FSG 1400-01
MENTAL HEALTH DISORDERS

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A. AMA 100-01 Medical Standards for CF Aircrew

B. CFP 154 – Medical Standards for the Canadian Forces

RECORD OF AMENDMENTS:

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07/2021	**Major revision of previous guideline**	**Aeromedical psychiatry**

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List of Acronyms

ADHD- Attention Deficit/Hyperactivity Disorder
AEC – Aerospace Environmental Controllers
ASCS - Aeromedical Standards and Consultation Service
AUMB - Aerospace and Undersea Medical Board
US-AUMB - Undersea Aerospace and Undersea Medical Board
BAvMed - Basic Aviation Medicine Provider
1 CAD - 1 Canadian Air Division
CFEME – Canadian Forces Environmental Medical Establishment
CFHIS- Canadian Forces Health Information System
FSG – Flight Surgeon Guideline
MELs- Medical Employment Limitations
OTC - Over-the-counter
SAR - Search and Rescue
SNRI – Selective Noradrenaline Reuptake Inhibitor
SSRI – Selective Serotonin Reuptake Inhibitor

Scope of this Guideline

This FSG replaces FSG 1400-01 “Use of SSRI/SNRI Medications in Aircrew” and now applies to a wider range of mental health conditions with the exception of Substance Use Disorders. This guideline is intended to be used as a guide for assessment of aircrew presenting with a mental health condition and to outline the process for return to duties. Mental health disorders, including a history thereof, in aircrew candidates for selection are not addressed in this Guideline, and are covered in Ref A.

Context and Definition

Mental health disorders are common in the general population with similar prevalence in aircrew. If left untreated, these illnesses can pose a significant threat to flight safety and have significant implications on the well-being and performance of the individual. The aeromedical risks of untreated mental illness are significant and may affect cognitive as well as physical performance. Mental health conditions may manifest acutely, or they may develop insidiously. All mental health conditions may threaten the safety and well-being of the individual as well as the crew and compromise operational effectiveness if not identified and treated.

Background

There have been advances in the understanding of the treatment of mental health conditions and how this may impact flight safety and performance. Historically, aircrew were often reluctant to come forward to discuss symptoms with their Flight Surgeon for fear of career implications. Increasing experience with some of the second-generation antidepressants and select other approved medications have led to their consideration for the treatment of mental health conditions in aircrew while remaining on flight duty. Such an approach has been promoted to encourage aircrew suffering from mental symptoms to seek treatment without the fear of long-term grounding.

Aeromedical Risks

Piloting an aircraft requires the utilization of a complex set of physical and cognitive skills. Interference with any aspect of these skills and their coordination may have serious personal and public safety consequences. Psychiatric conditions can cause an aircrew member to become acutely incapacitated, or may result in more insidious and subtle performance degradation. Psychiatric illnesses may affect cognition and judgment and have significant impact in safety-sensitive and safety-critical occupations. Psychotropic medications used to treat mental health disorders often have side-effects of significant aeromedical concern and many are unsuitable for use in operational aircrew.

Aeromedical Disposition of Mental Health Conditions

Many mental illnesses present most commonly in young adulthood and may present for the first time in individuals who are in the age range of young aircrew. There are some mental health conditions which are incompatible with performing aircrew duties. Disqualifying mental health conditions are detailed in Ref A, Appendix A, para 14 and include Schizophrenia Spectrum and Other Psychotic Disorders, Bipolar Disorder, Dissociative and Somatic Symptom Disorders, Panic Disorder, Personality Disorders, Depressive Disorders with psychosis or suicidality, Anxiety Disorders if severe, and a history of recurrent panic attacks.

1. A number of mental health conditions are assessed on a case-by-case basis with respect to suitability for aircrew duties, including:

   a) ADHD – For serving aircrew who have a diagnosis of ADHD confirmed by appropriate consultation, a requirement for pharmacologic treatment is disqualifying for aircrew duties. Milder symptoms managed by non-pharmacologic approaches are evaluated on a case-by-case basis.

   b) Trauma- and Stressor-Related Disorders including Posttraumatic Stress Disorder (PTSD) are reviewed on a case-by-case basis for selection for or continuing aircrew duties, with consultation with aeromedical psychiatry.

   c) Adjustment disorders are most likely to be acute, but may be protracted, or considered chronic depending on the nature of the stressor, and may be disqualifying if severe eg requiring hospitalization, protracted or recurrent, or involve complex features including panic attacks, suicidal ideation or suicide attempt.

   d) Obsessive-Compulsive and Related Disorders.

e) Depressive disorders.

