CITY OF GROSSE POINTE WOODS
20025 Mack Plaza
Zoning Board of Appeal Meeting Agenda
Monday, November 15, 2010
7:35 p.m.

1. CALL TO ORDER
2. ROLL CALL
3. ACCEPTANCE OF AGENDA

4. PUBLIC HEARING
   A. Use Variance: Pointe Neurology - Dr. Haranath Policherla, 20160 Mack
      1. Letter 10/14/10 – Wilson & Cain PA
      2. Application to the ZBA
      3. Mortgage Report 04/08/1992
      4. Letter 11/09/10 w/attachment – City Attorney
      5. Memo 10/28/10 – Building Official
      6. Plan Review and Permit Application 11/01/09
      7. Letter 03/11/10 – Pointe Neurology
      8. Memo 08/25/10 – Building Official
      9. Letter 09/08/10 – Building Official/Property-Electrical Inspector
      10. Memo 10/26/10 – Fire Inspector/Investigator
      11. Memo 10/30/10 – Fire Inspector/Investigator
      12. Memo 10/26/10 – Director of Public Works
      13. Affidavit of Legal Publication 10/28/10
      14. Affidavit of Property Owners Notified 10/28/10
      15. Aerial View

5. IMMEDIATE CERTIFICATION OF MINUTES

6. ADJOURNMENT

Lisa Kay Hathaway, MMC
City Clerk

IN ACCORDANCE WITH PUBLIC ACT 267 (OPEN MEETINGS ACT)
POSTED AND COPIES GIVEN TO NEWSPAPERS

The City of Grosse Pointe Woods will provide necessary, reasonable auxiliary aids and services, such as signers for the hearing impaired, or audio tapes of printed materials being considered at the meeting to individuals with disabilities. All such requests must be made at least five days prior to a meeting. Individuals with disabilities requiring auxiliary aids or services should contact the City of Grosse Pointe Woods by writing or call the City Clerk's office, 20025 Mack Plaza, Grosse Pointe Woods, MI 48236 (313) 343-2440 or Telecommunications Device for the Deaf (TDD) 313 343-9249.

WILSON & CAIN, P.A.

Counsellors at Law
18404 Mack Avenue
Grosse Pointe Farms, Michigan 48236

GARY M. WILSON
Also admitted in Massachusetts
RANDALL D. CAIN

313-886-5600
facsimile
313-886-5604

4A

October 14, 2010

City Clerk
City of Grosse Pointe Woods
20025 Mack Plaza
Grosse Pointe Woods, MI 48236

Re: ***Pointe Neurology, P.C.***
Application to the Zoning Board of Appeals

Dear Sir/Madam:

Please find enclosed an Application to the Zoning Board of Appeals on behalf of my client, Pointe Neurology, P.C. and Dr. Haranath Policherla along with the required $75.00 application fee. Based on the 14 day filing rule, I believe the next available meeting of the Zoning Board of Appeals will be November 1, 2010.

Thank you for your anticipated cooperation. If you should have any questions, please feel free to contact me.

Very truly yours,

WILSON & CAIN, P.A.

Gary M. Wilson

GMW/jab
Enclosures

PLEASE TYPE or PRINT NEATLY

CITY OF GROSSE POINTE WOODS
20025 MACK PLAZA
GROSSE POINTE WOODS MI 48236
(313) 343-2440 – CITY CLERK
FAX (313) 343-2785
(313) 343-2426 – BUILDING DEPARTMENT
FAX (313) 343-2439

APPLICATION TO THE ZONING BOARD OF APPEALS

1. **Address of the Property** 20160 MACK AVE.
(Number and Street)

TO THE ZONING BOARD OF APPEALS

I (We) POINTE NEUROLOGY P.C. 313-882-0737
Name (Please Print) Phone No. (Daytime)

20160 MACK AVE. GROSSE POINTE WOODS, MI. 48236
Address City State Zip

Hereby appeal to the Zoning Board of Appeals for a variance to:

SECTION 50-448 (2) THIS SECTION DOESN'T ALLOW "ANY TYPE OF MEDICAL FACILITY PERMITTING OVERNIGHT PATIENTS"

2. **DESCRIPTION OF CASE** *(Fill out only items that apply)*

   a. **Present zoning classification of the property** RO-1

   b. **Description of property**

      (1) **Size and Area of Lot** SEE SITE PLAN

      (2) **Is the lot a corner or interior lot** CORNER LOT

VIOLATION OF 50-448(2) GT 10/15/10 SEE LETTER DATED 9/28/10

Payment Validation

*NOTE: When answering questions pertaining to use and non-use variances, additional paper may be used if necessary.

PLEASE TYPE or PRINT NEATLY

c. Description of EXISTING structures

(1) Total square footage of accessory building now on premises 0; of main buildings +/- 6,029 SF
(2) Uses of building on premises MEDICAL CLINIC
(3) Percentage of lot coverage of all buildings on ground level _____%

d. Description of PROPOSED structures

(1) Height of proposed structure _____

N/A

(2) Height and area of existing structure _____

(3) Dimensions and area of structure or addition to be constructed _____

(4) Percentage of lot coverage of all buildings including proposed _____%

e. Yard setbacks after completion of addition/structure

N/A

(1) Front Yard (measured from lot line) _____
(2) Side Yard (measured from lot line) _____
(3) Rear Yard (measured from lot line) _____

N/A

f. A sketch drawn to scale depicting the above information shall Be included herewith.

3. TYPE OF VARIANCE REQUEST: NON-USE – Common regulations subject to non-use variance requests: setbacks, height or parking regulations, lot coverage, bulk or landscaping restrictions. Uniqueness: odd shape, small size, wetland, creek, natural features, big trees or slopes.

N/A

A finding of practical difficulty, based on competent, material, and substantial evidence on the record, shall require the petitioner to demonstrate that all of the following conditions are met *(please answer all reasons)*:

a) That the ordinance restrictions unreasonably prevent the petitioner from using the property for a permitted purpose.

_____

_____

_____

*NOTE: When answering questions pertaining to use and non-use variances, additional paper may be used if necessary.

PLEASE TYPE or PRINT NEATLY

N/A

b) That a variance would do substantial justice to the petitioner as well as to other property owners in the zoning district, and a lesser relaxation than that requested would not give substantial relief to them or be more consistent with justice to other others. (i.e., Are there other more reasonable alternatives?)

c) That the plight of the petitioner is due to unique circumstances of the property.

d) That the alleged hardship has not been self-created or created by any person presently having an interest in the property.

e) That the spirit of the Grosse Pointe Woods Ordinance will be observed, public safety secured, and substantial justice done.

*NOTE: When answering questions pertaining to use and non-use variances, additional paper may be used if necessary.

PLEASE TYPE or PRINT NEATLY

4. **TYPE OF VARIANCE REQUEST: USE – A use variance permits a use of land that is otherwise not allowed in that zoning district. The applicant must present evidence to show that if the zoning ordinance is applied strictly, an unnecessary hardship to the applicant will result, and that all of the following requirements are met (*please answer all reasons*):**

a) **That the property cannot reasonably be used in a manner consistent with existing zoning.**

DR. POLICHERLA IS SEEKING ACCREDITATION FOR A SLEEP LAB BY THE AMERICAN ACADEMY OF SLEEP MEDICINE. IN ORDER TO BE ACCREDITED, IT IS NECESSARY THAT THERE BE A SLEEP ROOM TO STUDY SLEEP DISORDERS.

b) **That the plight of the petitioner is due to unique circumstances peculiar to the property and not to general neighborhood conditions.**

DR. POLICHERLA IS BOARD CERTIFIED IN NEUROLOGY AND SLEEP MEDICINE, THUS THE PRESENT ORDINANCE IS UNIQUE TO HIS PRACTICE. THE AMERICAN ACADEMY OF SLEEP MEDICINE DOES NOT HAVE AN ACCREDITED SLEEP LAB IN GROSSE POINTE WOODS.

c) **That the use requested by the variance would not alter the essential character of the area and locality.**

BY PERMITTING THIS CLINIC TO HAVE A SLEEP STUDY PROGRAM, WILL HAVE NO ADVERSE AFFECT UPON THE ADJACENT NEIGHBORS OR THE COMMUNITY AT LARGE. THE PROPOSED WORK TO BE DONE IS ALL INTERIOR, WITH NO EXTERIOR WORK.

d) **That the alleged hardship is not self-created or created by any person presently having an interest in the property.**

THE HARDSHIP IS NOT SELF-CREATED BY THE DOCTOR OR ANYONE HAVING AN INTEREST IN THE PROPERTY.

*NOTE: When answering questions pertaining to use and non-use variances, additional paper may be used if necessary.

PLEASE TYPE or PRINT NEATLY

e) That the spirit of the Grosse Pointe Woods Ordinance will be observed, public safety and welfare secured, and substantial justice done.
THE SPIRIT OF THE ORDINANCE WILL BE OBSERVED, PUBLIC SAFETY AND WELFARE WILL REMAIN SECURE AN SUBSTANTIAL JUSTICE WILL BE DONE IF THE VARIANCE IS GRANTED,

5. Interpretation of the Zoning Ordinance is requested because:

THE CURRENT ORDINANCE DOES NOT ALLOW FOR "OVERNIGHT PATIENTS"

6. Article and Section of the Zoning Ordinance that is being appealed:

SECTION 50-448 (2)

I hereby depose and say that all the above statements and the statements contained in the papers submitted herewith are true and correct.

