A woman visits her dermatologist, complaining of extremely dry skin and seldom feeling clean. She showers for two hours every day.

A lawyer insists on making coffee several times each day. His colleagues do not realize that he lives in fear that the coffee will be poisoned, and he feels compelled to pour most of it down the drain. The lawyer is so obsessed with these thoughts that he spends 12 hours a day at work -- four of them worrying about contaminated coffee.

A man cannot bear to throw anything away. Junk mail, old newspapers, empty milk cartons all "could contain something valuable that might be useful someday." If he throws things away, "something terrible will happen." He hoards so much clutter that he can no longer walk through his house. Insisting that nothing be thrown away, he moves to another house where he continues to hoard.

A 10 year old girl keeps apologizing for "disturbing" her class. She feels that she is too restless and is clearing her throat too loudly. Her teachers are puzzled and over time become annoyed at her repeated apologies since they did not notice any sounds or movements. She is also preoccupied with "being good all the time".

These people suffer obsessive-compulsive disorder (OCD). The National Institute of Mental Health estimates that more than 2 percent of the U.S. population, or nearly one out of every 40 people, will suffer from OCD at some point in their lives. The disorder is two to three times more common than schizophrenia and bipolar disorder.

What is Obsessive-compulsive disorder?

Obsessions are intrusive, irrational thoughts -- unwanted ideas or impulses that repeatedly well up in a person's mind. Again and again, the person experiences disturbing thoughts, such as "My hands must be contaminated; I must wash them"; "I may have left the gas stove on"; "I am going to injure my child." On one level, the sufferer knows these obsessive thoughts are irrational. But on another level, he or she fears these thoughts might be true. Trying to avoid such thoughts creates great anxiety.

Compulsions are repetitive rituals such as handwashing, counting, checking, hoarding, or arranging. An individual repeats these actions, perhaps feeling momentary relief, but without feeling satisfaction or a sense of completion. People with OCD feel they must perform these compulsive rituals or something bad will happen.

Most people at one time or another experience obsessive thoughts or compulsive behaviors. Obsessive-compulsive disorder occurs when an individual experiences obsessions and compulsions for more than an hour each day, in a way that interferes with his or her life.

OCD is often described as "a disease of doubt." Sufferers experience "pathological doubt" because they are unable to distinguish between what is possible, what is probable, and what is unlikely to happen.
Who gets OCD?
People from all walks of life can get OCD. It strikes people of all social and ethnic groups and both males and females. Symptoms typically begin during childhood, the teenage years or young adulthood.

What causes OCD?
A large body of scientific evidence suggests that OCD results from a chemical imbalance in the brain. For years, mental health professionals incorrectly assumed OCD resulted from bad parenting or personality defects. This theory has been disproven over the last 20 years. OCD symptoms are not relieved by psychoanalysis or other forms of "talk therapy," but there is evidence that behavior therapy can be effective, alone or in combination with medication. People with OCD can often say "why" they have obsessive thoughts or why they behave compulsively. But the thoughts and the behavior continue.

People whose brains are injured sometimes develop OCD, which suggests it is a physical condition. If a placebo is given to people who are depressed or who experience panic attacks, 40 percent will say they feel better. If a placebo is given to people who experience obsessive-compulsive disorder, only about two percent say they feel better. This also suggests a physical condition.

Clinical researchers have implicated certain brain regions in OCD. They have discovered a strong link between OCD and a brain chemical called serotonin. Serotonin is a neurotransmitter that helps nerve cells communicate.

Scientists have also observed that people with OCD have increased metabolism in the basal ganglia and the frontal lobes of the brain. This, scientists believe, causes repetitive movements, rigid thinking, and lack of spontaneity. Successful treatment with medication or behavior therapy produces a decrease in the over activity of this brain circuitry. People with OCD often have high levels of the hormone vasopressin.

In layperson's terms, something in the brain is stuck, like a broken record. Judith Rapoport, M.D., describes it in her book, The Boy Who Couldn't Stop Washing, as "grooming behaviors gone wild."

How do people with OCD typically react to their disorder?
People with OCD generally attempt to hide their problem rather than seek help. Often they are remarkably successful in concealing their obsessive-compulsive symptoms from friends and co-workers. An unfortunate consequence of this secrecy is that people with OCD generally do not receive professional help until years after the onset of their disease. By that time, the obsessive-compulsive rituals may be deeply ingrained and very difficult to change.

How long does OCD last?
OCD will not go away by itself, so it is important to seek treatment. Although symptoms may become less severe from time to time, OCD is a chronic disease. Fortunately, effective treatments are available that make life with OCD much easier to manage.

Is age a factor in OCD?
OCD usually starts at an early age, often before adolescence. It may be mistaken at first for autism, pervasive developmental disorder, or Tourette's syndrome, a disorder that may include obsessive doubting and compulsive touching as symptoms.

Like depression, OCD tends to worsen as the person grows older, if left untreated. Scientists hope, however, that when the OCD is treated while the person is still young, the symptoms will not get worse with time.

