

CHAPTER 46  
MINIMUM REQUIREMENTS FOR TANNING FACILITIES

**641—46.1(136D) Purpose and scope.** This chapter provides for the permitting and regulation of tanning facilities and devices used for the purpose of tanning human skin through the application of ultraviolet radiation. This includes, but is not limited to, public and private businesses, hotels, motels, apartments, condominiums, and health and country clubs.

All references to Code of Federal Regulations (CFR) in this chapter are those in effect as of July 1, 1999.

These rules stipulate minimum safety requirements relating to the operation of tanning devices; procedures for obtaining a permit; qualifications for tanning facility operators; and procedures for health departments to provide for the inspection of tanning facilities and enforcement of these rules. Tanning facilities which are in compliance with these rules are not relieved from the requirements of any other federal and state regulations or local ordinances.

**641—46.2(136D) Definitions.**

*“Board of health”* means a county, city, or district board of health that has a 28E agreement with the Iowa department of public health to perform inspections under this chapter.

*“Cleansing”* means to remove soil, dirt, oils or other residues from the surface of the tanning unit which may come into contact with the skin.

*“Cleansing agent”* means a substance capable of producing the effect of “cleansing.” These agents shall not adversely affect the equipment or the health of the consumer and shall be acceptable to the department or board of health.

*“Consumer”* means any member of the public who is provided access to a tanning facility in exchange for a fee or other compensation, or any individual who, in exchange for a fee or other compensation, is afforded use of a tanning facility as a condition or benefit of membership or access.

*“Department”* means the Iowa department of public health.

*“Director”* means the director of public health or the director’s designee.

*“Exposure position”* means any position, distance, orientation, or location relative to the radiation surfaces of a tanning device at which the user is intended to be exposed to ultraviolet radiation from the product, as recommended by the manufacturer.

*“Formal training”* means a course of instruction approved by the department for operators of tanning facilities.

*“Health care professional”* means an individual, licensed by the state of Iowa, who has received formal medical training in the use of phototherapy.

*“Inspection”* means an official examination or observation including but not limited to tests, surveys, and monitoring to determine compliance with rules, orders, requirements, and conditions of these rules.

*“Manufacturer’s recommendations”* means written guidelines established by a manufacturer and approved by the U.S. Food and Drug Administration for the installation and operation of the manufacturer’s equipment.

*“Operator”* means an individual designated to control operation of the tanning facility and to instruct and assist the consumer in the proper operation of the tanning devices.

*“Permit”* or *“permit to operate”* means a document issued by the department which authorizes a person to operate a tanning facility in Iowa.

“*Person*” means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision of this state, any other state or political subdivision or agency thereof, and any legal successor, representative, agent, or agency of the foregoing, but shall not include federal government agencies.

“*Phototherapy device*” means a piece of equipment that emits ultraviolet radiation and is used by a health care professional in the treatment of disease.

“*Tanning device*” means any equipment that emits electromagnetic radiation with wavelengths in air between 200 and 400 nanometers and that is used for tanning of human skin, such as sunlamps, tanning booths, or tanning beds. The terms also include any accompanying equipment such as protective eyewear, timers, and handrails.

“*Tanning facility*” means a place that provides access to tanning devices for compensation.

“*Ultraviolet radiation*” means electromagnetic radiation with wavelengths in air between 200 and 400 nanometers.

**641—46.3(136D) Exemptions.** The department may, upon application or upon its own initiative, grant exemptions from the requirements of these rules as long as it will not result in undue hazard to public health and safety. The following categories of devices are exempt from the provisions of this chapter:

**46.3(1) *Other purposes.*** Devices intended for purposes other than the deliberate exposure of human skin to ultraviolet radiation which produce or emit ultraviolet radiation incidental to their proper operation.

**46.3(2) *Personal use.*** Tanning devices which are limited exclusively to personal use by an individual and this individual’s immediate family. Multiple ownership of the device by persons for personal use only does not qualify it for the “personal use only” exemption.

**46.3(3) *Phototherapy devices.*** Phototherapy devices used by a properly trained health care professional in the treatment of disease.

