

FSG 300-02 Pregnancy Management Summary Guidance for Aviation Medicine Providers

Pregnancy Confirmed

TCAT G4/O4(T12)¹ A3(T12)² with MELs as per ref A and aeromedical specific MELs as appropriate from those below

- Unfit ejection seat aircraft;
- May fly with or as co-pilot qualified on type;
- No unpressurized flight or chamber runs above 10,000’;
- Unfit hypoxia recognition training;
- Unfit centrifuge;
- ALSE fit re-assessment after DD MMM YY (20 weeks)² or earlier;
- Fit simulator as tolerated;
- Unfit underwater egress training;
- Unfit parachuting;
- Avoid noise >115 dBA at any time (Annex B);
- Avoid frequent or lengthy circadian disruptions requiring overnight work;
- Avoid exposure to heat stress resulting in core body temperature increases above 38°C;
- Minimize exposure to whole body vibration whenever possible (Annex B);
- In addition to routine and specialist medical appointments, monthly follow-up with an Av Med Provider is required;
- SAR Tech: Unfit parachuting, avoid activity on the rescue hoist between the cabin door and 3 metres below the aircraft when the radar is emitting, CDSM for undersea (U) factor review.³

At any time during the pregnancy, the Av Med Provider or aircrew member can decide that grounding is required by the member’s specific clinical condition, pregnancy related symptoms (nausea, vomiting, urinary frequency, fatigue, etc) and/or concerns about the effect of the aviation environment on pregnancy outcome⁵.

Uncomplicated Pregnancy^{3.1}

May continue flight duties to 28 weeks and may live control (ground-based) to 34 weeks²⁻⁴ (AEC, ACOP), then unfit control duties²

Complicated Pregnancy^{3.2}

Discuss MEL with ASCS

Return to Flight Status Postpartum

- Uncomplicated SVD – Av Med Provider may reassess for return to flying duties 2 weeks after birth⁶.
- Uncomplicated C-Section – Av Med Provider may reassess for return to flying duties 6 weeks after birth⁵.
- Complications in pregnancy, birth or postpartum are to be managed on case-by-case basis by Av Med Providers with pregnancy medical provider and ASCS consultation^{7,8}.

Uncomplicated pregnancy – Approval for return to flying by B/W Surg^{9,10}
Other - Aeromedical Disposition Approved by ASCS

Notes

[1] G and O factors - refer to CF H Svcs Gp Instruction 3100-23.

[2] Medical Employment Limitations (MELs) in Medical Disposition Notes (MDNs) are to include a **specific date** from which they apply, NOT ‘from 28 weeks’ (i.e. ‘unfit flight duties from 20 Nov 25’).

[3] These are the minimum restrictions. Av Med Providers should also apply any additional MELs specifying flight types, durations and destinations (North America, CONUS and Canada, etc) as applicable.

[3.1] Low-risk/uncomplicated pregnancy: defined, for the purpose of this guideline, as singleton, intrauterine pregnancy with no high-risk features; normal prenatal labs and vital signs; no pregnancy-related medical conditions or pre-existing medical conditions.

[3.2] High-risk/complicated pregnancy: defined, for the purpose of this guideline, as multiple gestation; conceived via in-vitro fertilization; pre-existing maternal medical conditions including hypertension, diabetes, thyroid disease and autoimmune diseases; pregnancy related conditions including gestational diabetes, pre-eclampsia, previous or current preterm labour or birth; >35yo; or as per the treating pregnancy provider.

[4] Live controlling in ground positions may be continued past 34 weeks under Av Med Provider supervision with pregnancy medical provider consult.

[5] Immediate grounding for potentially incapacitating conditions or complications (pre-eclampsia, HELLP, threatened abortion, depression, etc).

[6] Includes full post-partum recovery from lacerations, c-section or other birth complications, no signs of postpartum depression, etc, plus clearance from pregnancy medical provider to return to flying duties. This is the minimum interval and is at the discretion of Av Med Provider.

[7] Ongoing complications to be managed on case-by-case basis IAW applicable FSGs. TCAT may be extended as required after 12 months, and sent to ASCS for review.

[8] Post Partum depression to be managed IAW FSG 1400-01.

[9] IAW FSG 100-02.

[10] For aircrew applicants, the initial aircrew medical should be deferred until the post-partum period and the associated TCAT has been removed (IAW AMA 100-01, para 15.2). Initial air factors will not be approved during pregnancy, as the period of validity for initial air factor assignment is only 1 year. For those interested applicants, consideration should be made to coordinating initial aircrew investigations concurrent to the TCAT removal.

