

# A1 Medications metabolised by Cytochrome P450 3A4

This information is based on the listing at <http://medicine.iupui.edu/flockhart/table.htm>

## Inhibitors (potentially increasing blood levels of buprenorphine)

### **HIV antivirals**

Delaviridine

Indinavir

Nelfinavir

Ritonavir

### **Other:**

Amiodarone

Cimetidine

Clarithromycin

Erythromycin

Fluconazole

Fluvoxamine

Grapefruit juice

Itraconazole

Ketoconazole

Nefazodone

Norfloxacin

Verapamil

## Substrates

### **Macrolide antibiotics:** **HMG CoA reductase inhibitors:**

Clarithromycin

Erythromycin

### **Anti-arrhythmics:**

Quinidine

### **Benzodiazepines:**

Alprazolam

Diazepam

Midazolam

### **Immune modulators:**

Cyclosporine

Tacrolimus

### **HIV antivirals:**

Indinavir

Nelfinavir

Ritonavir

Saquinavir

### **Prokinetic:**

Cisapride

### **Antihistamines:**

Astemizole

### **Calcium channel blockers:**

Amlodipine

Diltiazem

Felodipine

Nifedipine

Verapamil

Atorvastatin

Cerivastatin

Lovastatin

NOT pravastatin

Simvastatin

### **Steroids:**

Estradiol

Hydrocortisone

Progesterone

Testosterone

### **Miscellaneous:**

Buspirone

Dapsone

Fentanyl

LAAM

Methadone

Ondansetron

Propranolol

Quinine

Tamoxifen

Trazodone

Zolpidem

## Inducers (potentially decreasing blood levels of buprenorphine)

### **HIV antivirals:**

Efavirenz

Nevirapine

Other

Barbiturates

Carbamazepine

Glucocorticoids

Modafinil

Phenobarbital

Phenytoin

Rifampin

St John's wort

# A2

## Consultancy and support mechanisms

### Australian Capital Territory

#### ACT Health

GPO Box 825, Canberra ACT 2601

#### ACT Health — Alcohol and Drug Program

Director

Phone: (02) 6205 0947

Fax: (02) 6285 2780

Medical Officers

Phone: (02) 6244 2591

Fax: (02) 6285 2780

Chief Pharmacist

Phone: (02) 6205 0959

Fax: (02) 6285 2780

#### ACT Health — Policy Division

Manager, Alcohol and Other Drug Unit

Phone: (02) 6205 0909

Fax: (02) 6205 0866

#### ACT Health — Population Health Division

Chief Health Officer

Phone: (02) 6205 0883

Fax: (02) 6205 1884

#### Applications for approval to dispense buprenorphine

Health Protection Services

Pharmaceutical Services Section

Phone: (02) 6207 3974

Fax: (02) 6205 0997

#### Applications for approval to prescribe buprenorphine

Chief Health Officer

Phone: (02) 6205 0998

Fax: (02) 6205 0997

### New South Wales

#### Alcohol and Drug Information Service

Phone: (02) 9361 2111

Toll Free: 1800 023 599

#### NSW Drug and Alcohol Specialist Advisory Service

Phone: (02) 9557 2905

Toll Free: 1800 023 687

#### NSW Health Centre for Drugs and Alcohol

Phone: (02) 9391 9244

#### Applications for authorisation to prescribe, and approval to dispense, buprenorphine and methadone

NSW Health Pharmaceutical Services Branch

PO Box 103

GLADESVILLE NSW 1675

Phone: (02) 9879 5246

Fax: (02) 9859 5170

### Northern Territory

#### Alcohol and Other Drug Information Service (ADIS, NT)

Toll free 1800 131 350

#### Drug and Alcohol Clinical Advisory Service (DACAS)

Toll free 1800 111 092

#### Alcohol and Other Drugs Program, Policy and Program Development

Phone: (08) 8999 2691

#### Alcohol and Other Drugs Service, Darwin

Phone: (08) 8922 8399

## Alcohol and Other Drugs Service, Central Australia

Phone: (08) 8951 7580

### Applications for approval to prescribe and dispense buprenorphine

Chief Poisons Inspector  
Poisons Control Branch  
Department of Health and Community Services  
PO Box 40596  
CASUARINA NT 0811  
Phone: (08) 8999 2631  
Fax: (08) 8999 2420

## Queensland

### Policy and Specific State Information

Senior Advisor Illicit Drugs  
Alcohol, Tobacco and Other Drug Branch  
Phone: (07) 3234 1700  
Fax: (07) 3234 1699

Medical Advisor  
Alcohol, Tobacco and Other Drug Branch  
Phone: (07) 3234 0957  
Fax: (07) 3234 1699