**641—46.4(136D) Permits and fees.**

**46.4(1) *Permit to operate.*** No tanning facility shall be operated in the state without having a permit to operate issued by the department.

**46.4(2) *Application requirements for permit.*** Each person acquiring or establishing a tanning facility shall:

*a.* Apply for a permit prior to beginning operation. The application shall be completed on forms provided by the department or board of health and shall contain all information required by the form and accompanying instructions. A nonrefundable application fee of \$5 shall be remitted with the application.

*b.* A \$15 returned check fee will be charged for each check returned for insufficient funds.

*c.* The permit holder shall notify the department in writing within 30 days of any changes, additions, or deletions to the initial or renewal application as appropriate. This request does not apply to changes involving replacement of components in tanning equipment.

**46.4(3) *Expiration of permit.*** Except as provided in 46.4(4)“*b*,” each permit shall expire at the end of the specified day in the month and year stated therein.

**46.4(4) *Renewal of permit.***

a. Permits shall be renewed annually upon acceptance of a renewal application provided by the department and upon receipt of the renewal fee of \$5.

b. If application has been filed prior to the expiration date of the existing permit, the existing permit shall not expire until the application status has been finally determined by the department.

c. A \$25 fee will be charged per month for failure to pay annual permit fees starting the month of expiration of the facility's permit to operate. This fee is added to the annual fee not paid.

**46.4(5) *Transfer or termination of permit.***

a. No permit shall be transferable from one person to another or from one tanning facility to another.

b. A permit shall be returned to the department or board of health if the facility ceases business or otherwise ceases on a permanent basis or changes ownership.

**46.4(6) *Denial, revocation, or termination of permit.***

a. The department may deny, suspend or revoke a permit applied for or issued pursuant to this chapter for any of the following reasons:

(1) Submission of false statements in the application for a permit or in any statement of fact required by provisions of this chapter;

(2) Because of conditions revealed by the application or any report, record, inspection or other means which would warrant the department to refuse to grant a permit on an original application;

(3) Operation of the tanning facility in a manner that causes or threatens to cause hazard to the public health or safety;

(4) Failure to allow authorized representatives of the department or board of health to enter the tanning facility at reasonable times for the purpose of determining compliance with the provisions of this chapter, conditions of the permit or an order of the department or board of health;

(5) Failure to pay fees or costs required in rule 46.4(136D);

(6) Violation of any of the provisions of this chapter or of Iowa Code chapter 136D.

b. Except in cases where public health and safety require otherwise, prior to the institution of proceedings for suspension or revocation of a permit, the department or board of health shall:

(1) Call to the attention of the permit holder, in writing, the facts or conduct which may warrant such actions, and

(2) Provide opportunity for the permit holder to demonstrate or achieve compliance with all lawful requirements.

c. Any person aggrieved by a decision by the department to deny a permit or to suspend or revoke a permit after issuance may request a hearing under procedures established by the department.

**46.4(7) *Inspections.***

a. Inspections shall be conducted annually.

b. Inspection cost.

(1) An inspection cost of \$33 per tanning device shall be billed to the permit holder up to a maximum of \$330 per facility.

(2) Inspection costs shall be due upon receipt of payment due. When the tanning facility is located within a contracted area of a board of health, the costs billed will be paid to the contracted board of health or its designee.

(3) Inspection costs not received within 45 days of the date of billing will be assessed a \$25 penalty for each month or fraction thereof that the bill is delinquent.

c. Inspections shall include the following areas: proper operation and maintenance of devices, review of required records and training documentation, operator understanding and competency, and the requirements of these rules.

**641—46.5(136D) Construction and operation of tanning facilities.** Unless otherwise ordered or approved by the department, each tanning facility shall be constructed, operated, and maintained to meet the following minimum requirements:

**46.5(1)** A tanning facility shall provide and post the following warning signs and statements that describe the hazards associated with the use of tanning devices:

*a.* A warning sign in a conspicuous location readily visible to persons entering the establishment. This warning sign shall use 0.5-inch (12.7-millimeter) letters for “DANGER, ULTRAVIOLET RADIATION” and 0.25-inch (6.4-millimeter) letters for all other lettering. The sign shall use red lettering against a white background, be at least 9.0 inches by 12.0 inches (22.9 centimeters × 30.5 centimeters) and have the following wording:

