10. Will laboratory tests (e.g. heart tests, blood tests, etc.) need to be performed on the child or youth before or during treatment?
11. Will a child and adolescent psychiatrist be monitoring the child's response to the medication? Will dosages be adjusted if needed? How often will progress be checked and by whom?
12. Are there medications or foods that should be avoided while taking these medications? What if the child or adolescent in my care experiments with alcohol or drugs while taking these medications?
13. How long will the medication be taken? Who will make the decision to stop taking this medication? Will the dosage stop immediately?
14. What do I do if a problem develops (e.g. the young person becomes ill, misses one or several doses, side effects develop)?
15. Does the school nurse have to be notified?
16. Can the youth in my care be allowed to drive or operate machinery while taking this medication?
17. Will there be other treatment approaches used in addition to medication?

By being informed, caregivers and the children or youth in their care can be equal partners in the critical issue of depression treatment.

This is not intended, nor should it be used, as a treatment planner. The purpose of this publication is to provide a brief overview of currently prescribed pharmaceutical options available for the treatment of depression.

Resources

Statewide Crisis Call Center = (877) 885-4673 – available 24 hours

Clark County

Suicide Prevention Center of Clark County = (702) 731-2990

Lincoln County

Family Crisis Center (Volunteer staffing) = (775) 962-5888 (days)
(775) 962-5262 (evenings)

Nye County

Mental Health Crisis Line = (800) 992-5757

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DEPRESSION

Pharmacological Treatment Overview

This is not intended, nor should it be used, as a professional guide to the use of psychotropic medications, as an assessment instrument or treatment planner. The purpose of this document is to provide basic information regarding medication used in treatment of depression in school-age children and adolescents.

Depression, affecting approximately sixteen million people in North America, is regarded as the major psychiatric disorder of the time (National Institute of Mental Health [NIMH], 1994). This disorder affects at least 6% of the youth population per year (NIMH, 1999). Young women usually experience depressive episodes more frequently than young men. Nationally, of every 100,000 adolescents, almost three thousand typically experience depressive symptoms, and there likely will be eight to ten suicides out of this group (Brown, 1999). The Nevada Division of Child and Family Services (DCFS) recorded 448 episodes of treatment for depression among 2,089 youth in out-of-home placement in Clark County between July 1997 and June 1999, affecting one out of every five youth in foster care (Thomas, 1999).

Depression in youth is caused by a variety of events (see UNCE Fact Sheet 99-70 "Recognizing Depression in Youth"). Typically, most youth are able to come to terms with this event and get on with their lives.

Occasionally, the process deteriorates to the point that youth are overwhelmed and no longer able to cope without professional help. In severe cases, it can lead to thoughts or acts of personal harm or suicide. It is not uncommon for young people to be preoccupied with issues of mortality and to contemplate the effect their death would have on those around them. **Any statements involving suicidal thought must be taken seriously and acted upon immediately (See Resources on back page).**

In the majority of cases, depression is treated with "talking therapy", using a directed approach that allows the youth to overcome the depression and resume an active, emotionally healthy life. However, in chronic or very severe cases, psychotropic medications will be prescribed to assist the youth in stabilizing their mood swings and debilitating feelings of helplessness and despair, helping them continue their verbal therapy.

While there is a great deal of controversy over the prescribing of these powerful medications for children and adolescents, the fact remains that, in severe cases, medications are an integral part of the treatment protocol. For that reason, this fact sheet will attempt to provide an overview of the most commonly prescribed drugs currently authorized by the Nevada Division of Child and Family Services (DCFS) in the pharmacological treatment of child and adolescent depression. This document will not take a position in regards to prescribing anti-depressant medication to young people, but it does provide some very basic information regarding specific medications, known side effects, and precautions to be observed while taking them.

Commonly Prescribed Anti-Depressant Medication

Anti-depressant medications fall into four main types. They are listed below with some of the technical and (*brand names)* that fall into these categories (Diamond, 1998).