(1) Single Major Depressive Episode: Trained aircrew may be considered for a return to flight duties following resolution of an episode of major depressive disorder provided that there is clear confirmation of clinical stability. Aircrew may be returned to flight duties (with possible restrictions) while taking approved antidepressant medications following aeromedical psychiatric review and clinical aeromedical review as detailed below. Alternatively, antidepressant medication must be discontinued with confirmation of clinical stability without return of symptoms.
(2) Recurrent Major Depression. Trained Aircrew may be considered for a return to flight duties (with a restriction if required) while on an approved antidepressant medication as outlined below.
(3) A history of attempted suicide or depression-related psychotic features is disqualifying for aircrew duties.

Medications

The use of psychotropic medications is widespread in the general population for the treatment of various mental health conditions. Our experience in treating aircrew using SSRIs as part of a comprehensive treatment plan has proven successful and has shown to be compatible with flying duties, allowing aircrew suffering from mental health disorders to seek treatment without the fear of long-term grounding or negative career implications. Medications should be chosen based on best practice recommendations, with additional occupational considerations for aircrew. The following are specific recommendations for medication choices in aircrew.

(1) Preferred

Based on pharmacological properties including half-life, adverse effect profiles, and specific aeromedical performance evaluations, the following four medications are approved for aircrew:

a. Sertraline (Zoloft)
b. Citalopram (Celexa)
c. Escitalopram (Cipralex)
d. Bupropion (Wellbutrin)

(2) Acceptable

There are many first-line psychotropic medications that are indicated for the treatment of mood and anxiety disorders which are used extensively in clinical practice, but have not been evaluated in aircrew. If it is the opinion of the treating Psychiatrist that an alternative medication is preferable, priority should be given to providing optimal clinical management. Although not aeromedically evaluated, Duloxetine (Cymbalta) and Desvenlafaxine (Pristiq) may be used for aircrew. Novel agents such as multimodal antidepressants including Vortioxetine (Trintellix) may also be considered.

(3) **Unacceptable**

There are some classes of psychotropic medications that are not acceptable for use in aircrew based on their class and pharmacologic profiles. Additionally, consideration must be given to the condition for which the medication is being considered. Medications which are not acceptable for use include:

a. Stimulants
b. Benzodiazepines
c. Antipsychotics (first and second-generation)
d. Mood Stabilizers
e. Venlafaxine (Effexor) and Paroxetine (Paxil) due to their potential for discontinuation effects with missed doses and short half-life.
f. Any medication in contravention to FSG 1900-01 Medications and Aircrew.
g. Any natural, herbal, regular OTC medication must be approved by a Flight Surgeon.

Clinical Approach to Aircrew with Mental Health Conditions

Initial Management

1. When a mental health condition is suspected a comprehensive assessment is the first step in management. Initial assessment and management are done by the Flight Surgeon and a referral to Psychiatry or other mental health supports may be done at any time.

2. The initial assessment should
   a. Identify whether a mental health condition is present
   b. Determine the severity and functional impairment
   c. Identify any comorbid psychiatric and medical conditions that may require additional assessment and concurrent intervention including substance abuse
   d. Develop an appropriate treatment plan; and
   e. Determine MELs and aeromedical disposition.

3. During the initial assessment of a mental health condition, aircrew should be temporarily grounded. Flight Surgeons and BAvMed providers should liaise with 1 CAD/ASCS regarding the requirement for temporary grounding or operational restriction.

Recommendations for Specific Mental Health Conditions

MOOD DISORDERS/DEPRESSION.