Signature of Petitioner

Signature of Applicant

Subscribed and sworn to before me this 14th day of October 2010

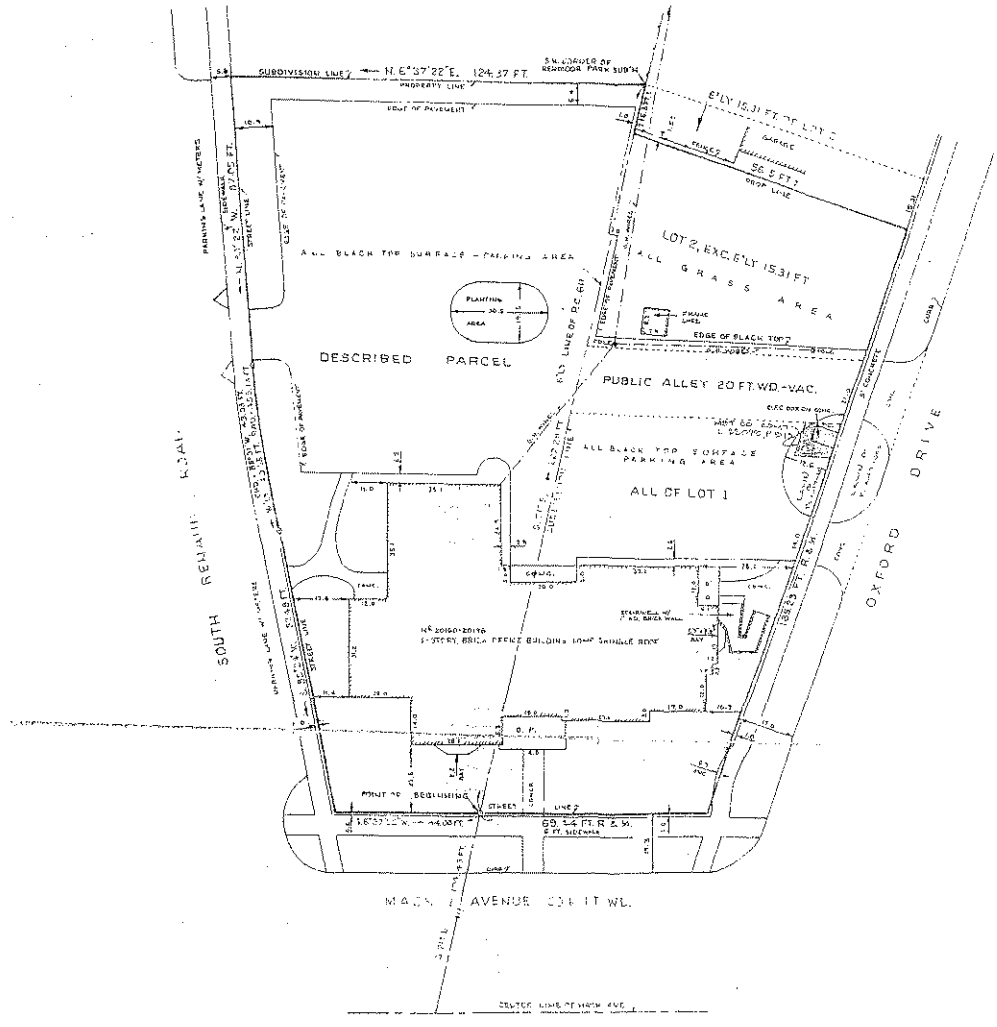
JULIE ANN BLOCK
NOTARY PUBLIC, STATE OF MI
COUNTY OF MACOMB
MY COMMISSION EXPIRES Jun 22, 2011
ACTING IN COUNTY OF WAYNE

Julie Ann Block
Notary Public
Macomb County, Acting in Wayne
My Commission expires 6/22/2011

NOTE: The Zoning Board of Appeals (ZBA) may consider evidence from a variety of sources in making its determination. The Zoning Board of Appeals meets the first and third Monday of each month at 7:30 PM. The application must be filed with the City Clerk with a fee in the amount of $75 a minimum of 14 days prior to council hearing.

150

*NOTE: When answering questions pertaining to use and non-use variances, additional paper may be used if necessary.



Property located in the City of Grosse Pointe Woods, Wayne County, Michigan. All of Lot 1 & Lot 2, excepting therefrom the land 15.31 feet in Arthur J. Scully's Easternmost Park, being a subdivision of part of Private Claim 240, Village of Lochmoor, according to the plat thereof recorded in Liber 63, Page 42 of Plats. Subject to restrictions and to easements of record, if any. Also all that part of P.C. 611, Village of Grosse Pointe Woods, bounded and described as follows: Beginning at a point at the intersection of the East line of Mack Avenue, as widened, and the South line of said P.C. 611, said point being S.71° E. a distance of 104.43 feet from the middle line of Mack Avenue; thence along said South line of P.C. 611, S.71° E. a distance of 227.28 feet to the Southeast corner of Beamon Park Subdivision; thence along the West line of said subdivision N.6°37'22"E. a distance of 124.37 feet to the South line of Remond Road; thence along Remond Road N.86°22'W. a distance of 87.05 feet; thence turning to the left on a curve having a radius of 468.14 feet westerly, 49.95 feet (chord bears S.86°31'W. a distance of 49.93 feet); thence S.85°24'W. a distance of 87.48 feet to the East side of Mack Avenue; thence along Mack Avenue S.6°37'32"E. a distance of 44.00 feet to the place of beginning.

WE HEREBY CERTIFY that we have theodolited the property hereon described according to the legal description furnished by the client and assume no liability for the accuracy of said description; and that the buildings and improvements are entirely within said property and do not encroach on adjoining lands and that adjacent building(s) or improvements do not encroach on said described property, unless otherwise shown. This report is for mortgage purposes only and is not intended to represent a property line survey; no property corners have been set by us. Dimensions on this plan are not to be used for building or structures or fences.

CERTIFIED TO: MANUFACTURERS BANK, N.A.
AND PROPERTIES INC.
American Title Ins. Co., Ulico Mater Title Co., Chicago Title Ins. Co., Commonwealth Title Ins. Co., First American Title Ins. Co., First Title Corporation, Grand Lakes Title, Philip F. Cross Title Co., Lawyers Title Ins. Corp., Metropolitan Title Co., Midwest Title Co., Midwest Title Agency, Philip A. Seaver Title Co., Titan Title Ins. Co., Transamerica Title Ins. Co.

William J. Carlson
BY: WILLIAM J. CARLSON
PROF. ENGR. & REG. LAND SURVEYOR

REV: ADD LAND OWNER 5-15-92

Owner: REAL PROPERTIES, INC.

MORTGAGE REPORT

BROWN AND CARLSON, INC.
Civil Engineers & Land Surveyors
One John R. Park
Detroit, Michigan 48226
(313) 961-3411

SCALE: 1 IN. = 20 FT.
DATE: APR. 8, 1992
JOB NO. M-920215-A

SHEET 1 OF 1 SHEETS

CHARLES T. BERSCHBACK
ATTORNEY AT LAW
24053 EAST JEFFERSON AVENUE
ST. CLAIR SHORES, MICHIGAN 48080-1530
(586) 777-0400
FAX (586) 777-0430
blbwlaw@yahoo.com

CHARLES T. BERSCHBACK

DON R. BERSCHBACK
OF COUNSEL

November 9, 2010

Honorable Mayor and Council
City of Grosse Pointe Woods
20025 Mack Plaza
Grosse Pointe Woods, MI 48236

RE. Pointe Neurology/ZBA Agenda 11.15.10

Dear Mayor and Council:

I have reviewed Mr. Tutag's Memo dated October 28, 2010 and have the following general comments regarding this agenda item:

1. I have attached a copy of Section 50-149 to provide you with the complete ordinance standards for reviewing this use variance request. Granting the request would require that the petitioner demonstrate that all five conditions referenced in Section 50-149(b)(1)-(5) have been met.

2. Since this is a use variance, five affirmative votes are required to grant the variance regardless of the number of members in attendance at the meeting. See Section 50-145(a) requiring a two thirds majority of the members of the Board.

3. Any motion to either grant or deny the request should include findings of fact supporting the reasons for the motion. The Board may consider evidence from a variety of sources in making its determination, including Mr. Tutag's memo, other agenda items placed on file, information obtained from the Petitioner or Administration, and information obtained during the course of the public hearing.

Should you have any questions, please call.

Very truly yours,

Chip Berschback

CHIP BERSCHBACK

CTB:nmg
Enclosures
cc: Skip Fincham
Gene Tutag

signed, erected and landscaped to conform harmoniously with the general architecture and plan of such district.

(7) Permit the erection of a building to its full height or use, as originally planned, when foundations and structural members are designed to carry such buildings higher.

(8) Permit a partial or complete exception to the loading space provisions of section 50-529 where, after investigation by the board, it is found that the volume of vehicular service will not require compliance with such provisions and will not cause undue interference with the public use of the streets or alleys or imperil the public safety, and where such modification or exception will not be inconsistent with the purpose and spirit of this chapter.

(9) Permit a variation or modification in the required location of off-street parking facilities or in the amount of off-street parking facilities required, or both, if after investigation by the board it is found that such variation is necessary to secure an appropriate development of a specific parcel of land which has such peculiar or exceptional geographical conditions, or is of such size, shape or dimension, that it cannot be reasonably developed in accordance with the provisions of section 50-530, and that any variation will not be inconsistent with the spirit and purpose of this chapter, with public safety and with substantial justice.