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DANGER  
 ULTRAVIOLET RADIATION  
 — Overexposure can cause

- Eye and skin injury
- Allergic reaction

— Repeated exposure may cause

- Premature aging of the skin
- Skin cancer

— Failure to wear protective eyewear may result in

- Severe burns to eyes
- Long-term injury to eyes

— Medication or cosmetics may increase your sensitivity

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*b.* A warning sign with the identical wording set forth in 46.5(1) “*a*” posted within one meter of the tanning device in a conspicuous location readily visible to a person preparing to use the device. This warning sign shall use 0.5-inch (12.7-millimeter) letters for “DANGER, ULTRAVIOLET RADIATION” and 0.25-inch (6.4-millimeter) letters for all other lettering. The sign shall use red lettering against a white background and be at least 6 inches by 9 inches (15.2 centimeters × 22.9 centimeters) in size.

*c.* A tanning facility shall provide each consumer with a written warning statement prior to the consumer’s initial exposure which includes at least the following information:

(1) A representative list of potential photosensitizing drugs and agents. This list should at least include drugs or agents in the product classes of acne treatment, antibacterials, antibiotics, anticonvulsants, antidepressants, antidiabetics, antihypertensives, dye, estrogen and progesterones, melonogenics, perfumes and toilet articles, tranquilizers, antihistamines and antimicrobials/anti-infectious agents. A partial list of drugs and agents in these product classes is found in Appendices 1A, 1B, and 1C.

(2) Information regarding potential negative health effects related to ultraviolet exposure, including:

1. The increased risk of skin cancer later in life;
2. The increased risk of skin thickening and premature aging;
3. The possibility of burning or rashes, especially if using any of the potential photosensitizing drugs and agents. The consumer should consult a physician before using a tanning device if using medication, if there is a history of skin problems or if the consumer is especially sensitive to sunlight.

- (3) Basic information on how different skin types respond to tanning (see Appendix 2).
- (4) An explanation of the need to use eyewear.
- (5) The operator shall then request that the consumer sign a statement that the information has been read and understood.

**46.5(2) Federal certification.**

*a.* Only tanning devices manufactured and certified under the provisions of 21 CFR Part 1040.20, "Sunlamp products and ultraviolet lamps intended for use in sunlamp products," shall be used in tanning facilities. Compliance shall be based on the standard in effect at the time of manufacture as shown on the device identification label required by 21 CFR Parts 1010.2 and 1010.3.

*b.* Labeling shall meet the following requirements, be visible on each unit and be permanently affixed. Labeling shall include:

(1) A warning statement with the words "DANGER-Ultraviolet radiation. Follow instructions. Avoid overexposure. As with natural sunlight, overexposure can cause eye and skin injury and allergic reactions. Repeated exposure may cause premature aging of the skin and skin cancer. WEAR PROTECTIVE EYEWEAR; FAILURE TO MAY RESULT IN SEVERE BURNS OR LONG-TERM INJURY TO THE EYES. Medications or cosmetics may increase your sensitivity to the ultraviolet radiation. Consult a physician before using a sunlamp if you are using medications or have a history of skin problems or believe yourself especially sensitive to sunlight. If you do not tan in the sun, you are unlikely to tan from the use of this product."

(2) Recommended exposure position(s). Any exposure position may be expressed either in terms of a distance specified both in meters and in feet (or in inches) or through the use of markings or other means to indicate clearly the recommended exposure position.

(3) Directions for achieving the recommended exposure position(s) and a warning that the use of other positions may result in overexposure.

(4) A recommended exposure schedule including duration and spacing of sequential exposures and maximum exposure time(s) in minutes.

(5) A statement of the time it may take before the expected results appear.

(6) Designation of the ultraviolet lamp type to be used in the product.

**46.5(3) Tanning device timers.**

*a.* Each tanning device shall have a timer which complies with the requirements of 21 CFR Part 1040.20. The maximum timer interval shall not exceed the manufacturer's maximum recommended exposure time by a factor greater than  $\pm 10$  percent of the indicated setting.

*b.* Each tanning device must have a method of remote timing located so that consumers may not control their own exposure time.