### Applications for approval to prescribe and dispense buprenorphine

Chief Executive  
Queensland Health  
Locked Bag 32  
COORPAROO QLD 4151  
Phone: (07) 3896 3900  
Fax: (07) 3896 3933

### Alcohol and Drug Information Service (ADIS)

GPO Box 8161  
Brisbane Qld 4001  
Phone: (07) 3837 5989  
Fax: (07) 3837 5914  
Free call 1800 177 833 outside Brisbane

## Tasmania

### Alcohol and Drug Service State Office

State Manager  
Phone: (03) 6216 4260

Coordinator Illicit Drugs  
Phone: (03) 6216 4262

Deputy Chief Pharmacist  
Phone: (03) 6233 3906

### Alcohol and Drug Service

Southern Regional Office  
Manager  
Phone: (03) 6230 7903

Opiate Treatment Medical Officer  
Phone: (03) 6230 7903

Pharmacist  
Phone: (03) 6230 7903

North/North West Regional Office  
Manager  
Phone: (03) 6336 5577

Opiate Treatment Medical Officer  
Phone: (03) 6336 5577

### Applications for approval to dispense buprenorphine

Opioid Pharmacotherapy Accreditation and Training Committee  
C/o Alcohol and Drug Service  
Department of Health and Human Services  
PO Box 125  
HOBART TAS 7001  
Phone: (03) 6216 4262  
Fax: (03) 6216 4267

### Applications for approval to prescribe buprenorphine

Pharmaceutical Services  
Department of Health and Human Services  
PO Box 125  
HOBART TAS 7001  
Phone: (03) 6233 2064  
Fax: (03) 6233 3904

## South Australia

### ADIS (Alcohol and Drug Information Service)

Toll Free: 1300 13 13 40

### Drug and Alcohol Clinical Advisory Service

Toll Free: 1300 13 13 40

### Warinilla Clinic

92 Osmond Terrace  
Norwood SA 5067  
Phone: (08) 8130 7500

### Northern Methadone Service

22 Langford Drive  
Elizabeth SA 5112  
Phone: (08) 8252 4040

### Southern Clinic

82 Beach Road  
Christies Beach SA 5165  
Phone: (08) 8326 6644

### Applications for approval to prescribe and dispense buprenorphine

Drugs of Dependence Unit  
Drug Strategy and Programs Branch  
PO Box 6  
RUNDLE MALL SA 5000  
Phone: 1300 652 584  
Fax: 1300 658 447

## Victoria

### Victorian Drug and Alcohol Clinical Advisory Service

Metro: (03) 9416 3611  
Toll Free: 1800 81 2804

### Direct Line

Provides counseling, information and referral  
Toll Free: 1800 888 236

### Youth Substance Abuse Service

Provides information, outreach and residential services for young people aged between 12 and 21 experiencing significant problems related to their use of drugs and/or alcohol.  
Phone: (03) 9415 8881  
Fax: (03) 9415 8882  
Website: <http://www.ysas.org.au>

### YSASLine

Provides 24 hour access to information, telephone counseling, and referral to YSAS outreach teams.

Metro: (03) 9418 1020  
Toll Free: 1800 014 446

### Specialist Methadone Services

Consultative service to methadone prescribers seeking expert opinion about the management of patients with special problems.

Turning Point Drug and Alcohol Centre  
54 Gertrude St., FITZROY 3065  
Administration  
Phone: (03) 8413 8413  
Fax: (03) 9416 3420

### Clinical Services

Phone: (03) 8413 8444  
Fax: (03) 9486 9766  
Website <http://www.turningpoint.org.au>

### Southcity Clinic

6–69 Brighton Rd., ELWOOD 3184  
Phone: (03) 9525 7399  
Fax: (03) 9525 7369  
Website <http://www.southcityclinic.com.au>

### Western Hospital Drug and Alcohol Service

3–7 Eleanor St, FOOTSCRAY 3011  
Phone: (03) 8345 6682  
Fax: (03) 8345 6027

### Austin and Repatriation Medical Centre Specialist Methadone Service

Studley Rd, HEIDELBERG 3084  
Phone: (03) 9496 5999 or 9496 5000

Pharmacy  
Phone: (03) 9496 4999  
Fax: (03) 9459 4546

### Eastern Region Specialist Methadone Service

Whithorse Community Health Service  
65 Carrington Street, BOX HILL, 3128  
Phone: (03) 8843 2225  
Fax: (03) 9898 8010

### **Royal Women's Hospital Chemical Dependency Unit**

For women who are pregnant and use drugs.  
264 Cardigan Street Carlton 3053  
Phone: (03) 9344 3631

