Jordan
Ministry of Health

GUIDANCE FOR THE ASSESSMENT AND MANAGEMENT OF CARDIOVASCULAR RISK IN PRIMARY CARE

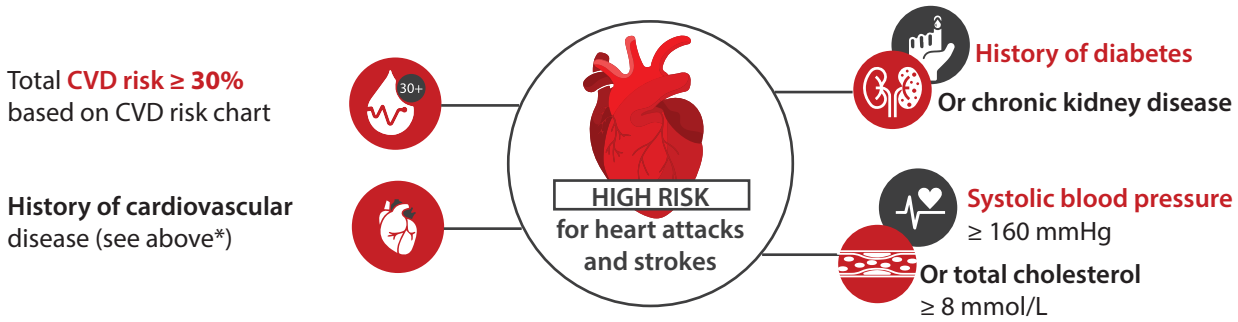
Based on WHO Global HEARTS protocols adapted to the Jordan context in collaboration with the World Health Organization and Primary Care International

December 2020

THIS GUIDANCE REFERS TO PRIMARY PREVENTION OF CARDIOVASCULAR RISK.

Patients with known cardiovascular disease* (includes angina, history of heart attack, stroke, TIA or peripheral arterial disease) should be referred to secondary care to initiate secondary prevention, and this guidance does not apply. Offer lifestyle recommendations for CVD prevention to all patients regardless of risk.

Figure 1. **Flow chart of CVD risk assessment and management (WHO HEARTS 2016/2018)**



1. Who to assess for cardiovascular (CV) risk in primary care?

All adults > 40 years OR if cardiovascular risk factors exist. Risk factors include:

Smoking

Obesity (BMI ' ≥ 30)

Known hypertension, or diabetes mellitus

History of cardiovascular disease (see above*) or kidney disease in first degree relatives

This guidance was developed through the collaboration of MOH committee of local experts, the World Health Organization and Primary Care International experts. The process involved establishing consensus among experts on cardiovascular risk assessment, management of hypertension and diabetes, guided by WHO HEARTS protocols and international evidence-based guidelines for hypertension and diabetes (e.g. NICE, ACC, ESC, and ADA), ensuring a pragmatic approach for primary care to suit the Jordanian setting.

2. How to assess for CV risk in primary care?

- Use risk stratification chart overleaf for adults between 40-74 years. **Start with using the laboratory-based chart** (if cholesterol/blood sugar testing is available), otherwise use the non-laboratory-based chart if lab testing is unavailable.
- Have the following information ready to select the relevant section of the chart:
  age, gender, smoking status, systolic blood pressure, (diabetes status and total blood cholesterol if available, if not use body mass index (BMI), then find the cell where the BP and cholesterol/BMI intersect.
- The colour of the cell indicates the 10-year risk of a fatal or non-fatal cardiovascular event. The value within the cell is the risk expressed as a percentage.

Caution: Risk charts underestimate the risk in those with a family history of premature cardiovascular disease (<55 yrs men, <65 yrs women), raised triglyceride levels, chronic kidney disease, and generalised inflammatory conditions, e.g. rheumatoid arthritis.

3. For all patients with CV risk 10% - <30%

Provide intensive healthy lifestyle counselling to stop smoking, (including shisha). **THIS IS MORE EFFECTIVE THAN MEDICATION.** Avoid alcohol, improve diet, increase physical activity and manage weight – refer to health educator/nutritionist if available.