Annex A: Military Aviation and Pregnancy Literature

Annex B: Summary of RCAF Whole Body Vibration and Noise Data

References

- [CF H Svcs Gp Instruction 3100-23](#), Medical Administration of Pregnant Members
- [Aircrew and Reproductive Health](#), National Institute for Occupational Safety and Health
- [Reproductive Health – Reproductive Hazards](#), Canadian Centre for Occupational Health and Safety
- [Reproductive Health – Pregnancy in the Workplace](#), Canadian Centre for Occupational Health and Safety

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Annex A: Summary of Literature for Military Aviation and Pregnancy (Sept 2025)

No evidence for increased risk for any adverse pediatric outcomes and a decreased risk of neurodevelopmental outcomes, however studies performed to date did not differentiate between aircrew in flight/non-flight positions or consider hours flown.

Decreased risk: depression prior to delivery, hyperemesis gravidarum, gestational diabetes and hypertension

Increased risk: placental complications and growth restrictions

Note: All articles state more research needs to be conducted to determine how military flight impacts pregnancy

References

- A. Stark CM, Sorensen IS, Royall M, et al. Maternal and Fetal Health Risks Among Female Military Aviation Officers. *Aerosp Med Hum Perform*. 2024;95(9):675-682. doi:10.3357/AMHP.6416.2024
- B. Stark CM, Sorensen IS, Royall M, et al. Neonatal Health Risks Among Children of Female Military Aviation Officers. *Aerosp Med Hum Perform*. 2024;95(11):815-820.doi:10.3357/AMHP.6417.2024
- C. Royall M, Sorensen IS, Stark CM, et al. Pediatric Health Risks Among Children of Female Military Aviation Officers. *Aerosp med hum perform*. 2025;96(5):386-391. doi:10.3357/AMHP.6418.2025

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Annex B: Summary of RCAF Whole Body Vibration and Noise Data

Whole Body Vibration (WBV)

BLUF: Women should not be exposed to WBV ≥ the action limit value of 0.5 m/s² *continuously* throughout pregnancy. Based on studies completed by National Research Council – Flight Research Lab (NRC-FRL), the CH146, CH147F, and CH148 have whole-body vibration (WBV) levels exceeding 0.5m/s² in certain phases of flight. CH149 vibration levels have not been formally assessed.

Summary:

- WBV depends on aircraft configuration, power settings, speed, etc
- CH-147F Chinook: Very high aircrew WBV levels in general, exceeding the 0.5 m/s² threshold (Action Limit) in the majority of flight conditions that were tested. Although tuned vibration absorbers were installed at the pilot seat locations, the pilot WBV levels were shown to be very high in the test.
- CH-148 Cyclone: Active vibration control system, and the pilot and cabin aircrew WBV levels were relatively low in general. However, the Senso and Tacco operators experienced very high WBV levels that exceeded the 0.5m/s² threshold in a few flight conditions, such as the IGE 40kts even when the active vibration control system was engaged.
- Bell-412 (similar to CH-146) pilot seat experienced relatively high WBV levels at high-speed flight and maneuver conditions, which exceeded the 0.5 m/s² threshold.
- CH-149 helicopter is equipped with an active vibration control system. The aircrew WBV data was measured at selected locations, and the results were not analyzed

References

A. Skröder H, Pettersson H, Albin M, et al. Occupational exposure to whole-body vibrations and pregnancy complications: a nationwide cohort study in Sweden. Occup Environ Med. 2020;77(10):691-698.doi:10.1136/oemed-2020-106519

Noise

BLUF: Pregnant women should not be exposed to >115 dBA at any time.

Summary:

- The CH-147 Chinook is the loudest platform and can generate noise Overall Sound Pressure Levels (OSPL) of up to 132 dB at multiple locations in the cabin when travelling at 140 kts with doors open
- Cyclone max OSP is ~112 dB at the sensor operator workstation
- Gunnery on the CH146 with the GAU21 0.50CAL machine gun can generate up to ~140 dB impulse noise

References

A. NIOSH, *About Reproductive Health and the Workplace*, <https://www.cdc.gov/niosh/reproductive-health/prevention/noise.html>

	CH147F Chinook	CH146 Griffon with GAU21 Gunfire	CH148 Cyclone	CH149 Cormorant	CC295 Kingfisher	
					Perfectly Fitted Gentex 190A Helmet	David Clark Headset
Testing Group	NRC-FRL	QETE	NRC-FRL	NRC-FRL	NRC-FRL	
Output Sound Pressure Level (OSPL)	>115 dB (A) *without hearing protection	>140 dB (impulse ~22 msec) *without heading protection	<115 dB (A) *without hearing protection	<115 dB (A)	<115 dB (A)	<115 dB (A)
Worst location/seat	Under rear transmission	Gunner Pilot	Ramp Sensor Operator	Pilot	Maritime Warfare Configuration	Maritime Warfare Configuration
Remarks	>115 dB (A) for ground personnel	N/A	< 115 dB (A) for ground personnel	~115 dB (A) for transitory noise event	N/A	N/A

Note: Noise data currently unavailable for other platforms