What are other examples of behaviors typical of people who suffer from OCD?
People who do the following may have OCD:
• repeatedly check things, perhaps dozens of times, before feeling secure enough to go to sleep or leave the house. Is the stove off? Is the door locked? Is the alarm set?
• fear they will harm others. Example: A man's car hits a pothole on a city street and he fears it was actually a body.
• feel dirty and contaminated. Example: A woman is fearful of touching her baby because she might contaminate the child.
• constantly arrange and order things. Example: A child can't go to sleep unless he lines up all his shoes correctly.
• are excessively concerned with body imperfections -- insist on numerous plastic surgeries, or spend many, many hours a day body-building.
• are ruled by numbers, believing that certain numbers represent good and others represent evil.
• are excessively concerned with sin or blasphemy.

Is OCD commonly recognized by professionals?
Not nearly commonly enough. OCD is often misdiagnosed, and it is often underdiagnosed. Many people have dual disorders of OCD and schizophrenia, or OCD and bipolar disorder, but the OCD component is not diagnosed or treated. In children, parents often are aware of some anxiety or depression but not of the underlying OCD. Researchers believe OCD, anxiety disorders, Tourette's, and eating disorders such as anorexia and bulimia can be triggered by some of the same chemical malfunctioning of the brain.

Is heredity a factor in OCD?
Yes. Heredity appears to be a strong factor. If you have OCD, there's a 25-percent chance that one of your immediate family members will have it. It definitely seems to run in families.

Can OCD be effectively treated?
Yes, with medication and behavior therapy. Both affect brain chemistry, which in turn affects behavior. Medication can regulate serotonin, reducing obsessive thoughts and compulsive behaviors.

Anafranil (clomipramine): A tricyclic antidepressant, Anafranil has been shown to be effective in treating obsessions and compulsions. The most commonly reported side effects of this medication are dry mouth, constipation, nausea, increased appetite, weight gain, sleepiness, fatigue, tremor, dizziness, nervousness, sweating, visual changes, and sexual dysfunction. There is also a risk of seizures, thought to be dose-related. People with a history of seizures should not take this medication. Anafranil should also not be taken at the same time as a monoamine oxidase inhibitor (MAOI).

Many of the antidepressant medications known as selective serotonin reuptake inhibitors (SSRIs) have also proven effective in treating the symptoms associated with OCD. The SSRIs most commonly prescribed for OCD are Luvox (fluvoxamine), Paxil (paroxetine), Prozac (fluoxetine), and Zoloft (sertraline).

Luvox (fluvoxamine): Common side effects of this medication include dry mouth, constipation, nausea, sleepiness, insomnia, nervousness, dizziness, headache, agitation, weakness, and delayed ejaculation.

Paxil (paroxetine): Side effects most associated with this medication include dry mouth, constipation, nausea, decreased appetite, sleepiness, insomnia, tremor, dizziness, nervousness, weakness, sweating, and sexual dysfunction.

Prozac (fluoxetine): Dry mouth, nausea, diarrhea, sleepiness, insomnia, tremor, nervousness, headache, weakness, sweating, rash, and sexual dysfunction are among the more common side effects associated with this drug.
**Zoloft (sertraline):** Among the side effects most commonly reported while taking Zoloft are dry mouth, nausea, diarrhea, constipation, sleepiness, insomnia, tremor, dizziness, agitation, sweating, and sexual dysfunction.

**Celexa (Citalopram)** Side effects may include dry mouth, nausea, or drowsiness.

SSRIs should never be taken at the same time as MAOIs.

**How long should an individual take medication before judging its effectiveness?**
Some physicians make the mistake of prescribing a medication for only three or four weeks. That really isn't long enough. Medication should be tried consistently for 10 to 12 weeks before its effectiveness can be judged.

**What is behavior therapy, and can it effectively relieve symptoms of OCD?**
Behavior therapy is not traditional psychotherapy. It is "exposure and response prevention," and it is effective for many people with OCD. Consumers are deliberately exposed to a feared object or idea, either directly or by imagination, and are then discouraged or prevented from carrying out the usual compulsive response. For example, a compulsive hand-washer may be urged to touch an object he or she believes is contaminated and denied the opportunity to wash for several hours. When the treatment works well, the consumer gradually experiences less anxiety from the obsessive thoughts and becomes able to refrain from the compulsive actions for extended periods of time.

Several studies suggest that medication and behavior therapy are equally effective in alleviating symptoms of OCD. About half of the consumers with this disorder improve substantially with behavior therapy; the rest improve moderately.

**Will OCD symptoms go away completely with medication and behavior therapy?**
Response to treatment varies from person to person. Most people treated with effective medications find their symptoms reduced by about 40 percent to 50 percent. That can often be enough to change their lives, to transform them into functioning individuals.

A few consumers find that neither treatment produces significant change, and a small number of people are fortunate to go into total remission when treated with effective medication and/or behavior therapy.

Reviewed by Judith Rapoport, MD May 2003