### **Hepatitis C Helpline**

Toll Free: 1800 800 241  
TTY: 1800 032 665  
Vietnamese Line: 1800 456 007

### **AIDSLINE**

Phone: (03) 9347 6099  
Toll Free: 1800 133 392  
TTY: 1800 032 665

### **Melbourne Sexual Health Centre**

580 Swanston Street, Carlton 3053  
Phone: (03) 9347 0244  
Toll Free: 1800 032 017

### **Needle and Syringe Exchange Programs (NSEPs)**

For contact details of Victorian NSEPs see:  
<http://hna.ffh.vic.gov.au/phb/9808109/index.htm>  
or call Direct Line (see above)

### **Applications for approval to prescribe and dispense buprenorphine**

Drugs and Poisons Unit  
Department of Human Services  
GPO Box 4057  
MELBOURNE VIC 3001  
Phone: 1300 364 545  
Fax: 1300 360 830

## **Western Australia**

### **Alcohol and Drug Information Service (Public)**

Phone: (08) 9442 5000  
Toll Free: 1800 198 024

### **Clinical Advisory Service (Health Professionals)**

Phone: (08) 9442 5042  
Toll Free: 1800 688 847

### **Applications for approval to prescribe buprenorphine**

Phone: (08) 9370 0307  
Fax: (08) 9471 0444

### **Applications for approval to dispense buprenorphine**

Pharmaceutical Services Branch  
Department of Health  
PO Box 8172  
Perth Business Centre WA 6849  
Phone: (08) 9388 4980  
Fax: (08) 9388 4988

# A3 Scales for assessing opioid withdrawal

The Subjective and Objective Opiate Withdrawal Scales assess the severity of withdrawal at the time the scale is administered. These scales can be administered multiple times in any day. The Short Opiate Withdrawal Scale is often abbreviated in literature to SOWS, but referred to here as ShOWS to avoid confusion with the Subjective Opiate Withdrawal Scale. This scale assesses the patient's experience of withdrawal in the preceding 24 hours. As such the ShOWS is only valid for once daily administration. It includes assessment of sleep disturbance which is an aspect of withdrawal that is significant to patients. The Clinical Opiate Withdrawal Scale (COWS) is the newest of the scales. It combines objective and subjective items. Like the SOWS and OOWS it can be administered multiple times in a day. It has the advantage of being quick to administer.

## The Subjective Opiate Withdrawal Scale (SOWS)

(Handelsman *et al* 1987)

Date . . . . . Time . . . . .

Please score each of the 16 items below according to how you feel NOW (circle one number)						
	Symptom	not at all	a little	moderately	quite a bit	extremely
1	I feel anxious	0	1	2	3	4
2	I feel like yawning	0	1	2	3	4
3	I am perspiring	0	1	2	3	4
4	My eyes are teary	0	1	2	3	4
5	My nose is running	0	1	2	3	4
6	I have goosebumps	0	1	2	3	4
7	I am shaking	0	1	2	3	4
8	I have hot flushes	0	1	2	3	4
9	I have cold flushes	0	1	2	3	4
10	My bones and muscles ache	0	1	2	3	4
11	I feel restless	0	1	2	3	4
12	I feel nauseous	0	1	2	3	4
13	I feel like vomiting	0	1	2	3	4
14	My muscles twitch	0	1	2	3	4
15	I have stomach cramps	0	1	2	3	4
16	I feel like using now	0	1	2	3	4

Total score range 0–64.

## Objective Opioid Withdrawal Scale (OOWS)

(Handelsman *et al* 1987)

Date..... Time .....

Observe the patient during a 5 minute observation period then indicate a score for each of the opioid withdrawal signs listed below (items 1–13). Add the scores for each item to obtain the total score

Sign		Measures		Score
1	Yawning	0 = no yawns	1 = $\geq 1$ yawn	
2	Rhinorrhoea	0 = < 3 sniffs	1 = $\geq 3$ sniffs	
3	Piloerection (observe arm)	0 = absent	1 = present	
4	Perspiration	0 = absent	1 = present	
5	Lacrimation	0 = absent	1 = present	
6	Tremor (hands)	0 = absent	1 = present	
7	Mydriasis	0 = absent	1 = $\geq 3$ mm	
8	Hot and Cold flushes	0 = absent	1 = shivering / huddling for warmth	
9	Restlessness	0 = absent	1 = frequent shifts of position	
10	Vomiting	0 = absent	1 = present	
11	Muscle twitches	0 = absent	1 = present	
12	Abdominal cramps	0 = absent	1 = Holding stomach	
13	Anxiety	0 = absent	1 = mild – severe	
<b>TOTAL SCORE</b>				

Total score range 0–13

## The Short Opiate Withdrawal Scale (ShOWS)

(Gossop 1990)

Please put a check mark in the appropriate box if you have suffered from any of the following conditions in the last 24 hours:

	None	Mild	Moderate	Severe
Feeling sick				
Stomach cramps				
Muscle spasms/twitching				
Feelings of coldness				
Heart pounding				
Muscular tension				
Aches and pains				
Yawning				
Runny eyes				
Insomnia/problems sleeping				

Scoring:   None = 0  
               Mild = 1  
               Moderate = 2  
               Severe = 3

## Clinical Opiate Withdrawal Scale

(Wesson & Ling 2003)

For each item, circle the number that best describes the patient's signs or symptoms. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increased pulse rate would not add to the score.