(10) Permit a variation, modification or exception in the required regulations specified in article V of this chapter if after investigation by the board it is found that such variation, modification or exception is necessary because of peculiar existing conditions and that such variation, modification or exception will not be inconsistent with the purpose and spirit of this chapter.

(11) Permit additional garage space for buildings having ten rooms or more when evidence is presented proving need for the additional space.

(12) Permit open parking lots in R-1 and R-2 districts for the periodic storage of self-propelled passenger vehicles for periods less than one day, when the space used for parking is adjacent to business and further complies with article V of this chapter and such use is not injurious to the surrounding neighborhood and not contrary to the spirit and purpose of this chapter.

(13) The board of appeals may, in specific cases and subject to appropriate conditions and safeguards, determine and vary the application of the regulations established in this chapter upon written application when unnecessary hardship or practical difficulty is found by a majority of the board of appeals, as defined in section 50-149.

(14) Permit a variation and modification of front and rear yard minimum requirements where the plat of any subdivision provides for lots of 100 feet or less in depth and where the architectural design and layout of the building structures require such variation and modification to preserve the architectural appointments, design and development of the subdivision, provided that the area of the lot shall be not less than 6,000 square feet and that the area of the dwelling and accessory buildings shall not exceed 25 percent of the lot area. Before any building permit is issued the planning commission shall approve the plot plan therefor or shall have approved a general plan of the subdivision development and building locations thereon.

(Code 1975, § 5-14-8; Code 1997, § 98-408; Ord. No. 695, § 1, 2-12-1996; Ord. No. 829, 7-6-2009)

Sec. 50-149. Variance standards.

(a) *Dimensional or nonuse variances.* The zoning board of appeals may grant a dimensional or nonuse variance only upon a finding that compliance with the restrictions governing area, setbacks, frontage, height, bulk, density, or other dimensional provisions would create a practical difficulty. A finding of practical difficulty, based on

competent, material, and substantial evidence on the record, shall require the petitioner to demonstrate that all of the following conditions are met:

(1) That strict compliance with the restrictions governing area, setbacks, frontage, height, bulk, density, and other similar items would unreasonably prevent the petitioner from using the property for a permitted purpose or would render conformity with said restrictions unnecessarily burdensome.

(2) That a variance would do substantial justice to the petitioner as well as to other petitioners in the zoning district; or whether a lesser relaxation of the restrictions would give substantial relief to the petitioner and be more consistent with justice to others (i.e., are there other more reasonable alternatives);

(3) That the plight of the petitioner is due to unique circumstances of the property;

(4) That the petitioner's problem is not self-created.

(5) That the spirit of this chapter will be observed, public safety and welfare secured, and substantial justice done.

(b) *Use variances.* The zoning board of appeals may grant a use variance only upon a finding that there is an unnecessary hardship in the way of carrying out the requirements of this chapter. A finding of unnecessary hardship, based on competent, material, and substantial evidence on the record, shall require the petitioner to demonstrate that all of the following conditions are met:

(1) The property cannot reasonably be used in a manner consistent with existing zoning;

(2) That the plight of the petitioner is due to unique circumstances peculiar to the property and not to general neighborhood conditions;

(3) That the use to be authorized by the variance will not alter the essential character of the area and locality;

(4) That the problem is not self-created;

(5) That the spirit of this chapter will be observed, public safety and welfare secured, and substantial justice done.

(c) The zoning board of appeals may consider evidence from a variety of sources in making its determination.
(Ord. No. 829, 7-6-2009)

Secs. 50-150—50-179. Reserved.

ARTICLE III. DISTRICT REGULATIONS

DIVISION 1. GENERALLY

Sec. 50-180. Districts enumerated.

For the purpose of this chapter, the city is hereby divided into the following districts:

R-1	(A through E) One-Family Residential Districts
R-2	Two-Family Residential District
R-3	Planned Multiple-Family Residential Development District
R-4	High Density Multiple Dwelling District
C.F.	Community Facilities District
C	Commercial Business District
C-2	High Intensity City Center District
RO-1	Restricted Office District
P-1	Vehicular Parking District

(Code 1975, § 5-2-1; Code 1997, § 98-51)

Sec. 50-181. Boundaries of districts established.

The boundaries of the districts enumerated in section 50-180, shown upon the map attached to the ordinance from which this chapter is derived, as revised, and on file in the office of the city clerk, and made a part of this chapter, are hereby established, such map being designated as the zoning map, and such map and all notations, references and other information shown thereon shall be as much a part of this chapter as if the matter and information set forth by the map were all fully described in this chapter.
(Code 1975, § 5-2-2; Code 1997, § 98-52)

CITY OF GROSSE POINTE WOODS

BUILDING DEPARTMENT

MEMORANDUM

TO: Zoning Board of Appeals

FROM: Gene Tutag, Building Official

DATE: October 28, 2010

SUBJECT: Use Variance for Pointe Neurology
20160 Mack Avenue

The variance request from Dr Policherla of Pointe Neurology, 20160 Mack Avenue has been reviewed. The petitioner is requesting a variance to establish a sleep clinic involving overnight patients. The regulatory provision of the city code is Section 50-448(2) which indicates the proposed use is not permitted as follows:

In all RO-1 districts, no building or land, except as otherwise provided in this chapter, shall be erected or used except for one or more of the following specified uses:

(2) Medical or dental centers, not including veterinary hospitals but including veterinary practice limited to felines and not including any type of medical facility permitting overnight patients.

Background:

On November 5, 2009 a building permit application to convert existing basement exam rooms into sleep exam rooms at 20160 Mack was denied. The change in use would be in violation of Section 50-448(2) of the city code as the ordinance does not allow a medical facility permitting overnight patients in this district. This space was previously occupied by Dr Secord, an orthodontist (copy attached).

On March 11, 2010 the petitioner signed the attached letter requesting a variance to establish the sleep clinic (copy attached).

On August 25, 2010 the Building Department received a complaint that a sleep clinic had been established at 20160 Mack. The Public Safety Department was asked to check the premises (copy attached).

On September 8, 2010 the Building Department sent the attached letter notifying the petitioner to "cease and desist" the sleep clinic at this location (copy attached).

On October 18, 2010 the variance application is filed with the city.

On October 25, 2010 Fire Inspector Provost and myself inspected the basement of 20160 Mack and verified that the sleep clinic was being operated. (See attached memo dated October 26, 2010)

Recommendation:

According to Section 50-149(b), the Zoning Board of Appeals may grant a use variance only upon a finding that there is an unnecessary hardship in the way of carrying out the requirements of this chapter. A finding of unnecessary hardship, based on competent, material, and substantial evidence on the record, shall require the petitioner to demonstrate that all of the following conditions are met:

(1) The property cannot reasonably be used in a manner consistent with existing zoning;
(2) That the plight of the petitioner is due to unique circumstances peculiar to the property and not to general neighborhood conditions;
(3) That the use to be authorized by the variance will not alter the essential character of the area and locality;
(4) That the problem is not self-created;
(5) That the spirit of this chapter will be observed, public safety and welfare secured, and substantial justice done.
(c) The zoning board of appeals may consider evidence from a variety of sources in making its determination.

It is recommended that the requested variance be denied based upon the following facts:

1. The petitioner has failed to present any information that the property cannot be used in a manner consistent with existing zoning.

2. The information provided by the applicant does not describe any unique circumstances peculiar to the property and not to general neighborhood conditions.

3. The subject property has residentially zoned property to the east. There currently is no landscaping or masonry headlight wall to protect the residential property from night time vehicle or patient activity.

4. The plight of the petitioner is entirely self-created as the use was established after the original permit was denied.

5 Attachments
1) 11/05/09 Denied Bldg Permit Appl
2) 03/11/10 Variance Request Ltr
3) 08/25/10 Public Safety request
4) 09/08/10 Cease & Desist Ltr
5) 10/26/10 Fire Insp Memo

RECEIVED

NOV 02 2009

CITY OF GROSSE PTE. WOODS
BUILDING DEPT.

COPY

CITY OF GROSSE POINTE WOODS
Building Department
20025 Mack Plaza, Grosse Pointe Woods, MI 48236
(313) 343-2426

PLAN REVIEW AND PERMIT APPLICATION

COMMERCIAL AND RESIDENTIAL

COMMERCIAL – Zoned As – Please Check One:
( ) C – Commercial Business ( ) RO-1 – Restricted Office ( ) P-1 – Vehicular Parking
( ) CF – Community Facilities ( ) C-2 – High Intensity City Ctr

RESIDENTIAL – Zoned As – Please Check One:
( ) R-1A One Family Residential ( ) R-1D One Family Residential ( ) R-3 Planned Multi-Family Res.
( ) R-1B One Family Residential ( ) R-1E One Family Residential ( ) R-4 High Density Multi-Dwelling
( ) R-1C One Family Residential ( ) R-2 Two Family Residential

Property Owner Name: Pointe Neurology P.C Date: 11-1-09

Property Owner Address: 20160 Mack Ave.

Telephone #: Work 313 882-0737 Home: _____

Contractor Name: Neill Construction Co.

