ISCO-08 and health occupations

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International Standard Classification of Occupations (ISCO-08)

- Endorsed by the ILO Governing Body in 2008 it is known as ISCO-08 and replaces ISCO-88
- Structure, group definitions and correspondence with ISCO-08 available on ILO Website or on request
- Index of occupational titles will be available very soon
- To be published in English, French, Spanish as soon as possible
- Used in European Union (EU) collections from 2010
- Structure is available in all EU languages from Eurostat
  - Eurostat Web discussion forum to support implementation is available to all countries
- Hierarchically structured classification comprising:
  - 10 major groups
  - 43 sub-major groups
  - 130 minor groups
  - 436 unit groups
What is ISCO used for?

- International reporting, comparison and exchange of statistical and administrative data on occupation
- A model for the development of national and regional classifications of occupations
- Used directly in countries that have not developed their own national classifications

- **National Occupation Classifications are used for:**
  - Statistics from censuses, household surveys, employer surveys and other sources
  - Administrative and policy-related activities such as:
    - matching job seekers with job vacancies
    - educational planning
    - management of employment related international migration
Framework for Updating ISCO-88

- Mandated by the 17th ICLS in 2003:
  - An update not a major revision
  - ILO meeting of experts to evaluate the results and make appropriate recommendations to the ILO Governing Body
- Advice and support from expert groups in classification:
  - UN Expert Group on International Economic and Social Classifications
  - ILO Technical Expert Group on Updating ISCO (TEG/ISCO)
- Close collaboration with WHO and OECD on health occupations
- Reporting of progress to UN Statistical Commission
- Resolution of MoE endorsed by ILO Governing Body - March 2008
Underlying concepts – ISCO-08

- **Job**: a *set of tasks and duties* performed, or meant to be performed, by one person including for an employer or in self employment

- **Occupation**: a *set of jobs* whose main tasks and duties are characterised by a high degree of similarity:
  - A person may be associated with an occupation through the main job currently held, a second job, or a job previously held

- Occupations are organized into groups according to **skill level** and **skill specialization**:
  - Skill level is applied mainly at the top (major group) level of the classification
  - Within each major group occupations are arranged into unit groups, minor groups and sub-major groups, primarily on the basis of aspects of skill specialization
ISCO-08 - significant changes impacting on health work force

• Improved coverage and upgrading of health services occupations
  – Identifiable at sub-major group level in Major groups 2 and 3 and at Minor group level in Major group 5, Sales and Service Workers
    • 1342 Health Services Managers
    • 22 Health Professionals
    • 32 Health Associate Professionals
    • 532 Personal Care Workers in Health Services

• Proposed thematic view for health occupations

• Elimination of parallel groups at different skill levels if tasks performed are the same:
  – Virtually all teaching occupations are classified in Sub-major Group 24, Teaching professionals
  – Nurses are classified in Major groups 2 or 3 depending on tasks performed and not on qualifications alone
Parallel groups in ISCO-88 Major groups 2 and 3 due to differences in national education requirements

- **Major group 2, Professionals**
  - 2230 Nursing and midwifery professionals
  - 2331 Primary education teaching professionals
  - 2332 Pre-primary education teaching professionals
  - 2340 Special education teaching professionals
  - 2446 Social work professionals

- **Major group 3, Technicians and associate professionals**
  - 3231 Nursing associate professionals
  - 3232 Midwifery associate professionals
  - 3310 Primary education teaching associate professionals
  - 3320 Pre-primary education teaching associate professionals
  - 3330 Special education teaching associate professionals
  - 3460 Social work associate professionals
Skill – the ability to carry out the tasks and duties of a job

Skill level:
a function of the complexity and range of tasks and duties performed in an occupation:

- Measured operationally by considering one or more of:
  - The nature of the work performed in an occupation in relation to the characteristic tasks and duties defined for each ISCO-08 skill level (new for ISCO-08)
  - The level of formal education defined in terms of the International Standard Classification of Education (ISCED-97) required for competent performance of the tasks and duties involved
  - The amount of informal on-the-job training and/or previous experience in a related occupation required for competent performance of these tasks and duties
# Mapping of ISCO-08 major groups to skill levels

