE WORLD
- <https://www.cartercenter.org/resources/pdfs/health/ephti/library/lecture-notes/env-occupational-health-students/In-occ-health-safety-final.pdf>
- https://www.bclaws.ca/civix/document/id/crbc/crbc/296_97_multi
- <https://www.researchgate.net/publication/264826329> Osmanli Imparatorlugu'nun Son Doneminden Cok Partili Doneme Madencilik Politikari 1861-1948 Mining Policies from Ottoman's Last Era to Multi-Party Period
- <http://www.oicvet.org/oshnet/files/journal1-isgum.pdf>
- <https://www.lawsturkey.com/law/occupational-health-and-safety-law>
- <https://www.researchgate.net/publication/311987345> Assessment of Occupational Safety and Health Law in Turkish Industrial Relations
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- TGNA (2012), Ordinal Number: 277, Draft on Occupational Health and Safety Law and commission reports, <http://www.tbmm.gov.tr/sirasayi/donem24/yil01/ss277.pdf> (Turkish Version- Access 11th July 2013).
- https://www.google.com.tr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwjgqufxgP_WAhXBCpoKHdbiC9kQtwIIMDAB&url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3Da-YkLaFvmo8&usg=AOvVaw06eb5XbQtYH1DdorOUAyig
- https://www.google.com.tr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwipjcvVg_WAhVJKpoKHbvEBwAQyCkIJzAA&url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DHD1e3uc_eQE&usg=AOvVaw1oc9wxLNRIclglgu1NtYny
- https://www.healthmanagement.co.uk/sites/default/files/paragraph/image/Health-Management_brief-history-occupational-health.pdf
- <http://www.lawsturkey.com/law/labor-act-law-of-turkey-4857>
- <https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/64083/77276/%20F75317864/TUR64083%20English.pdf>
- http://www.cakmak.av.tr/articles/Pharmaceuticals_Healthcare/Law%20on%20Occupational%20Health%20and%20Safety.pdf