Telephone # _____ Mobile Phone # 586-747-9741

Contractor Address: 61 Lesdale Troy, MI 48085

MI Builder's License # : _____ MI Driver's License # : N400585738275

Nature of Proposed Work – *Please Be Specific:*

Change exams rooms to sleep exam room.
(overnight stay while being treated.)

Value of Construction $ $20,000.00

Section 23a of State Construction Code Act of 1972, No. 230 of the Public Acts of 1972, being Section 125.1523a of the Michigan Compiled Laws, prohibits a person from conspiring to circumvent the licensing requirements of the State relating to persons who are to perform work on a residential building or a residential structure. Violations of Section 23a are subject to civil fines.

Applicant Signature: Mark Neill

I hereby certify that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and we agree to conform to all applicable laws of this jurisdiction.

FOR OFFICE USE ONLY

Approved: _____ Denied: X Req. Zoning Board of Approval _____ ($250)

Inspector: _____ Date: _____

01/09

Sect 50-448(2) 11-5-09
doesn't allow medical facility permitting
overnight patients

POINTE NEUROLOGY

Board Certified Neurologists

GENERAL NEUROLOGY, EEG, EMG, EVOKED POTENTIALS AND SLEEP DISORDERS

HARANATH POLICHERLA, M.D., A.C.P

KATHRYN SMITH M.S.N., C.R.N.P.

March 11, 2010

City of Grosse Pointe Woods
20025 Mack Plaza
Grosse Pointe Woods, MI 48236

RE: Variance Request at
Pointe Neurology
20160 Mack Avenue
Grosse Pointe Woods, MI 48236

To Zoning Board of Appeals:

I am writing this letter in support of our request for variance at 20160 Mack Avenue, Grosse Pointe Woods, Michigan 48236.

I am Haranath Policherla, M.D., Board Certified Neurologist, Board Certified in Sleep Medicine by American Sleep Disorders Association and American Board of Sleep Medicine, and I am also Board Certified in Clinical Neurophysiology as well as Certified in American Society of Neuro Rehabilitation.

At 20160 Mack Avenue, we have been providing medical services for the past 15 years and are applying for accreditation for the sleep lab by American Academy of Sleep Medicine. As a requirement prior to applying for accreditation, we should follow the guidelines and the recommended size of the testing rooms for the sleep disorders should be at least 140 square feet and with no dimension shorter than 10 feet. It is our intention to convert 3 rooms from exam rooms to sleep study rooms. This will be done within the footprint of the existing building,no addition will be necessary. We are aware of the requirements of the zoning ordinance and are requesting relief from section 50-448(2)

20160 Mack Ave
Grosse Pointe Woods, MI 48236
Tel. 313 882 8600, Fax 882 0737

15717 Fifteen Mile Road
Clinton Township, MI 48035
Tel. 586 285 3825, Fax 285 3818

26635 Woodward Avenue, Suite #101
Huntington Woods, MI 48070
Tel 248 548 6400, Fax 548 8885

Please see the enclosure #10, page #3 (how big should our bedroom be). This is highlighted. This requirement for applying to the accreditation by American Academy of Sleep Medicine brought us here in applying for the variance at our building at 20160 Mack Avenue. To give a background regarding sleep medicine, I routinely practice sleep medicine. The major disorder in sleep disorders, which can cause major morbidity and mortality, is obstructive sleep apnea. I wrote several newsletters and I am enclosing in exhibit #1 about sleep apnea and its facts and exhibit #1A shows cardiovascular disease and insulin resistance in sleep apnea, and exhibit #1B shows the sleep apnea, hypertension, and stroke. These are self explanatory and also include the sleep study what we do.

Exhibit #2 describes about obstructive sleep apnea, which is published by American Sleep Disorders Association as a sleep education. Exhibit #2A talks about overnight sleep study and multiple sleep latency studies.

Exhibit #3 talks about health risks for obstructive sleep apnea, which includes high blood pressure, heart disease, stroke, brain damage, depression, diabetes, obesity, and mortality. Exhibit #4 is a new study published on August 18, 2009 by American Academy of Sleep Medicine showing obstructive sleep apnea increases risk of death. Exhibit #5 is a glossary of all the technical terms with reference to the sleep study and the sleep testing.

Exhibit #6 talks about the prevalence of sleep disorders in the growing elderly population.

Exhibit #7 talks about sleep disorders in men.

Exhibit #8 explains sleep disorders in women.

Exhibit #9 explains sleep disorders in children.

These presented exhibits explain obstructive sleep apnea affects more than 15 million people in the United States and more than 85% of those affected are undiagnosed. Common symptoms of sleep apnea include excessive daytime sleepiness, loud snoring, choking, gasping during the sleep, and restless sleep. The way to diagnose sleep studies include nighttime sleep tests, which checks for the sleep stages, oxygen saturation, breathing patterns, as well as electrocardiogram, among the other things. Next morning the patients get multiple sleep latency tests. The patients get 20 minutes naps separated by two hours to evaluate alertness.

If the patients suffer from obstructive sleep apnea, the patient will be brought back and will be fitted with a mask, which will be connected to an air-pump called Continuous Positive Airway Pressure, which will eliminate obstructive sleep apnea. This is done throughout the night and throughout the night the amount of pressure delivered through the nasal CPAP will be titrated.

We, at Pointe Neurology, would like to provide the highest level of sleep care in Grosse Pointe area. By receiving accreditation, we are achieving the national standards. Currently there is no requirement that any of the sleep labs need to be accredited. We would like to achieve that higher goal and milestone to provide quality health care to the Grosse Pointe population in

general. Also to note that as such none of the hospitals in the area or no other health care facilities have an accredited sleep lab. By getting the accredited sleep lab in Grosse Pointe, we would serve our community with highest degree of confidence.

In view of above all facts, I humbly request to grant us variance to accommodate accreditation guidelines, which are enumerated in exhibit #10 page #3. The requirement is that the bedroom size should be 140 square feet.

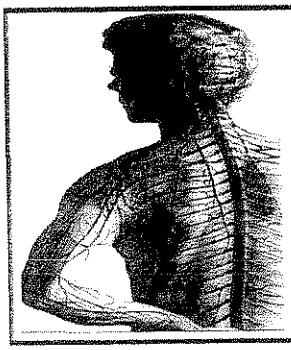
I will be available for explaining any of these details if you need further clarifications.

Thank you very much in advance for improving the quality health care in Grosse Pointe area.

Sincerely,

Haranath Policherla, M.D., ACP
Board Certified Neurologist
Board Certified Clinical Neurophysiology
Board Certified Sleep Medicine
Certified by American Society of Neuro Rehabilitation

YS/ 1111-HP-0736-063 Letter



POINTE NEURO-NEWS

EDITOR- H. POLICHERLA, MD ACP SEPTEMBER, 2009

SLEEP APNEA: BASIC FACTS

Obstructive sleep apnea affects more than 15 million people in the United States. More than 85% of those affected are undiagnosed. Both longitudinal and cross-sectional epidemiological data have demonstrated that obstructive sleep apnea (OSA) is an independent risk factor for hypertension, stroke, coronary artery disease and heart failure. Myocardial infarction, nocturnal angina and arrhythmias are common. Studies have also found elevated C-reactive protein levels in those with OSA. In addition, there is an association between OSA and insulin resistance, independent of obesity.

Common **symptoms** of sleep apnea include:

- Excessive daytime sleepiness
- Loud snoring
- Choking or gasping during sleep
- Restless sleep
- Observed episodes of discontinued breathing during sleep
- Headaches, especially in the morning
- Complaints of insomnia (difficulty with sleep initiation, intermittent awakenings, early morning awakening with inability to get back to sleep)
- Difficulties with concentration, memory, and cognitive function, particularly executive functioning

It is important to note that all of the patients may not have all of the above symptoms.

Patients frequently complain of excessive sleepiness, verbalizing "I'm tired all the time," "I have no energy," "I feel depressed," "I don't feel rested," "I feel fatigued," or "I don't sleep well."

Patients frequently complain of excessive sleepiness, verbalizing "I'm tired all the time," "I have no energy," I feel depressed," "I don't feel rested," or "I don't sleep well."

Other common **risk factors** for OSA include:

- Obesity
- Male gender
- Age 40 years or older (OSA is even more common in older age compared to middle age)
- Family history of OSA
- Craniofacial characteristics: retroposed maxilla and mandible, narrow posterior airway, large tongue and soft palate and large tonsils
- Use of alcohol, sedatives or tranquilizers
- Hypothyroidism
- Menopausal status in women

Screening for OSA can be done in different ways. A careful history from the patient and bed partner is the first step. Scales to determine sleepiness are also used. The Epworth Sleepiness Scale, most commonly used, is an 8-item subjective measurement of one's wakefulness and ability to engage in daily activities, including sitting and reading or sitting in a car while stopped in traffic. The patient is asked to rate their chance of dozing on a scale of 0 to 3 in each of 8 situations. A score greater than 10 is considered abnormal. Other validated screening tools, such as the Insomnia Severity Scale (ISS) or the Fatigue Severity Scale (FSS), as well as a sleep diary or sleep log may also be used. **Clinical judgment ultimately determines who needs further evaluation.**

Sleep apnea is defined as an apnea-hypopnea index (AHI) greater than 5, with symptoms of daytime sleepiness. The combined number of apneas and hypopneas per hour of sleep is known as the AHI. Hypopnea is defined as partial (30% or more) reduction in airflow. Apneas and hypopneas have similar pathophysiology and clinical significance. The severity of OSA is measured by the AHI: An AHI less than 5 can be normal; 5 to 14 is mild OSA; 15 to 30 is moderate OSA; and AHI greater than 30 is severe OSA. An AHI of 5 has been determined as the threshold of OSA based upon epidemiological data showing risk for adverse outcomes at this level, including hypertension and automobile accidents. **Studies have found a 2.5 to 3 times greater automobile accident rate in those with untreated**

sleep apnea. Treatment with nasal continuous positive airway pressure (CPAP) resulted in accident rates similar to a control group without OSA.

