



勞工事務局
Direcção dos Serviços para os Assuntos Laborais

Construction Safety in Macao

MACAO SAR, CHINA

LABOUR AFFAIRS BUREAU

OCCUPATIONAL SAFETY AND HEALTH DEPARTMENT

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About Macau



勞工事務局
Direcção dos Serviços para os Assuntos Laborais

Macau Special Administrative Region (MSAR)

Location : Southeast coast of China

Area : 28.2 km²

Population : 503,000

Language : Chinese & Portuguese





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Current Construction Projects (Gaming, Tourism and Entertainment)

Project	Investment (US\$)
Cotai Strip	15 billion
City of Dreams	1.03 billion
MGM Grand Macau	975 million
Grand Lisboa	428 million
Galaxy Mega Resort	375 million



Cotai Strip



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The City of Dreams





MGM Grand Macau





Grand Lisboa





Galaxy Mega Resort

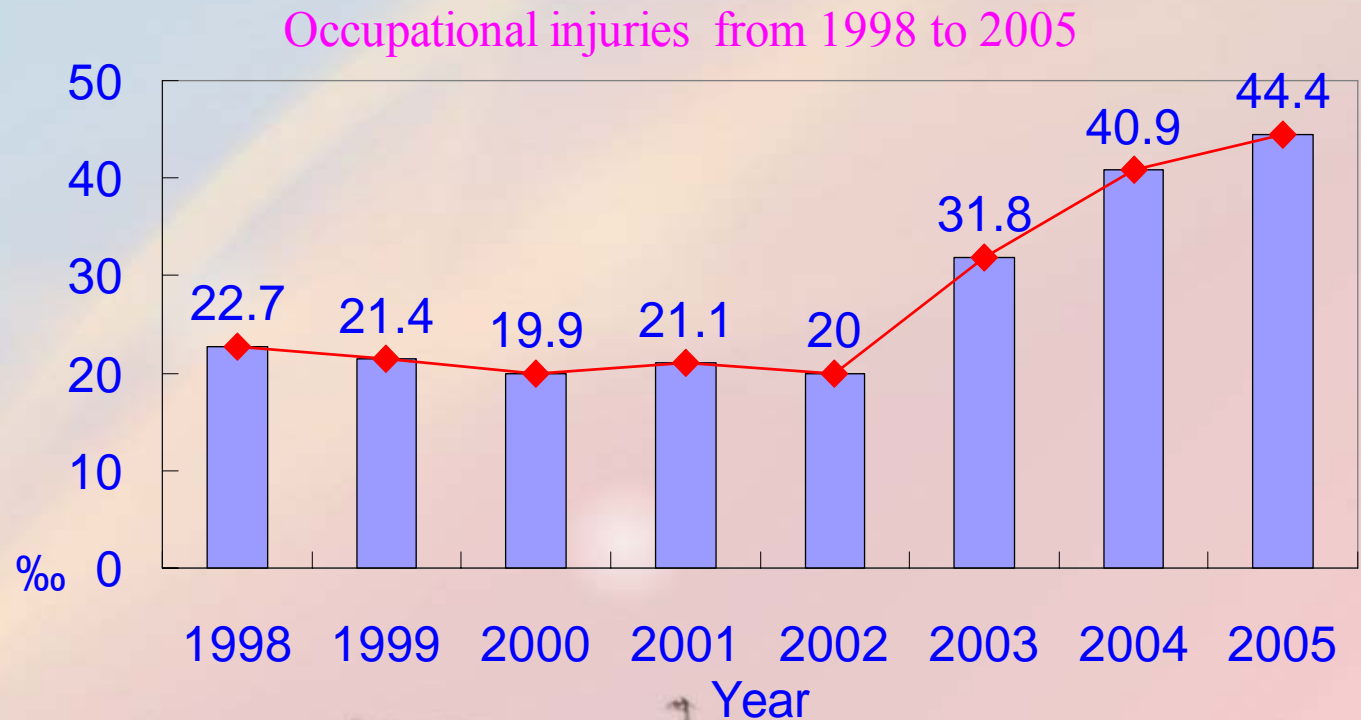
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OSH Status of Civil Construction

There is an obvious rise in occupational injuries from 2002 to 2005.