Trycyclic Antidepressants (TCA's)
Includes: Amitriptyline (*Elavil),* Clomipramine *(Anafranil)*, Imipramine *(Tofranil)*, and Nortiptyline *(Pamelor)*

Selective Serotonin Reuptake Inhibitors (SSRI's)
Includes: Fluoxetine *(Prozac)*, Sertraline *(Zoloft)*, Paroxetine *(Paxil)*, Fluvoxamine *(Luvox)*, Venlafaxine *(Effexor)*, and Citalopram *(Celexa)*

Monoamine Oxidase Inhibitors (MAOI's)
Includes: Phenelzine *(Nardil)*, and Tranylcypromine *(Parnate)*

Atypical Antidepressants
Includes: Bupropion *(Wellbutrin)*, Nefazodone *(Serzone)*, Trazodone *(Desyrel)*, and Mirtazapine *(Remeron)*

Discussions with pharmacy staff at the Southern Nevada Adult Mental Health Services in Las Vegas revealed the predominance of SSRI's as the preferred medication for children and adolescents. The table below lists the top five anti-depressants in this class, their known side effects and cautionary advisories listed on the medication pamphlet provided by the manufacturer. The choice of medication typically is guided by the type of depression and any problems with side-effects (Goldstein, 1998).

Table 1 **Frequently Prescribed Anti-Depressants for Adolescents**

Medication	Observed Side Effects	Cautions
Citalopram *(Celexa)* *Source: Forest Pharmaceuticals Pamphlet 1998*	Nausea, dry mouth, drowsiness, insomnia, increased sweating, tremor, diarrhea, and problems with ejaculation	Avoid alcohol. Notify doctor when taking other meds or over the counter remedies; should not be taken with or within two weeks of taking any MAOI (see above)

Table 1 Contd.

Medication	Observed Side Effects	Cautions
Venlafaxine *(Effexor)* *Source: Wyeth-Ayerst Laboratories Pamphlet 43593-00 1998*	Nausea, dizziness, sleepiness, sexual impairment, sweating, dry mouth, nervousness, anorexia, abnormal dreams, and tremor. May raise blood pressure. Also may impair judgment, thinking or motor skills	Avoid alcohol. Notify doctor when taking other meds or over the counter remedies; should not be taken with or within two weeks of taking any MAOI (see above) exercise caution until adapted to therapy
Paroxetine *(Paxil)* *Source: SmithKline Beecham Pharmaceuticals Pamphlet PX7246 1998*	Most common is nausea – alleviated by taking meds with food; drowsiness, abnormal ejaculation, dry mouth, and constipation	Notify doctor of fainting, agitation, weakness or muscle pain, when taking other meds or over the counter remedies; should not be taken with or within two weeks of taking any MAOI (see above), avoid alcohol
Fluoxetine *(Prozac)* *Source: Eli Lilly and Company Prozac Pamphlet 60-FL-2260-0 1995*	Nausea, anxiety/nervousness, insomnia	If rash develops – notify your doctor immediately. Notify doctor when taking other meds or over the counter remedies; should not be taken with or within two weeks of taking any MAOI (see above)
Sertraline *(Zoloft)* *Source: USP DI Patient Education Leaflets 978938 1995*	Nausea is most common; diarrhea or loose stools, stomach cramps, tremor, insomnia, somnolence, and dry mouth	Notify doctor of fever, rash, hives, itching, fast-talking or nervousness that is out of control. Notify doctor when taking other meds or over the counter remedies; should not be taken with or within two weeks of taking any MAOI (see above)

Questions To Ask When Medication is Prescribed

Treatment with psychotropic medication is a serious matter for caregivers, children and adolescents. The process of treating depression, when using an anti-depressant as part of the treatment plan, is made much easier when the youth and the caregiver are fully informed regarding the process. The following questions are very basic in nature, and the prescribing professional should be able and willing to answer them to your satisfaction before the young person begins taking them.

1. What is the nature of the medication? Is it known by any other name?
2. What is known about its success rate with other children or youth with similar conditions?
3. How will medications help the young person in my care? How long before we begin to see results? When will it work? How long will it work?
4. What are the commonly occurring side effects? How long do they last? Are they dangerous?
5. What are the rare or serious side effects that may occur? Are they cause for alarm? If they occur, should we discontinue the medication immediately?
6. Is this medication addictive? Can the child or adolescent abuse it?
7. What is the recommended dosage? When can it be taken? Can it be taken at school?
8. Can the child or youth attend school while taking these medications?
9. Will a child and adolescent psychiatrist be monitoring the child's response to the medication? Will dosages be adjusted if needed? How often will progress be checked and by whom?