<table>
<thead>
<tr>
<th>ISCO-08 major groups</th>
<th>Skill Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Managers</td>
<td>3 + 4</td>
</tr>
<tr>
<td>2 - Professionals</td>
<td>4</td>
</tr>
<tr>
<td>3 - Technicians and associate professionals</td>
<td>3</td>
</tr>
<tr>
<td>4 - Clerical support workers</td>
<td></td>
</tr>
<tr>
<td>5 - Service and sales workers</td>
<td></td>
</tr>
<tr>
<td>6 - Skilled agricultural and fishery workers</td>
<td>2</td>
</tr>
<tr>
<td>7 - Craft and related trades workers</td>
<td></td>
</tr>
<tr>
<td>8 - Plant and machine operators, and assemblers</td>
<td></td>
</tr>
<tr>
<td>9 - Elementary occupations</td>
<td>1</td>
</tr>
<tr>
<td>0 – Armed forces occupations</td>
<td>1, 2 + 4</td>
</tr>
</tbody>
</table>
### Mapping of the four ISCO-08 skill levels to ISCED-97 levels of education

<table>
<thead>
<tr>
<th>ISCO-08 Skill Level</th>
<th>ISCED-97 groups</th>
</tr>
</thead>
</table>
| 4                  | **6** - Second stage of tertiary education (leading to an advanced research qualification)  
|                    | **5a** - First stage of tertiary education, 1st degree (medium duration) |
| 3                  | **5b** - First stage of tertiary education (short or medium duration) |
| 2                  | **4** - Post-secondary, non-tertiary education  
|                    | **3** - Upper secondary level of education  
|                    | **2** - Lower secondary level of education |
| 1                  | **1** - Primary level of education |
### Sub-major groups in Major group 2, Professionals - ISCO-88 and ISCO-08

<table>
<thead>
<tr>
<th>ISCO-88 Code</th>
<th>ISCO-88 Title</th>
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<th>ISCO-08 Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Physical, mathematical and engineering science professionals</td>
<td>21</td>
<td>Science and engineering professionals</td>
</tr>
<tr>
<td>22</td>
<td>Life science and health professionals</td>
<td>22</td>
<td>Health professionals</td>
</tr>
<tr>
<td>23</td>
<td>Teaching professionals</td>
<td>23</td>
<td>Teaching professionals</td>
</tr>
<tr>
<td>24</td>
<td>Other professionals</td>
<td>24</td>
<td>Business and administration professionals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>Information and communications technology professionals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26</td>
<td>Legal, social and cultural professionals</td>
</tr>
</tbody>
</table>
22 Health professionals

221 Medical doctors
2211 Generalist medical practitioners
2212 Specialist medical practitioners

222 Nursing and midwifery professionals
2221 Nursing professionals
2222 Midwifery professionals

223 Traditional and complementary medicine professionals
2230 Traditional and complementary medicine professionals

224 Paramedical practitioners
2240 Paramedical practitioners

225 Veterinarians
2250 Veterinarians

226 Other health professionals
2261 Dentists
2262 Pharmacists
2263 Environmental and occupational health and hygiene professionals
2264 Physiotherapists
2265 Dieticians and nutritionists
2266 Audiolologists and speech therapists
2267 Optometrists and ophthalmic opticians
2269 Health professionals not elsewhere classified
### Sub-major groups in Major group 3, Technicians and associate professionals - ISCO-88 and ISCO-08

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</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Physical and engineering science associate professionals</td>
<td>31</td>
<td>Science and engineering associate professionals</td>
</tr>
<tr>
<td>32</td>
<td>Life science and health associate professionals</td>
<td>32</td>
<td>Health associate professionals</td>
</tr>
<tr>
<td>33</td>
<td>Teaching associate professionals</td>
<td>33</td>
<td>Business and administration associate professionals</td>
</tr>
<tr>
<td>34</td>
<td>Other associate professionals</td>
<td>34</td>
<td>Legal, social, cultural and related associate professionals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35</td>
<td>Information and communications technicians</td>
</tr>
</tbody>
</table>
### 32 Health associate professionals