Initial Assessment and Procedures

1. Aircrew with a depressive illness should initially be managed clinically at the wing level and a psychiatric consult sought to provide assessment and treatment recommendations. When referring aircrew for specialist consultation, Flight Surgeons should make the consultant Psychiatrist aware of the preferred medications, should psychotropic medications be recommended.
2. During initial treatment and initiation of pharmacotherapy and/or psychotherapy, aircrew should be grounded with appropriate MELs:
    a. G4/G5 (T6) - Requires physician/specialist follow up more often than every six months.
    b. O4 (T6) – as appropriate based on presentation
    c. A7 (T6) – Unfit Aircrew Duties

Assessment for Return to Duty

For consideration for return to duties following presentation with an initial episode of depressive illness, aircrew must be free from depressive symptoms and assessed as clinically stable by the treating psychiatrist. If treatment includes a medication, the dose must be stabilized for at least two months. Once clinically stable and free from depressive symptoms (either on or off medications), the following procedures apply for a return to aircrew duties:

1. Pilot, AEC, SAR
    a. A referral for an Aeromedical Psychiatric consultation is required. Referrals may be sent through CFHIS to the Aeromedical Psychiatrist.
    b. Aeromedical Assessment by the Medical Consult Service (MCS) at CFEME. Referrals may be made directly to CFEME through the CFHIS Inbox. Assessment at CFEME may include a Cogscreen AE neurocognitive assessment if indicated.
    c. ASCS will provide an aeromedical disposition based on the recommendations from the Aeromedical Psychiatrist and the CFEME MCS assessment. At the discretion of the ASCS, some cases may require review by the Aerospace and Undersea Medical Board (AUMB). Final disposition will be documented by ASCS in CFHIS.
2. Other Group A & All Group B aircrew – cases are managed at local Wing/Base level.
    a. An aeromedical summary including current clinical psychiatric assessment detailing clinical status, medication(s), prognosis, and proposed duration of treatment should forwarded to ASCS for review via CFHIS.
    b. At the discretion of ASCS, assessment by Aeromedical Psychiatry and/or review by AUMB may be required.
    c. Return to aircrew duties is assessed and approved by ASCS, and may not be approved at Wing/Base level

<u>Disposition.</u>

1. **Pilots.** Pilots are generally returned to restricted flying duties based on the recommendations of the Aeromedical Psychiatrist, the CFEME assessment, and AUMB review if required. The restriction is assigned as a temporary category while aircrew are taking a psychotropic medication, with further review following discontinuation.

2. **SAR**. SAR Techs require both aeromedical and dive medical assessment. They may be returned to restricted or unrestricted duties depending on the recommendations of the AUMB and US-AUMB.
3. **Other Aircrew**- Other aircrew may be returned to unrestricted aircrew duties while clinically stable and if on medications, the dose has been stable for two months.
4. Aircrew stabilized on psychotropic medications for an initial episode of depression may also be assigned temporary MELs at the discretion of DMedPol, generally G3 – requires follow-up at intervals not exceeding 6 months.

Completion of Treatment

The decision on duration of pharmacologic treatment and non-pharmacologic interventions such as Cognitive Behaviour Therapy (CBT) should be made by the treating mental health professional(s). Once the decision is made to discontinue active treatment

1. Aircrew may remain on active aircrew status with operational restrictions as assigned during treatment
2. Aircrew require monitoring during the period of discontinuation of medications and for a period of three months thereafter. During this period, a temporary G4(T6) should be assigned – requires physician follow-up more frequently than six monthly. For non-pharmacologic therapy, if the mental health specialist has deemed treatment has been completed and clinical stability has been demonstrated, enhanced observation with MELs is not required.

Recurrent Depression

Recurrent depression may require long term therapy. For aircrew with recurrent episodes of depression, long-term or lifelong treatment may be clinically recommended. In such cases where medications are being used to prevent recurrences, permanent MELs are indicated. Although the exact MEL will be dictated by the specific clinical scenario, as a minimum the MEL should specify:

1. G3 - Requires clinical follow up at 6-month intervals, with annual follow up with Flight Surgeon.
2. Air factor determination will be made based on trade and may require restricted duties as appropriate. Pilots or AEC who require long-term pharmacotherapy may have permanent Air Factor restrictions as noted above.

STRESS-RELATED AND ANXIETY DISORDERS INCLUDING PANIC DISORDER

Stress-related and anxiety disorders exist on a spectrum. Aeromedical disposition will be evaluated on a case-by-case basis but is generally disqualifying for flight duties, aside from a history of uncomplicated, mild Generalized Anxiety Disorder, Social Anxiety Disorder, or Specific Phobia. Preoccupation with, or the presence of distracting symptoms; a feeling of perpetual anxiety, impaired cognition which may result in the inability to focus or concentrate; or panic attacks associated with a mental health condition will require thorough evaluation but will generally be disqualifying for aircrew duties.