OSH Status of Civil Construction

Fatal Accidents in Civil Construction

Year	Total Death Toll	Death Toll (Construction)	Percentage (%)
1998	6	5	83.3
1999	2	0	0
2000	6	0	0
2001	6	1	16.7
2002	8	4	50.0
2003	9	6	66.7
2004	2	2	100
2005	15	12	80



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Corresponding Measures

- **Enhance OSH supervision**
- **Enhance OSH training and promotion**
- **Promote “OSH Charter”**
- **Revise current OSH regulations**





OSH supervision

OSH Inspection for Construction work



- **Periodic inspections**
- **Carrying out by 2-3 inspectors each time**
- **Providing OSH suggestions at once on site**





OSH supervision

OSH Inspection for Construction work

- **Stating out deadline for improvement**
- **Sending out official report to the main contractor**
- **Following up items for improvement right after deadline**
- **Taking prosecution or issuing suspension notice to offending contractor**





OSH supervision

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	Jan-Sept 2005	Jan-Sept 2006	Variance
No. of construction sites under inspection	931	1060	14%↑
No. of inspections	2211	4257	93%↑
No. of suggested items for improvement	2730	6454	136%↑
No. of inspectors	9	14	56 %↑
Inspection frequency	2-3 weeks	1-2 weeks	---
Deadline for improvement	8-14 days	3-8 days	---





OSH Training

Construction Safety Card

- 6-hr training course:
 - ✓ OSH regulations of Macau
 - ✓ General construction safety
 - ✓ Precautionary measures for working safety
 - ✓ Uses of PPE





OSH Training

Construction Safety Card

- “Construction Safety Card” will be issued for passers
- Free for all Macau residents
- 21,329 cards are issued from Mar-2002 to Sept-2006.





OSH Training

Other Training

- **150-hr “Safety Supervisor” training course**
- **Modular courses for construction safety and health:**
 - ✓ **Electrical Safety**
 - ✓ **Confined Space Safety**
 - ✓ **Working at Height Safety**
 - ✓ **Manual Handling Safety**
 - ✓ **Occupational Noise and Hearing Protection**
 - ✓ **Personal Protective Equipment**





OSH Promotion



From Jan-2006 to Sept-2006

- **54 OSH seminars are held**
- **Take part in 18 OSH intercourse activities**
- **8 OSH promotion activities are held**
- **8 OSH articles are published on newspapers**





OSH Promotion

Morning Briefing

- Contractors of 10 construction sites had been encouraged to promote “Morning Briefing”





OSH CHARTER

- Encourage employer and employee to take part in OSH work
- Establish OSH management system





OSH CHARTER

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- 29 companies sign the OSH Charter from 2002 to 2005





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OSH Regulations

Current OSH Regulations for Construction Workplaces

- Approved by Decree-Law N.º 44/91/M
《Regulation of Hygiene and Work Safety of Civil Construction》
- Approved by Decree-Law N.º 34/93/M
《Regime of Law Applicable to Occupational Noise》





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OSH Regulations

Revise of OSH Regulations

- **Clauses related to compelling OSH training have been drafted into 《Regulation of Hygiene and Work Safety of Civil Construction》.**
- **All civil workers must have the “Construction Safety card” issued by Labour Affairs Bureau in order to work in construction site.**
- **Those clauses will be effective in 2007.**





OSH Regulations

New OSH Regulation

- New OSH regulation called 《Regulation of Occupational Safety and Health》 is being drafted.
- The regulation applies to all workplaces including construction sites.





OSH Regulations

New OSH Regulation

- **Clauses related to construction work safety will be contained in this new regulation to supplement the insufficiency of 《Regulation of Hygiene and Work Safety of Civil Construction》 :**
 - ✓ **Machinery Plant Safety**
 - ✓ **Gondola Safety**
 - ✓ **Confined space Safety**
 - ✓ **Vibration Protection**



THANK YOU!