There are two types of sleep apnea: obstructive and central. **Obstructive sleep apnea**, the more common variety, occurs when the muscles in the walls of the throat relax and collapse on themselves, obstructing the flow of air. After 10 to 30 seconds with no air, the sufferer enters a lighter level of sleep, the muscles return to their normal tone, and breathing resumes. This is often accompanied by snorting or gasping, and can occur throughout the night. However, many individuals are so used to these episodes occurring over and over throughout the night that they don't remember waking and believe they slept well.

Central sleep apnea sufferers are more likely to remember waking. This condition involves failure of the brain to send signals to the muscles that control breathing. The level of carbon dioxide in the blood rises and the person awakens. A definite diagnosis of sleep apnea requires an overnight study in a sleep laboratory while multiple physiological indices are monitored.

Explaining sleep studies to a patient can be done simply: A sleep study involves coming to the sleep center in the evening for an overnight stay. Technicians attach monitors and EEG equipment to the patient, and he or she goes to bed in a private room, which is comfortable and much like a hotel room. After a night's sleep, which is monitored and recorded, patients are awakened and are served breakfast. That morning, additional data is collected through a sequence of four naps, and patients go home in the early afternoon.

If the diagnosis is sleep apnea, patients return to the sleep center for another night's sleep. A CPAP (continuous positive airway pressure) device delivers air at a pressure slightly higher than that of the surrounding air through a mask placed over the nose. The pressure keeps upper airway passages open, allowing free breathing through the night. It also prevents snoring. Technicians adjust the CPAP machine so that just the right amount of air is delivered to the individual. For most patients with moderate to severe sleep apnea, use of the CPAP relieves their symptoms. For those with only physical blockages in the upper airway, in the absence of obesity, surgery may be an alternative.

In addition to diagnosing sleep apnea, the polysomnogram is also useful for diagnosing the level of hypersomnolence, which is important for those who drive or engage in potentially hazardous jobs or activities. Multiple sleep latency tests (MSLTs) are considered a gold standard objective measure of sleepiness. After a polysomnogram the individual has a series of four 20 minute naps at 2-hour intervals. A mean sleep latency (defined as the average time to the first epoch of any stage of sleep) of 10 minutes or more is considered normal, while average sleep latency less than 8 minutes is considered excessive daytime sleepiness (EDS).

Sleep onset rapid eye movement (SOREM) periods during 2 or more of the 4 naps during MSLTs is considered a neurophysiologic indication of narcolepsy. Data from several studies have shown a sensitivity of 0.78 and a specificity of 0.93 for narcolepsy diagnosis. However, SOREMs are seen in 7% of those with OSA, which makes it important to rule out OSA with a polysomnogram the night before MSLTs. SOREMs can also be seen in patients with depression and antidepressant withdrawal, and REM sleep deprivation.

Parasomnias can also be diagnosed with a polysomnogram. These include REM behavioral disorder, somnambulism (sleep walking) and sleep terrors, although continuous audiovisual monitoring and more than one night may be necessary.

Leg movement activity is also recorded during the polysomnogram. Restless legs syndrome (RLS) or periodic limb movement disorder (PLMD), repetitive limb movements without the sensory symptoms of RLS, can also be diagnosed with polysomnogram. Associated conditions which need to be considered include peripheral neuropathy, peripheral vascular disease, anemia, arthritis, spinal cord lesions, antidepressants, and caffeine use.

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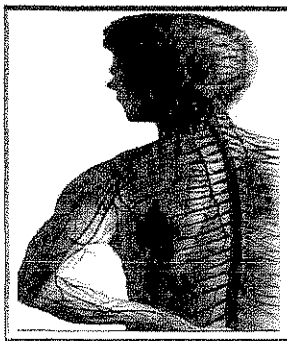

POINTE NEURO-NEWS

EDITOR- H. POLICHERLA, MD ACP NOVEMBER, 2006

UPDATE ON SLEEP APNEA: CARDIOVASCULAR DISEASE AND INSULIN RESISTANCE

Obstructive sleep apnea (OSA) is associated with a variety of comorbidities, including *cardiovascular disease*, obesity, hypertension, and stroke. Evidence also points to an association between obstructive sleep apnea and *insulin resistance*, independent of obesity.

OSA causes repeated obstruction of the upper airway while asleep, intermittent oxygen desaturation, fragmented sleep, and spontaneous arousals. The combined number of apneas and hypopneas (partial reduction in airflow) per hour of sleep is known as the apnea-hypopnea index, or AHI. The severity of OSA is measured by the AHI: An AHI less than 5 can be normal; 5 to 14 is mild OSA; 15 to 30 is moderate OSA; and AHI greater than 30 is severe OSA.

Numerous studies have linked obstructive sleep apnea with cardiovascular disease. One study found that 50% of patients with coronary artery disease (CAD) had OSA.

Numerous studies have linked obstructive sleep apnea with cardiovascular disease. One study found that 50% of patients with coronary artery disease (CAD) had OSA. Myocardial infarction, heart failure and arrhythmias are common. In patients undergoing Holter monitoring, paroxysmal asystole, bradycardia, and sinus node dysfunction were more frequent in those with OSA. The risk of cardiac arrhythmias with OSA is related to the severity of OSA. AHI above 20 (moderate to severe OSA) led to a 40% cardiovascular mortality rate in men after eight years.

The Sleep Heart Health Study reported OSA as an independent risk factor for CAD and heart failure. A five year follow-up of 62 patients with CAD found a higher mortality (38%) in those with OSA compared to those without OSA (9%).

Those with severe OSA using CPAP had cardiovascular events similar to healthy control subjects.

Merin et al (2005) did an observational study comparing fatal and non-fatal cardiovascular events in patients with treated and untreated OSA. Ten year follow-up revealed more fatal and non-fatal cardiovascular events in those with severe OSA not using CPAP (refused treatment with CPAP). Those with severe OSA using CPAP had cardiovascular events similar to healthy control subjects. The treatment of OSA with CPAP reduces cardiovascular risk in those with severe OSA.

OSA has also been associated with ischemic heart disease and idiopathic cardiomyopathy related to the effects of hypertension on left ventricular function.

OSA has also been associated with ischemic heart disease and idiopathic cardiomyopathy related to the effects of hypertension on left ventricular function. The Framingham Heart Study found right ventricular hypertrophy on ehcocardiogram In those with OSA. Diastolic dysfunction is associated with increased risk of OSA. Several studies have shown that treatment of OSA may improve ejection fraction. *CPAP therapy in patients with chronic heart failure decreases left ventricular afterload, increases stroke volume, and reduces sympathetic tone.*

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Untreated OSA doubles the risk for recurrence of atrial fibrillation within 12 months in patients who have undergone elective cardioversion. The presence of OSA should be considered in all patients with atrial fibrillation.

Brady-tachydysrhythmias frequently occur with OSA and generally reverse with CPAP. Patients with heart failure and OSA also have an increased prevalence of atrial fibrillation. One study found that approximately one half of the patients with atrial fibrillation had OSA. Untreated OSA doubles the risk for recurrence of atrial fibrillation within 12 months in patients who have undergone elective cardioversion. The presence of OSA should be considered in all patients with atrial fibrillation.

It has been suggested that OSA leads to altered vascular endothelial function, leading to atherosclerosis. Elevated C-reactive protein has been identified in patients with OSA, and may contribute to atherosclerosis. Increased morning levels of fibrinogen have been found in patients with OSA, accounting for increased cardiovascular events and stroke. Treatment of OSA may therefore be cardioprotective.

Arousal from sleep leads to increased sympathetic activation, and changes in vagal tone due to oxyhemoglobin desaturation may contribute to worsening coronary artery disease, leading to increased platelet activation. Increased platelet activation was found in a group of 42 patients with OSA compared to a control group. CPAP treatment decreases platelet activation.

Researchers have found that patients with OSA had higher fasting glucose levels, insulin levels, and A1Cs, regardless of body weight.

Evidence suggests an association between OSA and insulin resistance, independent of obesity. It has been postulated that OSA may actually contribute to development of type 2 diabetes. Researchers have found that patients with OSA had higher fasting glucose levels, insulin levels, and A1Cs, regardless of body weight.

Sleep apnea severity correlates with insulin resistance. Two studies have shown decreased insulin resistance with CPAP treatment. A Japanese study found that men with sleep apnea were more likely to have metabolic syndrome (obesity, hypertension, insulin resistance, dyslipidemia) when compared to controls. The risk was higher in those with moderate or severe sleep apnea. CPAP has been associated with lower blood sugar levels. CPAP treatment increases insulin sensitivity and improves glycemic control in those with type 2 diabetes.