Initial Assessment and Procedures

Aircrew presenting with symptoms of an anxiety disorder may be managed at the local Base/Wing level, with referral for clinical evaluation and treatment by local psychiatry, and aeromedical disposition in consultation with ASCS. Treatment may include pharmacotherapy or psychotherapy or other interventions.

During initial treatment and initiation of pharmacotherapy and/or psychotherapy, aircrew should be grounded with appropriate MELs:

a. G4/G5 (T6) - Requires physician/specialist follow up more often than every six months.
b. O4 (T6) – as appropriate based on presentation
c. A7 (T6) – Unfit Aircrew Duties

Procedure for Return to Duty

On completion of treatment or when clinically stable on medications or with non-pharmacologic therapy, aircrew may be considered for a return to aircrew duties. For consideration for return to duties, aircrew must be able to manage their anxiety symptoms effectively without an impairment in function.

Return to aircrew duties is initiated from Base/Wing level;

a. Pilots, AEC and SAR require assessment by Aeromedical Psychiatry via a referral through CFHIS.
b. For other aircrew, an aeromedical summary should be forwarded to ASCS and should include the assessment of the treating mental health professional.

Factors to be taken into consideration include an individual's level of care needs including ongoing specialist care and formal mental health support (psychotherapy), response to treatment, tolerance and ongoing need for medications, the risk of recurrence, and prognosis.

While tapering off medications during discontinuation, aircrew may remain on flight status. They should be monitored closely during this time.

Stress-related and anxiety disorders may require long term therapy. Aircrew who are diagnosed with Posttraumatic Stress Disorder, Other Specified Trauma and Stressor-Related Disorder, or an anxiety disorder other than mild Generalized Anxiety Disorder or Social Phobia will be assessed on a case-by-case basis. In certain cases, long-term or lifelong treatment may be clinically recommended.

For aircrew taking medications, individuals must demonstrate the ability to perform their duties without functional impairment due to anxiety and remain on a stable dose of medication. At the discretion of Aeromedical Psychiatry and/or ASCS a consult with the MCS at CFEME may be required.

Disposition

On completion of treatment or stabilized on treatment for a stress-related or anxiety disorder, aircrew may be considered for return to duties with the following MELs as guidance.

a. G3 - Requires medical follow up at 6-month intervals. Requires annual follow up with Flight Surgeon
b. O – as appropriate based on condition and potential occupational exposures/triggers.
c. Air Factor – Aircrew may require an operational aircrew restriction or may be returned to unrestricted duties based on review by ASCS with review and recommendations from AUMB as appropriate

ADJUSTMENT DISORDERS

Adjustment disorders (ADs) are maladaptive responses to psychosocial stressors related to a stressful psychosocial event or situation. Given the stressors associated with military life and operations, adjustment disorders are common in Canadian Forces personnel including aircrew. Symptoms may include depressive symptoms, anxiety, and traumatic stress symptoms related to the specific situation or event. Unlike major depression, an Adjustment Disorder may be precipitated by an outside stressor and may resolve once the situation resolves and/or the individual is able to adapt to the situation.

Adjustment Disorders resolve within six months once the stressor or its consequences have terminated. Failure to resolve in the expected timeframe should trigger reassessment and reconsideration of the diagnosis. In most cases, aircrew can be returned to full duties.

ADs with more complex presentations may be disqualifying if any of the following conditions are met:

1. Active suicidal ideation or a documented attempt;
2. Hospitalization was required;
3. Three or more episodes have occurred;
4. Adjustment Disorder treated with psychotropic medications.
5. Presence of or a history of Panic Attacks

Disposition

Aircrew presenting for mental health support with symptoms related to a particular event or situation should be referred for mental health support. Aircrew diagnosed with an Adjustment Disorder should be temporarily grounded. Upon clinical resolution of the Adjustment Disorder, the case should be referred to ASCS for review, which may include further assessment by Aeromedical Psychiatry.

FSG 1400-01 Summary Guidance for Flight Surgeons