*c.* Tokens for token timers shall not be issued to any consumer in quantities greater than the device manufacturer's maximum recommended exposure time for the consumer.

**46.5(4)** Each tanning device shall incorporate a control on the product to enable the consumer to manually terminate the radiation emission from the product at any time without disconnecting the electrical source or removing the ultraviolet lamp.

**46.5(5)** The operator shall ensure that the facility's interior temperature does not exceed 100 degrees F or 38 degrees C.

**46.5(6) Condition of tanning devices.**

*a.* There shall be physical barriers to protect consumers from injury induced by falling against or breaking the lamps.

*b.* The tanning devices shall be maintained in good repair and comply with all state and local electrical code requirements.

**46.5(7)** Additional requirements for stand-up booths.

- a. There shall be physical barriers (e.g., handrails) or other means (floor markings) to indicate the proper exposure distance between ultraviolet lamps and the consumer's skin.
- b. The construction of the booth shall be such that it will withstand the stress of use and the impact of a falling person.
- c. Access to the booth shall be of rigid construction; doors shall open outwardly. Handrails and nonslip floors shall be provided.

**46.5(8)** Protective eyewear.

- a. Eyewear shall not be reused by another consumer.
- b. Protective eyewear shall meet the requirements of 21 CFR Part 1040.20(c)(4).
- c. Protective eyewear shall not be altered in any manner that would change its use as intended by the manufacturer (e.g., removal of straps).
- d. A tanning facility operator shall not allow a consumer to use a tanning device if that consumer does not use the protective eyewear required by this subrule.

**46.5(9)** Operation.

a. A trained operator must be present when a tanning device is operated. The operator must be within hearing distance to allow the consumer to easily summon help if necessary. If the operator is not in the immediate vicinity during use, the following conditions must be met:

(1) The consumer can summon help through use of an audible device such as an intercom or buzzer; and

(2) The operator can reach the consumer within 30 seconds after being summoned.

b. The facility permit to operate shall be displayed in an open public area of the tanning facility.

c. A record shall be kept by the facility operator of each consumer's total number of tanning visits and tanning times, exposure lengths in minutes, times and dates of the exposure, and any injuries or illness resulting from the use of a tanning device.

d. A written report of any tanning injury shall be forwarded by the permit holder to the department within five working days of its occurrence or knowledge thereof. The report shall include:

(1) The name of the affected individual;

(2) The name and location of the tanning facility involved;

(3) The nature of the injury;

(4) The name and address of the health care provider treating the affected individual, if any; and

(5) Any other information considered relevant to the situation.

e. Defective or burned-out lamps or filters shall be replaced with a type intended for use in that device as specified on the product label on the tanning device or with lamps or filters that are "equivalent" under 21 CFR Part 1040, Section 1040.20, and policies applicable at the time of lamp manufacture.

f. The permit holder shall replace ultraviolet lamps and bulbs, which are not otherwise defective or damaged, at such frequency or after such duration of use as may be recommended by the manufacturer of such lamps or bulbs.

g. Contact surfaces of tanning devices shall be cleansed by the operator with a cleansing agent between each use or the contact surfaces may be covered by a nonreusable protective material during each use.

h. Any records or documentation required by this chapter must be maintained in the tanning facility for a minimum of two years. Records maintained on computer systems shall be regularly copied, at least monthly, and updated on storage media other than the hard drive of the computer. An electronic record must be retrievable as a printed copy.

*i.* The operator shall limit the exposure of the consumer to the maximum exposure frequency and session duration recommended by the manufacturer.

*j.* When a tanning device is being used, no other person shall be allowed to remain in the tanning device area unless protective eyewear is worn.

**46.5(10) Training of operators.**

*a.* No individual shall begin functioning as an operator unless the individual has satisfactorily completed a training program. Training shall include but not be limited to:

- (1) The requirements of this chapter;
- (2) Procedures for correct operation of the tanning facility and tanning devices;
- (3) The determination of skin type of consumers and appropriate determination of duration of exposure to tanning devices;
- (4) Recognition of reaction or overexposure;
- (5) Manufacturer's procedures for operation and maintenance of tanning devices;

*b.* Owners and managers must complete formal training approved by the department. All owners and managers trained after December 31, 1997, must satisfactorily pass a certification examination approved by the department before operating a tanning facility or training employees.