#### 321 Medical and pharmaceutical technicians
- 3211 Medical imaging and therapeutic equipment technicians
- 3212 Medical and pathology laboratory technicians
- 3213 Pharmaceutical technicians and assistants
- 3214 Medical and dental prosthetic technicians

#### 322 Nursing and midwifery associate professionals
- 3221 Nursing associate professionals
- 3222 Midwifery associate professionals

#### 323 Traditional and complementary medicine associate professionals
- 3230 Traditional and complementary medicine associate professionals

#### 324 Veterinary technicians and assistants
- 3240 Veterinary technicians and assistants

#### 325 Other health associate professionals
- 3251 Dental assistants and therapists
- 3252 Medical records and health information technicians
- 3253 Community health workers
- 3254 Dispensing opticians
- 3255 Physiotherapy technicians and assistants
- 3256 Medical assistants
- 3257 Environmental and occupational health inspectors and associates
- 3258 Ambulance workers
- 3259 Health associate professionals not elsewhere classified
Sales and Service Workers

51 Personal service workers

52 Sales workers

53 Personal care workers
   531 Child care workers and teachers' aides
   532 Carers in health services
      5321 Health care assistants
      5322 Home-based personal care workers
      5329 Personal care workers in health services not elsewhere classified

54 Protective services workers
   541 Protective services workers
## Nursing and related occupations

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>222</td>
<td>Nursing and midwifery professionals</td>
</tr>
<tr>
<td>2221</td>
<td>Nursing professionals</td>
</tr>
<tr>
<td>2222</td>
<td>Midwifery professionals</td>
</tr>
<tr>
<td>322</td>
<td>Nursing and midwifery associate professionals</td>
</tr>
<tr>
<td>3221</td>
<td>Nursing associate professionals</td>
</tr>
<tr>
<td>3222</td>
<td>Midwifery associate professional</td>
</tr>
<tr>
<td>532</td>
<td>Personal care workers in health services</td>
</tr>
<tr>
<td>5321</td>
<td>Health care assistants</td>
</tr>
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<td>5322</td>
<td>Home-based personal care workers</td>
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</tr>
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</table>

- The distinctions between nursing and midwifery professionals and associate professionals should be made on the basis of the nature of the work performed in relation to the tasks specified.
- The qualifications held by individuals or that predominate in the country are not the main factor in making this distinction, as training arrangements for nurses and midwives vary widely between countries and have varied over time within countries.
Nursing and related occupations

- **Nursing and Midwifery Professionals**
  - assume responsibility for the planning, management and evaluation of the care of patients, including the supervision of other health care workers, working autonomously or in teams with medical doctors and others

- **Nursing and Midwifery Associate Professionals**
  - provide basic nursing and personal care
  - generally work under the supervision of, and in support of, implementation of health care, treatment and referrals plans established by medical, nursing, midwifery and other health professionals.

- **Personal Care Workers in Health Services**
  - provide personal care and assistance with mobility and activities of daily living to patients and elderly, convalescent and disabled people in health care and residential settings
  - do not perform tasks requiring extensive medical knowledge or training, such as administering medications and dressing wounds
Medical practitioners – boundary issues

2211 Generalist Medical Practitioners
- do not limit their practice to certain disease categories or methods of treatment, and may assume responsibility for the provision of continuing and comprehensive medical care to individuals, families and communities
- Includes general practitioners (family doctors) and other generalist doctors
- Medical interns who have completed their university education in basic medical education and are undertaking postgraduate clinical training are included here

2212 Specialist Medical Practitioners
- use specialized testing, diagnostic, medical, surgical, physical and psychiatric techniques
- specialize in certain disease categories, types of patient or methods of treatment
- may conduct medical education and research in their chosen areas of specialization
- require completion of a university-level degree in basic medical education plus postgraduate clinical training in a medical specialization (except general practice) or equivalent
- Resident medical officers training as specialist practitioners (except general practice) are included here
- All medical practitioners can logically be classified in one of these groups (no provision for ‘other’ in ISCO)
- If insufficient information supplementary code 2210, for Medical doctors not further defined can be used