If blood pressure ≥130/85 mmHg go to hypertension clinical protocol. Reducing blood pressure reduces CV risk

If fasting blood sugar raised ≥126 mg/dl (≥7mmol/l), or random glucose ≥ 200mg/dl (≥11.1mmol/l) go to diabetes protocol

If CV risk < 10% council about healthy lifestyle and reassess every 3 years, if CV 10% - < 30% council about healthy lifestyle and reassess every 6-12 months, or earlier if clinically indicated

4. For all patients with high CV risk (see figure 1 above) or CV risk ≥30%

- Provide intensive healthy lifestyle counselling as described above.
- If blood pressure ≥130/85mmHg go to hypertension clinical protocol. Reducing blood pressure reduces CV risk.
- If fasting blood sugar raised ≥126mg/dl (7mmol/l), or random glucose ≥200mg/dl (11.1mmol/l) go to diabetes protocol.
- Refer to GP or Family Medicine Specialist to consider statin. Check liver function prior to starting statin and after 3 months.
- If drug therapy is initiated follow up every 3 months. If no reduction in CV risk after 6-12 months, refer to next level facility. Once target achieved follow up annually. Refer if total cholesterol ≥ 8mmol/L (320mg/dl).
- Also vital to follow up BP and blood sugar targets. **Continue intensive healthy lifestyle counselling.**

References:
WHO HEARTS 2016/2020 adapted for Jordanian context, and WHO CVD Risk Chart Working Group. World Health Organization cardiovascular disease risk charts: revised models to estimate risk in 21 global regions. Lancet Glob Health. 2019;7(10):e1332-e1345. doi:10.1016/S2214-109X(19)30318-3"

