## **UNDERSEA PHAS CHEATSHEET**

#### **MEDICAL FORMAT TEMPLATE**

#### HPI

- ID: age, reg/res, trade, posting, type of/reason for medical
- Last medical type and date, category awarded, MELs
- CC if applicable
- Current Meds (incl Rx, OTC, supplements)
- Allergies
- Dates of Last

   Labs
   Audiogram & VA annually
   CXR q5yrs
   EKG q 4 yrs to age 40, then q2 yrs
   Framingham q4yrs <40yo, q2yrs >40yrs
   DON screening questionnaire yearly
- Spiro Standards (only on initial)

   FEV1 >80%
   FVC >80%
   FEV1/FVC >75%
   FEF 25-75 >50% subs, 55-60% dive
   \*\*ensure curve is adequate to assess numbers\*\*
- Dive History

Start of diving
Military & Civilian Certifications (i.e tech, mixed gas, rebreather)
Dive Hours last 12 months
Total dive hours ever
Deepest Dive past 12 months
Deepest Dive ever
Any previous dive injury/illness – Batrotrauma, DCI, DON

- Comment on ANY Positives from 2452/2552

#### DIVER ROS "big 5"

- Hx of DI (DCS or AGE), DON, Barotraumas

#### 1. Asthma

- o asthma after age 12/wheeze/SOB
- o childhood Hx
- o ER presentations, hospitalizations
- o EIA, respiratory cold tolerance, bronchitis, pneumonia, cough (nocturnal, post URTI)
- o Puffer use
- o ILD or COPD
- No go asthma for submariners/divers = requires ongoing use of rescue inhalers, induced by cold/exercise/anxiety, induced by exposure to airborne particulate/chemical/petroleum distillates found in the sub atmosphere

#### 2. Pneumothorax

• hx of spontaneous or traumatic, chest tube/intervention

#### 3. Neuro/MH

- o Seizure/epilepsy
- o Blackout/LOC
- o Migraines
- MH conditions claustrophobia, anxiety, PTSD, phobias, substances (CAGE positive context and consequences)
- 4. Significant Head trauma
  - TBI/concussion/LOC >2 mins, skull #, ANY intracranial hemorrhage, post-traumatic amnesia >30 mins, focal neuro sx, post concussive epilepsy or post concussive symptoms lasting >24 hrs
  - o For concussion/head injury
    - Total # of concussion or head injuries
    - o interval between concussions/HIs if multiple
    - o change in threshold of trauma required to induce concussion/HI sx
    - o date of late concussion/HI
  - o assessment by neurologist/specialist & recommendations
  - o Imaging results

#### 5 ENT

- o sinus problems, nasal polyps, deviated nasal septum, sinusitis
- o ETD problems clearing ears under pressure, flying
- o chronic OM/OExt, TM perforation
- o vertigo, Meniere's

General ROS examples (not exhaustive)

- CV murmur, dysrhythmia, palpitations
- o GI PUD, Gerd, colitis, hernia
- o Renal hematuria, nephrolithiasis
- o MSK any joint pain, limitations
- o HEME anemia, thyroid
- o Derm rashes, atopic
- o GU
- o TMJ, dental issues
- o Atmospheric sensitivities smells, diesel, particulates

#### PHYSICAL EXAM HIGHLIGHTS

- HEENT TM mobile with Valsalva, TM changes, TMJ ROM/crepitus
- CVS
- RESP
- GI scars, hernias, masses
- MSK document well any signs/symptoms, especially in the shoulders, elbows, hips and knees.
- Neuro Gait, cognition, CN, pronator drift, Romberg, sharpened Romberg, bulk/tone/power/sensory/DTR, peripheral vs dermatome nerve deficits, +/- SCAT
- Anything else you feel is required to ensure Dive/Sub safety

#### PLAN

- Fitness to dive/disposition
- Recommended Category:
  - o Min Dive: V2\* CV2 H2 G2 O2 A5
  - Min Sub V3 CV2 H2(3) G2 O2 A5
- MELs ALL communicated to CoC by chit
  - TCat reviewed by ADMO, >12 months send to CDM
  - PCat by ADMO for dive, SbMO for subs, to CDSM prior to sending to DMedPol
- Plan for F/U and reassessment as required
- Sign off dive log.

### **POLICIES SUMMARY**

- Initial Dive Medical
  - o **2939**
  - 2452, 2552, 2033, DON Q
  - o Part 1 & Part 2 full exam
- Type 1 Dive Medical q 2 yrs
  - o 2452, 2552, 2033, DON Q
  - o Part 1 & Part 2 full exam
- Type 2 Dive Medical intervening year
  - o 2452, 2552, DON Q
  - o Part 1
  - Part 2 = review of docs. In-person review only if requested by reviewing ADMO/CDSM
- Validity 1 year
  - $\circ~$  Can be extended by 60d day by approving authority
  - candidates not completing initial training within one year of their Initial SWD PHA can revalidate same by completing alternating types I & II PHAs
  - o 2 wks Prior to Initial dive course, require recheck

#### Who Can Sign? (see flowcharts)

- Approval Authorities for initial SWD PHA
  - West of Ontario FSMO (P)
  - East of Ontario FSMO (A)
  - Ontario CDM Ottawa (NCR), Delegated ADMO (Petawawa), CDHM Toronto (all other locations, or if NCR/Pet unavailable)
- SAR requires aeromedical certification as well.
- CD Prelim Selection Review by DMO/ADMO, signed off by Approval authority or CDSM as available (who will email +Tg email)
  - NO NEED to send the chart to TO anymore.