In summary, it is extremely important to diagnose and treat obstructive sleep apnea. Snoring, sleepiness, obesity, and hypertensison are the main manifestations. Cardiac dysrhythmias, stroke, heart failure, insulin resistance and elevated glucose levels also warrant investigation of OSA. Treatment of OSA using nasal continuous positive airway pressure (CPAP) can improve and may even prevent comorbidities. OSA is a chronic disease that requires patient and partner education about its consequences and the importance of proper treatment. This requires ongoing follow-up of patient tolerance and compliance. Counseling related to risk factor management, such as weight loss, medication management and smoking cessation are also important. Periodic assessment of CPAP use, daytime sleepiness, snoring or apneic periods when using CPAP, weight changes, equipment checks, and periodic reevaluation of CPAP pressure is necessary for optimal benefit.

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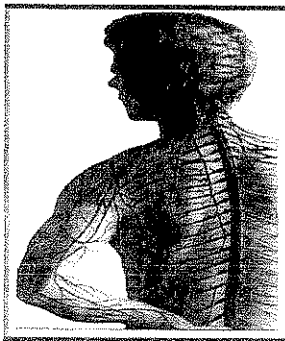

POINTE NEURO-NEWS

EDITOR- H. POLICHERLA, MD ACP OCTOBER, 2006

UPDATE ON SLEEP APNEA: HYPERTENSION AND STROKE

Obstructive sleep apnea (OSA) affects more than 15 million people in the United States. The vast majority of those affected are undiagnosed. This complex syndrome is associated with a variety of comorbidities, including obesity, hypertension, cardiovascular disease and stroke. Recent evidence also points to an association between obstructive sleep apnea and insulin resistance, independent of obesity. Those with OSA have a significantly higher mortality rate when compared to those without OSA, as much as a seven-fold increase. It has been estimated that OSA contributes to 40,000 deaths in Americans every year. Obstructive sleep apnea is a significant public health problem.

Obstructive sleep apnea is associated with a variety of comorbidities, including obesity, hypertension, cardiovascular disease and stroke. Recent evidence also points to an association between obstructive sleep apnea and insulin resistance, independent of obesity.

Individuals with OSA have repeated obstruction of the upper airway while asleep, intermittent oxygen desaturation, fragmented sleep, and spontaneous arousals. Obstructive sleep apnea (OSA) is associated with choking or gasping, restless sleep, morning headache; excessive daytime sleepiness, depression and work and motor vehicle accidents.

The combined number of apneas and hypopneas per hour of sleep is known as the apnea-hypopnea index, or AHI. An AHI greater than 5 with symptoms of daytime sleepiness constitutes the diagnostic criteria for sleep apnea syndrome. Hypopnea is defined as partial (30% or more) reduction in airflow. Apneas and hypopneas have similar pathophysiology and clinical significance. The severity of OSA is measured by the AHI: An AHI less than 5 can be normal; 5 to 14 is mild OSA; 15 to 30 is moderate OSA; and AHI greater than 30 is severe OSA. An AHI of 5 has been determined as the threshold of OSA based upon epidemiological data showing risk for adverse outcomes at this level, including hypertension and automobile accidents. Sleep apnea is more common in the middle aged individual, affecting nine percent of middle aged women and 24% of men. The incidence is increased in certain groups: commercial truck drivers have a 46% incidence of OSA; professional football players have a 14% incidence of OSA.

The most common risk factors for OSA are male gender, age 40 years or older, and obesity. Family history of OSA is also an important risk factor. Craniofacial characteristics such as retroposed maxilla and mandible, narrow posterior airway, large tongue and soft palate and large tonsils also predispose to sleep apnea.

Obesity is present in 60% to 90% of individuals undergoing evaluation in a sleep lab. The severity of OSA correlates with the severity of obesity. One study of 600 patients found that an increase of 10 kg. of body weight doubled the odds ratio of having sleep disordered breathing. Obesity leads to excess fat deposition in pharyngeal tissues.

The prevalence of OSA in **hypertension** is estimated to be as high as 50%. In those with normal blood pressure, sleep apnea is associated with the onset of hypertension. OSA, obesity, and hypertension often coexist. The presence of hypertension in sleep apnea patients is estimated to be 60%. Sleep apnea is present in up to 83% of those with resistant hypertension, defined as blood pressure that remains uncontrolled (> 140/90) despite three antihypertensive agents. OSA should be considered in those who respond poorly to therapy.

Sleep apnea is present in up to 83% of those with resistant hypertension, defined as blood pressure that remains uncontrolled (>140/90) despite three antihypertensive agents. OSA should be considered in those who respond poorly to therapy

Numerous studies in the past 20 years have linked OSA and hypertension. The seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and

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Treatment of High Blood Pressure (JNC VII) lists OSA as first on the list of potential causes of hypertension. The Sleep Heart Health Study examined the cardiovascular consequences of sleep apnea in more than 6,000 middle-aged and older adults. The AHI was linearly associated with blood pressure, after adjusting for body mass index (BMI), age, gender, smoking and alcohol use.

The Wisconsin Sleep Cohort Study examined hypertension and the severity of OSA in more than 700 adults. Baseline sleep apnea was linked to increased risk for hypertension at four year follow-up. An AHI of 15 (moderate OSA) or greater was associated with three times the risk of developing hypertension. A linear increase in blood pressure (systolic and diastolic) was seen with increasing AHI.

Those with subtherapeutic CPAP showed no significant blood pressure decrease, compared to those with therapeutic CPAP treatment, showing a mean arterial blood pressure decrease of 9.9 +/- 11.4 mm Hg. This points to the importance of effective CPAP treatment, and periodic re-evaluation of CPAP pressure.

Those with OSA have cardiovascular abnormalities during sleep as well as during waking hours, due to increased sympathetic activity caused by repetitive breathing obstruction, and consequent sympathetic response to hypoxia and hypercapnia. Treatment of OSA with nasal CPAP improves blood pressure control in those with hypertension, especially when measured over a 24 hour period. The blood pressure is lowered during both sleep and waking hours, with greater decreases seen in those with severe OSA. A recent study reported that after nine weeks of CPAP therapy, blood pressure was decreased by 10 mm Hg for both systolic and diastolic readings, both at night and during the day. Another study looked at treatment for moderate and severe OSA with therapeutic and subtherapeutic CPAP treatment over a nine week period. Those with subtherapeutic CPAP showed no significant blood pressure decrease, compared to those with therapeutic CPAP treatment, showing a mean arterial blood pressure decrease of 9.9 +/- 11.4 mm Hg. This points to the importance of effective CPAP treatment, and periodic re-evaluation of CPAP pressure.

Obstructive sleep apnea has been proposed as both a risk factor and a consequence of stroke. Several studies have demonstrated that the risk for stroke in individuals with OSA is independent of co-existing hypertension.

Obstructive sleep apnea has been proposed as both a risk factor and a consequence of stroke. Several studies have demonstrated that the risk for stroke in individuals with OSA is independent of co-existing hypertension.

In studies of patients with TIA or ischemic stroke, there was a similar frequency of OSA in both groups, lending support to OSA as a predisposing factor for ischemic stroke.

OSA is a common occurrence after ischemic stroke. Obstructive sleep apnea and stroke were compared in hospitalized patients with recent stroke and individuals in the general population. Researchers found that 71% of stroke patients and 19% of controls and had OSA. The four year mortality rate for those with stroke was 21%. All who died had OSA.

The Sleep Heart Health Study provides more evidence for the link between OSA and stroke. Stroke risk increased incrementally with the AHI severity. Even mild to moderate sleep apnea was associated with stroke.

There appears to be a diurnal pattern to the time of onset of stroke. The early morning hours, usually associated with REM sleep, more apneic periods, and oxygen desaturation, have coincided with stroke occurrence. The largest study showed that 31% of strokes occurred upon awakening from sleep. All patients with stroke should be screened for OSA. Those with TIA or minor stroke may represent a target for secondary prevention of stroke.

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Obstructive Sleep Apnea

John had known all his life that he snored. Both his dad and his college roommate did too, so he figured it wasn't a big deal.

It became a big deal to his wife, Marie, after they got married. His snoring was so loud that it was keeping her up at night. She constantly complained about it, but John thought she just had to get used to it.

Marie tried to get him to talk to a doctor to see if there was anything that could be done to help. John blew it off because he didn't want to admit that he had a problem.

Eventually he got some nasal strips and thought that would be the end of the conflict. But his snoring still kept Marie awake. She finally began to sleep in another room. Since John couldn't hear himself snore, he thought she was making too big of an issue out of it.

John was also working at his third job in the past two years. He was fired from the first job because he could never get to work on time. It was really hard for him to wake up in the morning.

He tried everything he could think of. He went to bed early; he used an alarm clock; he left the blinds open so sun would come in the window. It didn't matter. He was still tired and struggled to get out of bed on time.

Since Marie sometimes worked nights at the hospital, she wasn't always there to wake him up. John just figured that he wasn't a morning person.

He lost his second job because they said he was lazy. He would agree that he didn't have a lot of energy, but he was trying hard. The problem was that he would get distracted and lose his focus easily. During long meetings he would even doze off briefly. John blamed it on the office manager for keeping the temperature too warm.

One evening John and Marie were returning from a weekend spent visiting her parents. On the drive home, John fell asleep and the car drifted into a lane of oncoming traffic. Marie's scream woke him up, and John was able to swerve back into their lane just in time. This was the wake-up call that he needed.

Marie pleaded with him to see a doctor, and John finally agreed. It was his first visit to the doctor in years. He found out that he was 75 pounds overweight and that he had high blood pressure. John told the doctor about his sleepiness and his snoring. His doctor was concerned and referred John to a nearby sleep center.