*c.* For operators trained after December 31, 1997. Owners and managers are responsible to train operators in the above topics and to provide review as necessary. Training programs shall be approved by the department and include final testing. Operators shall be questioned during inspections as to the level of their understanding and competency in operating the tanning device.

*d.* Proof of training for both owner/managers and employees must be maintained in the tanning facility and available for inspection. For operators trained after December 31, 1997, the employee record shall be the original test which bears the signature of the employee, the date, and a statement signifying that all answers have been completed by the employee and without prior knowledge of the scoring key.

**46.5(11) Promotional materials.** A tanning facility shall not claim, or distribute promotional materials that claim, that using a tanning device is safe or free from risk or that the use of the device will result in medical or health benefits. The only claim that may be made is that the device is for cosmetic use only.

**641—46.6(136D) Inspections, violations and injunctions.**

**46.6(1)** The director or an authorized agent shall have access at all reasonable times to any tanning facility to inspect the facility to determine if this chapter is being violated.

**46.6(2)** A person who operates or uses a tanning device or tanning facility in violation of this chapter or of any rule adopted pursuant to this chapter is guilty of a simple misdemeanor.

**46.6(3)** If the director finds that a person has violated, or is violating or threatening to violate, this chapter and that the violation creates an immediate threat to the health and safety of the public, the director may petition the district court for a temporary restraining order to restrain the violation or threat of violation.

**46.6(4)** On application for injunctive relief and a finding that a person is violating or threatening to violate this chapter, the district court shall grant any injunctive relief warranted by the facts.

**46.6(5) Enforcement.**

*a.* The department shall take the following steps or use county ordinances or any other applicable ordinances, resolutions, rules or regulations when enforcement of these rules is necessary.

- (1) Cite each section of the Iowa Code or rules violated.
- (2) Specify the manner in which the owner or operator failed to comply.

- (3) Specify the steps required for correcting the violation.
- (4) Request a corrective action plan, including a time schedule for completion of the plan.
- (5) Set a reasonable time limit, not to exceed 30 days from the receipt of the notice, within which the permit holder must respond.

*b.* The department shall review the corrective action plan and approve it or require that it be modified.

*c.* In cases where the permit holder fails to comply with conditions of the written notice, the department shall send a regulatory letter, via certified mail, advising the permit holder that unless action is taken within five days of receipt, the case shall be turned over to the city/county attorney for court action.

These rules are intended to implement Iowa Code chapter 136D.



Appendix 1A  
PHOTOSENSITIZERS

Acetohexamide (Dymelor)	Dicyanine-A
Acridine preparations (slight)	Diethylstilbestrol
Agave lechuguilla (amaryllis)	Digalloyl trioleate (sunscreen)
Agrimony	Dill
9-Aminoacridine	Estrone
Aminobenzoic acid	5-Fluorouracil
Amitriptyline (Elavil, etc.)	Glyceryl p-aminobenzoate (sunscreen)
Anesthetics (procaine group)	Gold salts
Angelica	Grass (meadow)
Anthracene	Griseofulvin (Fulvicin)
Antimalarials	Hematoporphyrin
Arsenicals	Hexachlorophene (rare)
Barbiturates	Hydrochlorothiazide (Esidrix, HydroDiuril)
Bavachin (corylifolia)	Imipramine HCl (Tofranil)
Benzene	Isothipencyl (Theruhistin)
Benzopyrene	Isothipendyl (Theruhistin)
Bergamot (perfume)	Lady's thumb (tea)
Bithionol (actamer, Lorotheidol)	Lantinin
Blankophores (sulfa derivatives)	Lavender oil
Buclosamide (Jadit)	Lime oil
Bromchlorosalicylanilide	Methyclothiazide (Enduron)
4-Butyl-4-chlorosalicylanilide	Mepazine (Pacatal)
Carbamazepine (Tegretol)	9-Mercaptopurine
Carbinoxamine d-form (Twiston R-A)	Methotrimeprazine (Levoprome)
Carbutamide (Nadisan)	Methoxsalen (Meloxine, Oxsoralen)
Carrots, wild	5-Methoxypsoralen
Cedar oil	8-Methoxypsoralen
Celery	Monoglycerol para-aminobenzoate
Chlorophyll	Mustards
Chlorothiazide (Diuril)	Nalidixic acid (NegGram)
Chlorpromazine (Thorazine)	Naphthalene
Chlorpropamide (Diabinese)	Nortriptyline (Aventyl)
Chlortetracycline (Aureomycin)	Oxytetracycline (Terramycin)
Citron oil	Para-dimethylaminoazobenzene
Citrus fruits	Paraphenylenediamine
Clover	Parsley
Coal tar	Parsnips
Contraceptives, oral	Penicillin derivates (Griseofulvin)
Demeclocycline (Declomycin, demethylchlortetracycline)	Peroline
Desipramine (Norpramin, Perofrane)	Perphenazine (Trilafon)
Dibenzopyran derivatives	Phenanthrene
	Phenazine dyes