# **4000-04 Table 2: Diver PHA Investigation Requirements**

ltem	Initial PHA	Type I PHA	Type II PHA	Details	
Height, Weight, Blood Pressure	•	•	•		
Visual acuity	•	•	•	Measured and graded IAW CFP 154	
Colour Vision	•			Confirm CV was tested on enrolment medical. Colour vision examination only if clinically indicated or clearance diver selectees at CFEME.	
Audiogram	٠	•	•	Measured and graded IAW CFP 154	
Chest X-ray (insp/exp and lateral)	•	See Details	See Details	Every 5 years	
ECG	•	See Details		Every 4 years to age 40, then every 2 years	
Fasting blood glucose	•	See Details		Every 4 years to age 40, then every 2 years	
HbA1c	•	See Details		Every 4 years to age 40, then every 2 years	
Lipid Profile	•	See Details		Every 4 years to age 40, then every 2 years	
Complete Blood Count	•	•			
Liver function tests: to include GGT, AST, ALT, Alk phosphatase	•	•			
Electrolytes and Creatinine	•			Initial Diver PHA only, then as clinically indicated	
Urine: dipstick (micro as clinically indicated)	•	•			
CVS risk assessment	•	See Details		<ul> <li>Every 4 yrs to age 40, then every 2 yrs. To include:</li> <li>Resting ECG</li> <li>Lipid profile</li> <li>Fasting Blood Glucose, HbA1c</li> <li>Smoking history</li> <li>Fam Hx CAD before age 60 yrs</li> <li>CVS risk profile (using tool at Ref G, H or I)</li> </ul>	
Screening Spirometry	•			Screening spirometry only. If clinically indicated or abnormal screening spirometry, full PFT with flow volumes +/- methacholine (or exercise) challenge is performed. Full PFT for Clearance Diver Selectees at CFEME	
Transthoracic Echocardiogram (bc-TTE)				Only at CFEME for Clearance Diver Selectees after CDAC	

Dental Examination (through CF Dental Services)	•	•	•	IAW CFHS 1023-06 (Ref C). Divers are responsible for booking initial and annual diver dental examinations.	
Any other tests	See Details	See Details	See Details	As/if examining HCP feels clinically indicated	

## 4000-04 Table 3: Examining, Reviewing and Approval Clinician Requirements

Exam Type	Examining Clinician	Reviewing MO	Consultant DMO Review	Approval
Initial Diver	DMO (see notes 1 and 2)	ADMO or Approval Authority (see note 3)	CDHM, regional CDSM (as clinically indicated) Exceptions: 1. Cl Div/CLDO (note 7)	CDHM, regional CDSM or CDM delegated ADMO (see Table 4 for details)
Type I PHA	DMT/DMO (see note 4)	ADMO (see note 6)	Not required (see note 7)	Reviewing MO (see note 10)
Type II PHA	DMT/DMO (see note 4)	Not required	Not required (see note 7)	Examining Clinician
TCAT applied <12 months	DMT/DMO	ADMO (see note 6)	Not Required (see note 7)	Reviewing MO (see note 10)
TCAT removal <12 months	DMT (see note 5) DMO	ADMO (see note 6)	Not Required (see note 7)	Reviewing MO (see note 10)
TCAT >12 months or PCAT	DMO	ADMO or CDM (see note 9)	CDM	D Med Pol Exceptions: see notes 8 and 9

**Note 1**: Clearance Diver Initial PHAs are conducted and approved by CDHM Toronto after successful completion of CDAC.

Note 2: A CDM may permit specific experienced ADMTs to be the examining clinician for Initial Diver PHAs.

**Note 3**: If there is no ADMO available, or at the discrection of the Approval Authority or CDM, the file may proceed directly to the next level of review/approval.

**Note 4**: See para 57 for exceptional circumstances a BAvMed provider or Flight Surgeon may be the Examining Clinician for Diver Type I or II PHAs.

**Note 5**: A DMT may be the examining clinician for removal of temporary diving restrictions less than 12 months if the medical condition and management is within their scope of practice.

**Note 6**: If the examining clinician was an ADMO, the reviewing officer may be a BDMO (at the discretion of the regional CDSM) (para 60 refers).

**Note 7**: Although not required for routine PHAs and TCAT <12 months, the reviewing officer may request CDM review if there are any questions or concerns

**Note 8**: CDM may approve without DMedPol Review if the following conditions are met:

Diving is a secondary duty (i.e. not PID or CI Div);

No Geographical or Operational medical category changes; and

Vision, Colour Vision, and Hearing categories remain within MOSID standard

**Note 9**: For TCAT MELs totaling 12 to 18 months (i.e. 3<sup>rd</sup> TCAT), following CDM assignment/approval of diving related MELS, the Base Surgeon is authorized to provide final approval of the overall TCAT.

**Note 10**: Only ADMOs specifically authorized by a CDM (email is adequate) may review and approve Diver PHAs IAW with the table above.