John called the center to set up an appointment. A week later, he and Marie went together to meet with a sleep specialist. They both filled out a questionnaire about John's sleep patterns and how their lives were affected by them. The doctor reviewed those results and went over John's medical history.

He also examined John's nose and throat and measured his neck. His neck was a size 18. The doctor told John his suspicion that his sleep problems were the result of obstructive sleep apnea.

To find out for sure, he would have to do an overnight sleep study at the sleep center. John agreed, and the study was scheduled two weeks from then.

He actually felt relieved to find out that there really might be something causing him to be so tired all the time. When he got home, John called his insurance provider. He was happy to find out that his company insurance plan had just recently started to cover studies and treatments for sleep disorders.

In two weeks, John showed up at the sleep center with his bag packed for the night. He was shown to his private room, which was much more comfortable than he expected. It felt more like a hotel room than a medical center. He got situated, changed into his pajamas and relaxed for a little bit.

Then he had to fill out a few papers. After that, a technician went over all the equipment with him and answered his questions. He watched a video that explained about sleep apnea and treatment with continuous positive airway pressure (CPAP). The sensors were then placed on John, and the equipment was tested.

Once that was done, he watched some TV before turning the lights out around his usual bedtime. Everything felt a little strange to him at first, but he got used to it and finally drifted off to sleep.

Sometime in the night, the technician came in and woke John up. He said that John had stopped breathing numerous times. As a result, they wanted him to try to see if he slept better with CPAP. They put a mask over his nose and adjusted the pressure of the air flow. He quickly fell back to sleep.

When the technician woke him up again at 6 a.m., John couldn't believe how quickly the night had passed. He remarked that using the mask had given him the best sleep he could ever remember. John went home and shared with Marie what the study had confirmed: he had a severe case of obstructive sleep apnea.

The sleep specialist at the center still had to review and certify the data from John's study. The results were then sent to John's primary doctor. They showed that he had stopped breathing 127 times before being given the CPAP. This caused his oxygen level to only be 65% instead of the normal range of 90% to 98%.

His doctor wrote an order for John to get a CPAP machine. Within another week, John had been fitted for a mask and was using a CPAP machine at home.

It took John a little while to get used to sleeping with the machine. The mask felt a little awkward at first, and the machine made a constant humming noise.

Marie told him that the humming was music to her ears compared to his snoring. But once John got used to it, he began sleeping like never before.

Now the machine even goes with him when he has to travel out of town. People at the office have noticed that he seems to be happier and has more energy. For the first time that he can remember, he actually feels refreshed when he wakes up most mornings.

Both John and Marie are finally finding joy in being able to share a good night of sleep together.

Reviewed by Norman J. Wilder, MD
Updated on May 11, 2006

E(3)

Eight Health Risks of OSA

Obstructive sleep apnea (OSA) is a common sleep disorder that involves pauses in breathing during sleep. If left untreated, OSA can have a detrimental impact on your health and well-being.

OSA occurs when your muscles relax during sleep. This causes soft tissue in the back of the throat to collapse and block the airway. Breathing pauses can last from 10 seconds to a minute or longer. The pauses end when the body briefly wakes up to gasp for breath. This repetitive cycle of breathing pauses continues all night long. A person with severe OSA may have hundreds of breathing pauses per night.

These breathing pauses produce drastic changes in blood pressure and oxygen levels, while also fragmenting sleep. Over time, untreated OSA puts a tremendous amount of stress on the body, increasing your risk for many other health problems. These are eight of the health risks related to OSA:

1. High blood pressure

Studies have shown that OSA can cause high blood pressure, also known as "hypertension." The amount of increase in blood pressure is related to the severity of OSA; more severe OSA produces greater increases in blood pressure. Elevations in blood pressure even can occur in children who have OSA.

2. Heart disease

Untreated OSA is a risk factor for heart disease, which is the leading cause of death in the U.S. as of 2005. OSA increases your risk for an irregular heartbeat, coronary artery disease, heart attack and congestive heart failure. A 2006 study in the *Journal of the American College of Cardiology* found that OSA even affects the shape of your heart. Results show that the hearts of people with OSA are enlarged on one side, have thickened walls and a reduced pump function.

3. Stroke

OSA increases your risk for stroke, the third leading cause of death in the U.S. as of 2005. A stroke is a "brain attack" that occurs when blood flow to the brain is interrupted. It can result from either a blood clot that blocks an artery or from a broken blood vessel.

4. Brain damage

A study in the journal *Sleep* in 2008 provided visual evidence of brain damage that occurs in people with OSA. The damage affects brain structures that help control functions such as memory, mood and blood pressure.

5. Depression

Research shows that depression is common in people with OSA. Even mild OSA gives you a much greater risk of depression. This risk for depression increases with the severity of OSA.

6. Diabetes

OSA is associated with impaired glucose tolerance and insulin resistance. Type 2 diabetes, a leading cause of death in the U.S., occurs when the body fails to use insulin effectively. Research suggests that OSA can contribute to the onset of diabetes.

7. Obesity

Obesity is a key risk factor for OSA. But there is increasing evidence that OSA also may promote weight gain. OSA can fragment sleep, reducing daytime energy and physical activity. It also can disrupt metabolism. OSA may alter the levels of hormones that regulate your appetite, which may lead you to eat more.

8. Mortality

Two studies in the journal *Sleep* in 2008 show that people with sleep apnea have a much higher risk of death than people without sleep apnea. The risk is greater for people whose sleep apnea is more severe. The risk of death also increases when sleep apnea is untreated.

There is hope for people who have OSA; it can be treated with a high rate of success. A growing body of research even shows that treating OSA with continuous positive airway pressure (CPAP) therapy can reduce many of these eight health risks.

You can get expert help for OSA at a sleep disorders center that is accredited by the American Academy of Sleep Medicine. Find an AASM-accredited sleep center near you at www.sleepcenters.org.

Updated August 8, 2008

More Information

Obstructive sleep apnea

Are You at Risk?

Warning Signs for OSA

Five Ways to Fight OSA

Five OSA Myths

CPAP Central

E 4

Another Study Confirms that Obstructive Sleep Apnea Increases Your Risk of Death

A new study shows that people with OSA have a higher risk of death.

American Academy of Sleep Medicine
AASM | 08/18/2009

A new study provides strong evidence that severe obstructive sleep apnea increases your risk of death.

The study involved a community sample of 6,441 people who were 40 years of age or older. Their sleep was evaluated with a portable-monitoring system during one night of home sleep testing. An apnea-hypopnea index was calculated for each person. The AHI represents the average number of times you stop breathing per hour of sleep.

People were grouped according to the severity of their sleep apnea. An AHI of 30 or more breathing pauses per hour of sleep was considered severe OSA; an AHI of 15 to less than 30 represented moderate sleep apnea; people with an AHI of 5 to less than 15 had mild OSA.

The health status of participants was monitored during a follow-up period of about eight years. During this time 1,047 participants died; 587 of them were men and 460 were women.

Data analysis shows that the people with severe OSA were 46 percent more likely to die than those who did not have OSA. The risk of death in people with moderate OSA was increased by 17 percent.

The risk of death was even higher in men between the ages of 40 and 70; those with severe OSA were two times more likely to die than men their age who did not have OSA.

The study was published today in the online journal *PLoS Medicine*.

"Our study results really raise concern about the potentially harmful effects of sleep apnea," principal investigator Dr. Naresh Punjabi said in a Johns Hopkins statement. "Such an increased risk of death warrants screening for sleep apnea as part of routine health care."

Eight percent of men and three percent of women in the study had severe OSA. High blood pressure, diabetes and heart disease were more common in people with moderate to severe OSA.

Last year a study in the Aug. 1 issue of the journal *Sleep* reported similar findings. That study involved 1,522 participants; they were between 30 and 60 years old when the study began. Their sleep was evaluated during an overnight sleep study in a sleep lab at a clinical research center.

Their health status was monitored during an 18-year follow-up period. Results show that people with severe sleep apnea were three times more likely to die. The study also suggested that treating sleep apnea with regular CPAP use may prevent premature death.

Learn how CPAP therapy can be a life saver for people with OSA. Answer these questions to learn more about your risk for sleep apnea. Contact an AASM-accredited sleep disorders center for help with OSA.

On the Sleep Education Blog you will find links to the information cited here.

E(5)

Sleep Study Dictionary

AASM *American Academy of Sleep Medicine.* The only professional society that is dedicated exclusively to the medical subspecialty of sleep medicine. The AASM is the national accrediting body for sleep disorders centers and laboratories. AASM accreditation is the gold standard by which the medical community and the public can evaluate the services provided by a **sleep center** or **sleep lab**. A directory of AASM-accredited sleep centers and labs is available at www.sleepcenters.org.

AHI *apnea-hypopnea index.* A measurement of the overall severity of sleep apnea. AHI is an average of the combined episodes of **apnea** and **hypopnea** that occur per hour of sleep. An AHI of 15 or more indicates that you have OSA. If you have symptoms of OSA such as excessive daytime sleepiness or high blood pressure, then a lower AHI of 5 or more confirms that you have OSA.