Phenolic compounds	Sulfamerazine
Phenothiazines (dyes [methylene blue, toluidine blue], etc.)	Sulfamethazine
Phenoxazines	Sulfapyridine
Phenylbutazone (Butazolidin)	Sulfathiazole
Phenytoin (Dilantin)	Sulfisomidine (Elkosin)
Pitch and pitch fumes	Sulfonamides
Porphyrins	Sulfonylureas (antidiabetics)
Promazine hydrochloride (Sparine)	Tetrachlorosalicylanilide (TCSA)
Protriptylene (Vivactil)	Tetracyclines
Promethazine hydrochloride (Phenergan)	Thiazides (Diuril, HydroDiuril, etc.)
Psoralens (perfume)	Thiophene
Pyrathiazine hydrochloride (Pyrrolazote)	Thiopropazate dihydrochloride (Dartal)
Pyridine	Tolbutamide (Orinase)
Quinethazone (Hydromax)	Toluene
Quinine	Tribromosalicylanilide (TBS) deodorant soaps
Rose Bengal perfume (slight)	Trichlormethiazide (Metahydrin)
Rue	Tridione
Salicylanilides	Triethylenemelamine (TEM)
Salicylates	Triflupromazine hydrochloride (Vesprin)
Sandalwood oil (perfume)	Trimeprazine tartrate (Tamaril)
Silver salts	Trimethadione (Tridione)
Smartweed (tea)	Tripyrathiazine
Stilbamidine isethionate	Trypaflavine
Sulfacetamide	Trypan blue
Sulfadiazine	Vanillin oils
Sulfadimethoxine	Water ash
Sulfaguanidine	Xylene
Sulfanilamide (slight)	Yarrow

Note: This was the most complete list available for compilation prior to January 1991.

Appendix 1B  
POTENTIAL PHOTSENSITIZING AGENTS

The following table lists agents that may increase sensitivity to ultraviolet light resulting in a phototoxic or photoallergic response:

PRODUCT CLASS	GENERIC OR CHEMICAL NAME
Acne Treatment	Retinoic acid (tretinoin), Retin-A
Antibacterials	sulfonamides (sulfamethoxazole, sulfisoxazole, trisulfapyrimidines), nalidixic acid, trimethoprim and sulfamethoxazole, halogenated salicylanilides, halogenated carbanilides, halogenated phenols-(antibacterials in deodorant bar soaps, antiseptics, cosmetics)
Antibiotics	tetracycline and tetracycline derivatives; chlortetracycline, demeclocycline, doxycycline, methacycline, minocycline, oxytetracycline
Anticonvulsants	carbamazepine, trimethadione
Antidepressants	amitriptyline, desipramine, doxepin, imipramine, nortriptyline, protriptyline
Antidiabetic (glucose-lowering agents)	sulfonylureas (acetohexamide, chlorpropamide, tolazamide, tolbutamide)
Antihistamines	diphenhydramine, promethazine, triprolidine, chlorpheniramine
Antimicrobials/ Anti-infective agents	griseofulvin
Antipsoriatics (also in cosmetics)	coal tars and coal-tar derivatives, wood tars, and petroleum products
Diuretics (and antihypertensives)	chlorthalidone, furosemide, thiazides and combinations
Dyes	acridine, anthracene, cosin (lipstick), erythrosin, fluorescein, methyl violet, methylene blue
Estrogens and Progesterones	mestranol and norethynodrel, diethylstilbestrol
Melanogenics (and in cosmetics)	furocoumarins (5-methoxypsoralen, 8-methoxypsoralen, 4,5,8-trimethyl-psoralen)
Perfumes and Toilet Articles (essential oils in cosmetics)	containing ethereal oils, sandalwood
Tranquilizers	chlorprothixene, doxepin, haloperidol, loxapine, thiothixene phenothiazines: acetophenazine, chlorpromazine, fluphenazine, perphenazine, prochlorperazine, thioridazine, trifluoperazine, triflupromazine