Patient's Name	Date and Time
<b>Reason for this assessment</b>	
<p><b>Resting Pulse Rate</b> . . . . . beats/minute <i>Measured after patient is sitting or lying for one minute</i></p> <p>0 pulse rate 80 or below 1 pulse rate 81–100 2 pulse rate 101–120 4 pulse rate greater than 120</p>	<p><b>GI Upset:</b> <i>over last ½ hour</i></p> <p>0 no GI symptoms 1 stomach cramps 2 nausea or loose stool 3 vomiting or diarrhea 5 multiple episodes of diarrhea or vomiting</p>
<p><b>Sweating:</b> <i>over past ½ hour not accounted for by room temperature or patient activity</i></p> <p>0 no report of chills or flushing 1 subjective report of chills or flushing 2 flushed or observable moistness on face 3 beads of sweat on brow or face 4 sweat streaming off face</p>	<p><b>Tremor:</b> <i>observation of outstretched hands</i></p> <p>0 no tremor 1 tremor can be felt, but not observed 2 slight tremor observable 4 gross tremor or muscle twitching</p>
<p><b>Restlessness:</b> <i>Observation during assessment</i></p> <p>0 able to sit still 1 reports difficulty stilling still, but is able to do so 3 frequent shifting or extraneous movements of legs/arms 5 unable to sit still for more than a few seconds</p>	<p><b>Yawning:</b> <i>Observation during assessment</i></p> <p>0 no yawning 1 yawning once or twice during assessment 2 yawning three or more times during assessment 4 yawning several times/minute</p>
<p><b>Pupil size</b></p> <p>0 pupils pinned or normal size for room light 1 pupils possibly larger than normal for room light 2 pupils moderately dilated 5 pupils so dilated that only the rim of the iris is visible</p>	<p>Anxiety or Irritability</p> <p>0 none 1 patients reports increasing irritability or anxiousness 2 patient obviously irritable or anxious 4 patient so irritable and anxious that participation in the assessment is difficult</p>
<p><b>Bone or Joint aches:</b> <i>If patient was having pain previously, only the additional component attributed to opiate withdrawal is scored</i></p> <p>0 not present 1 mild diffuse discomfort 2 patient reports severe diffuse aching of joints/muscles 4 patient is rubbing joints or muscles and is unable to sit still because of discomfort</p>	<p><b>Gooseflesh skin</b></p> <p>0 skin is smooth 3 piloerection of skin can be felt or hairs standing up on arms 5 prominent piloerection</p>

Patient's Name	Date and Time
<b>Reason for this assessment</b>	
<p><b>Runny nose or tearing:</b> <i>Not accounted for by cold symptoms or allergies</i></p> <p>0 not present</p> <p>1 nasal stuffiness or unusually moist eyes</p> <p>2 nose running or tearing</p> <p>4 nose constantly running or tears streaming down cheeks</p>	<p>Total score . . . . .</p> <p><i>The total score is the sum of all 11 items</i></p> <p>Initials of person completing assessment:</p> <p>.....</p>

Score: 5–12 = mild; 13–24 = moderately severe; more than 36 = severe withdrawal

# A4

## Patient consent form for buprenorphine treatment during pregnancy/ breastfeeding

I ..... am currently in treatment with buprenorphine for the management of my opiate dependence, and wish to continue treatment with buprenorphine during my pregnancy / period of breastfeeding, rather than transfer to methadone.

In making this decision, I understand that:

the safety of buprenorphine during pregnancy or breastfeeding remains uncertain at this stage,

pregnancy and breastfeeding are currently listed as contraindications for the use of buprenorphine in Australia by the Therapeutic Goods Administration,

I will need to attend regularly (and as directed) for antenatal care at ..... Hospital,

I will need to attend regularly for appointments with my treatment team at ..... Hospital,

Doctor ..... has explained the potential risks and benefits of continuing buprenorphine during my pregnancy and afterwards.

Name: .....

Signed: ..... Date: / /

Witness: ..... Date: / /

# A5 Further reading and references

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