For additional information, please contact:
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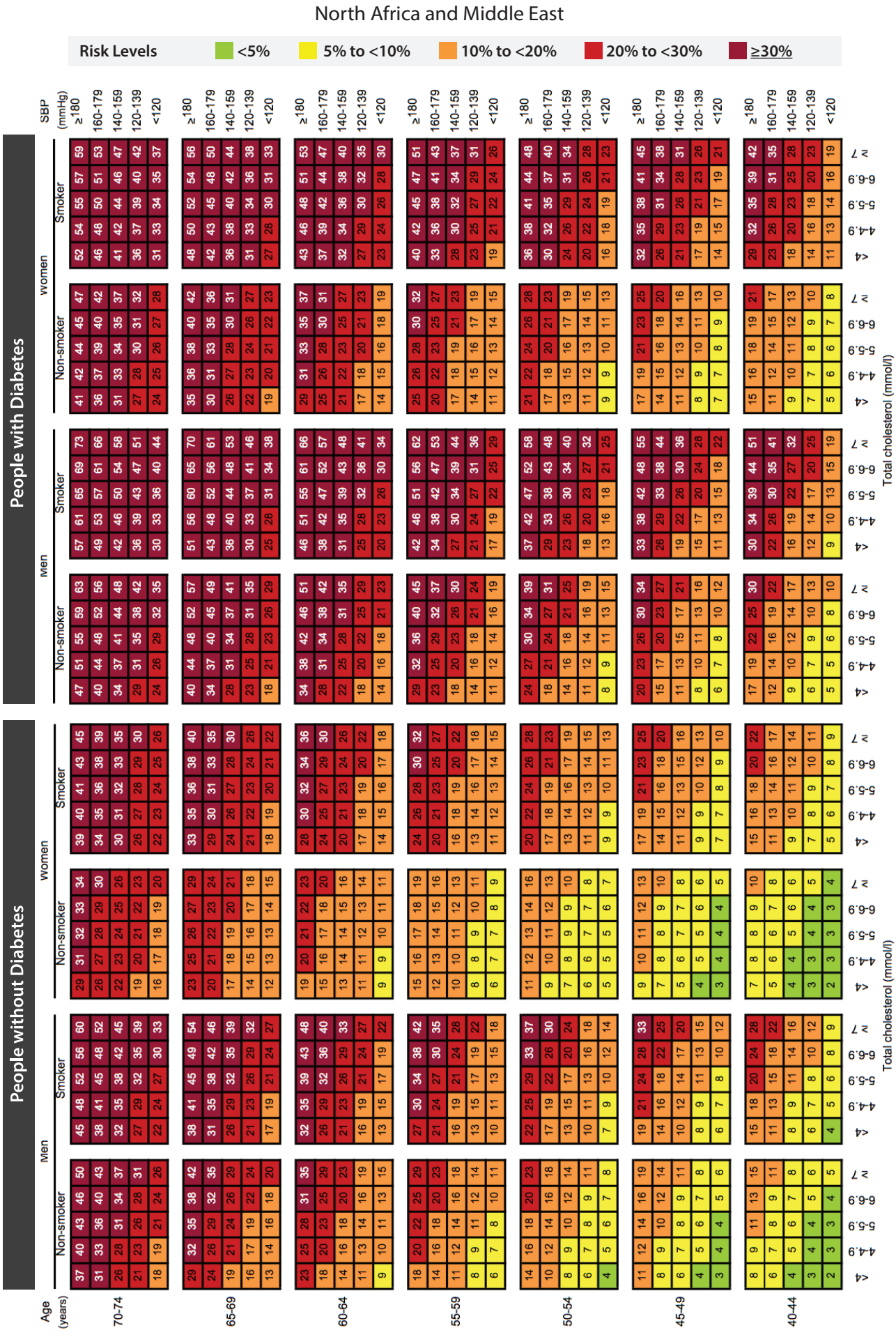
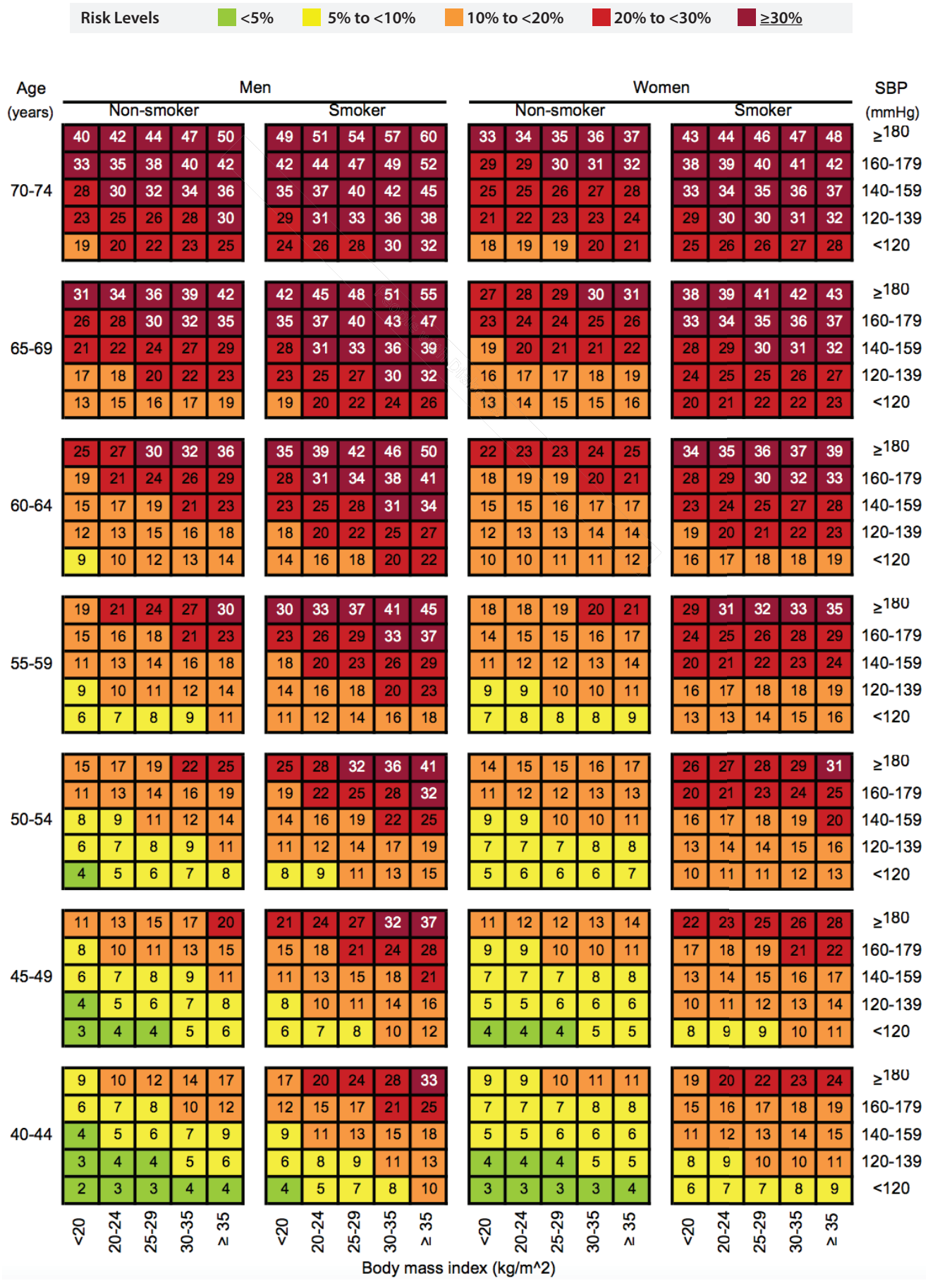
CV RISK STRATIFICATION CHART (LABORATORY-BASED)



WHO CVD Risk Chart Working Group. World Health Organization cardiovascular disease risk charts: revised models to estimate risk in 21 global regions. Lancet Glob Health. 2019;7(10):e1332-e1345. doi:10.1016/S2214-109X(19)30318-3.

CV RISK STRATIFICATION CHART (NON-LABORATORY-BASED)

North Africa and Middle East



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