## Appendix 1C

## AGENTS THAT MAY CAUSE PHOTSENSITIVITY REACTIONS TO UVA

## Antimicrobials/Antifungals

- Sulfonamides
- Nalidixic
- Griseofulvin
- Tetracyclines
- Soaps and deodorants  
with antibacterial agents

## Phenothiazines/Anticonvulsants

- Chlorpromazine
- Thioridazine
- Promethazine
- Carbamazepine

## Diuretics

- Thiazides
- Furosemide
- Chlorthalidone

## Dyes

- Cosmetic ingredients
- Occupational exposure

## Fragrances

- Oil of Bergamot
- Ethereal oils
- Lemon
- Lime
- Sandalwood oil

## Oral Hypoglycemic Agents

- Sulfonylureas

## Antihistamines

- Diphenhydramine
- Chlorpheniramine

## Furocoumarins

- Psoralen
- 5-Methoxypsoralen
- 8-Methoxypsoralen

## Non-steroidal Anti-inflammatory Drugs

- Piroxicam

## Appendix 2

## SUN-REACTIVE SKIN TYPES USED IN CLINICAL PRACTICE

SKIN TYPE	SKIN REACTIONS TO SOLAR RADIATION <sup>(a)</sup>	EXAMPLES
I	Always burns easily and severely (painful burn). Tans little or none and peels.	<sup>(b)</sup> People most often with fair skin, blue eyes, freckles. Unexposed skin is white.
II	Usually burns easily and severely (painful burn). Tans minimally or lightly, also peels.	<sup>(b)</sup> People most often with fair skin; red or blonde hair; blue, hazel or even brown eyes. Unexposed skin is white.
III	Burns moderately and tans about average.	Normal average Caucasoid. Unexposed skin is white.
IV	Burns minimally, tans easily, and above average with each exposure. Exhibits IPD (immediate pigment darkening) reaction.	People with white or light brown skin, dark skin, dark brown hair, dark eyes (e.g., Mediterraneans, Orientals, Hispanics, etc.). Unexposed skin is white or light brown.
V	Rarely burns, tans easily and substantially. Always exhibits IPD reaction.	Brown-skinned persons (e.g., Amerindians, East Indians, Hispanics, etc.). Unexposed skin is brown.
VI	Never burns and tans profusely; exhibits IPD reaction.	Blacks (e.g., African and American Blacks, Australian and South Indian Aborigines); unexposed skin is black.

(a) Based in the first 45-60 minutes (=2-3 minimum erythema dose) exposure of the summer sun (early June) at sea level

(b) They may be of Celtic background (Irish or Scottish); others may even have dark hair or brown eyes

These rules are intended to implement Iowa Code chapters 136B, 136C, and 136D.  
 [Filed 1/14/91, Notice 10/17/90—published 2/6/91, effective 3/13/91]  
 [Filed 9/14/92, Notice 8/5/92—published 9/30/92, effective 11/4/92]  
 [Filed 1/11/96, Notice 10/11/95—published 1/31/96, effective 3/6/96]  
 [Filed 9/16/96, Notice 7/17/96—published 10/9/96, effective 11/16/96]  
 [Filed 2/26/98, Notice 9/10/97—published 3/25/98, effective 4/29/98]  
 [Filed 4/2/99, Notice 1/13/99—published 4/21/99, effective 7/1/99]