APAP *autotitrating positive-airway pressure.* These **PAP** units have an automatic, self-adjusting mode that raises or lowers the air pressure as needed.

apnea A pause in breathing during sleep that lasts at least 10 seconds. It involves a reduction in airflow of 90% or more. This is measured by **thermal sensors**.

blood oxygen saturation The level of oxygen in your blood. Also SaO_2. It is measured by an **oximeter**. Episodes of **CSA** and **OSA** reduce the oxygen in your blood. This can lead to **hypoxemia** and **hypercapnia**.

BPAP *bilevel positive-airway pressure.* These **PAP** units provide two levels of air pressure: a higher level when you inhale and a lower level when you exhale.

cannula A flexible tube that is inserted into your nose. It is used with a **nasal pressure transducer** to measure airflow.

central sleep apnea Also *CSA.* A sleep related breathing disorder that occurs when the brain fails to tell the lungs to breathe. It is most common in the elderly and in patients who have heart disease or have had a stroke. In contrast to **OSA**, it is unrelated to an obstructed airway.

CPAP *continuous positive-airway pressure.* These **PAP** units provide one fixed level of air pressure.

CPAP study *continuous positive-airway-pressure study.* A sleep study that evaluates the effectiveness of **CPAP** therapy. It involves the **titration** of the CPAP device by a **sleep technologist**.

CSA *central sleep apnea*

EEG *electroencephalogram.* A graphic record of the electrical activity of the brain. The brain waves are recorded by electrodes that are placed on the head. Different types of brain waves occur during the various **sleep stages**. Each type of brain wave has a different frequency.

EKG *electrocardiograph.* Also *ECG.* A graphic record of the electrical activity of the heart. Electrodes are placed below the collarbone and on the ribcage. Episodes of **apnea** can cause repeated changes in heart rate and blood pressure.

EMG *electromyogram.* A graphic record of muscle movements. Electrodes are placed on the chin and the legs. Muscles relax during the transition from wake to sleep. Then your brain paralyzes many of your muscles during the stage of **R sleep** (REM sleep), although muscle twitches may occur. Leg movements may be a sign that you have restless legs syndrome or periodic limb movements.

EOG *electrooculogram.* A graphic record of eye movements. An electrode is placed on the face near each eye. Slow, rolling eye movements occur during the transition from wake to sleep. Brief, rapid movements occur during the stage of **R sleep** (REM sleep).

home sleep test This is one way to detect **OSA** in adults. A home sleep test involves the use of a portable-monitoring system that is small enough for you to take home. It consists of a small recording device, sensors, belts and related cables and accessories. You apply the sensors to your body and turn on the recording device before going to sleep. The sleep recorder gathers important data as you sleep in your own bed. Standard measurements include airflow, **respiratory effort**, blood **oxygen saturation** and heart activity (**EKG**). Home sleep tests are classified as **Type 2**, **Type 3** or **Type 4**.

hypercapnia Having a high level of carbon dioxide in the blood. It can be caused by **CSA** and **OSA**.

hypopnea A partial reduction in breathing of at least 30% that lasts at least 10 seconds during sleep. This is measured by a **nasal pressure transducer**.

hypoxemia Having a low level of **blood oxygen saturation**. It can be caused by **CSA** and **OSA**. Also called hypoxia.

MSLT *Multiple Sleep Latency Test.* A nap study that measures how quickly you fall asleep during the day. It is used primarily to detect narcolepsy.

MWT *Maintenance of Wakefulness Test.* Measures how well you are able to stay awake during the day. It is used to evaluate how well treatment improves the daytime symptoms of a sleep disorder.

N sleep *non-rapid eye movement (NREM) sleep.* The primary phase for 75% to 80% of an adult's sleep time. It is made up of three **sleep stages**.

nasal pressure transducer Measures airflow into and out of your nose. It can detect a **hypopnea** because it is sensitive even to minor changes. It is used with a **cannula**.

obstructive sleep apnea Also *OSA*. A sleep related breathing disorder that involves repeated episodes of **hypopnea** and apnea despite an ongoing **respiratory effort**. It occurs when the muscles relax during sleep, causing soft tissue in the back of the throat to collapse and block the upper airway.

OSA *obstructive sleep apnea*

overnight sleep study A *polysomnogram* or **Type 1** sleep study. It is the standard method of detecting sleep disorders and evaluating treatments in children and adults. You stay in a private room that often has the comforts of a hotel room. As you sleep, electrodes and sensors collect information such as airflow, brain activity (**EEG**), **respiratory effort**, eye movements (**EOG**), leg movements (**EMG**), **blood oxygen saturation** and unusual behavior.

oximeter A small device that provides continuous monitoring of your **blood oxygen saturation**. It can be worn on the ear but most often is placed on a fingertip.

PAP *positive airway pressure.* This is the most common and effective treatment for **obstructive sleep apnea** (OSA). It provides a stream of air through a mask that you wear during sleep. This airflow keeps the airway open, preventing pauses in breathing and restoring normal **blood oxygen saturation**. PAP can be continuous (**CPAP**), bilevel (**BPAP**) or autotitrating (**APAP**).

polysomnogram An *overnight sleep study*

portable monitoring A *home sleep test*

PSG A *polysomnogram*

R sleep *rapid eye movement (REM) sleep.* The last of the four **sleep stages** that make up a complete **sleep cycle**. The name comes from the rapid, twitching eye movements that occur during this stage. Most dreams occur during R sleep.

respiratory effort *breathing effort.* It can be measured by the movements of your chest and stomach. **OSA** involves pauses in breathing that occur even though your body continues making an effort to breathe. In contrast, a pause in breathing with no effort to breathe is a sign of **CSA**. The best method of measuring respiratory effort is **respiratory inductance plethysmography**.

respiratory inductance plethysmography Also *RIP*. The most accurate way to measure **respiratory effort**. You wear belts around your chest and stomach. These belts contain sensors and wires that carry a small electrical current. Chest or stomach movements produce changes in the current.

RIP *respiratory inductance plethysmography*

RPSGT *registered polysomnographic technologist.* A professional credential that a **sleep technologist** earns by passing the national certification examination.

SaO_2 *blood oxygen saturation*

sleep architecture A term that refers to all aspects of your sleep pattern, including **total sleep time**, **sleep latency**, **sleep efficiency** and **sleep stages**.

sleep center A *sleep disorders center.* Provides testing and treatments for all sleep disorders. A sleep center can earn accreditation from the **AASM**.

sleep cycle A transition through all four **sleep stages**. Each complete cycle lasts about 90 to 110 minutes. Most adults will go through four to six cycles in a full night of sleep. Children have much shorter sleep cycles than adults. The sleep cycle of a one-year-old may last about 45 minutes. Once a child nears 10 years of age, the length of his or her sleep cycle is similar to

that of an adult.

sleep efficiency The percentage of **total recording time** that you spend asleep.

sleep lab A *laboratory for sleep related breathing disorders*. Provides testing for all sleep disorders and treatments for sleep-related breathing disorders such as **obstructive sleep apnea** and **snoring**. A sleep lab can earn accreditation from the **AASM**.

sleep latency The length of time from when the lights are turned out to **sleep onset**.

sleep onset The moment when you fall asleep.

sleep specialist A licensed doctor who is board certified in the subspecialty of sleep medicine. He or she specializes in assessing, testing, diagnosing, managing and preventing sleep disorders.

sleep stages The four unique periods that make up one **sleep cycle**. The nature of your sleep is different in each stage. A typical sleep cycle consists of three stages of **N sleep** (N1, N2 and N3) followed by **R sleep**.

sleep technologist A health-care professional who assists in the evaluation and follow-up care of patients with sleep disorders. A sleep technologist works under the direct supervision of a **sleep specialist**.

snoring The vibration of tissue in the back of your throat as you breathe, making a noise during sleep. Frequent, loud snoring is a warning sign for **obstructive sleep apnea**.

split-night study Doing an **overnight sleep study** and a **CPAP study** in the same night. During an overnight sleep study, a CPAP study may be performed right away if you show signs of having severe **OSA**.

thermal sensors These sensors are placed near your nose and mouth to detect episodes of **apnea** by measuring your airflow. They record changes in temperature as you breathe. Air that you exhale is warmer than the air that you inhale. Two types are thermistors and thermocouples.

titration The process of setting the air-pressure level of a **PAP** device so that it eliminates episodes of **apnea** and **hypopnea**. A **sleep technologist** raises and lowers the air pressure to find the best setting for you. An **APAP** unit is autotitrating.

total recording time The length of time from "lights out" to "lights on.

total sleep time The total amount of time you spend asleep during the **total recording time**.

Type 1 sleep study An *overnight sleep study*

Type 2 sleep test A **home sleep test** that records seven or more channels of information. Recorded signals may include airflow, **respiratory effort**, **blood oxygen saturation**, brain activity (**EEG**), heart activity (**EKG**), leg movements (**EMG**) and eye movements (**EOG**).

Type 3 sleep test A **home sleep test** that records four to seven channels of information. This is the most common type of home sleep test. Recorded signals may include airflow, **respiratory effort**, **blood oxygen saturation** and heart activity (**EKG**).

Type 4 sleep test A **home sleep test** that records only one to three channels of information. It may record only **blood oxygen saturation** using an **oximeter**. Another recorded measure may be airflow.

WASO *Wake after sleep onset.* The total amount of time you spend awake in bed after **sleep onset**.

Reviewed by David Kuhlmann, MD
Updated March 26, 2008

More Information

Overnight Sleep Study

Home Sleep Test

Questions: Home Sleep Tests

Sleep Studies: Home or Away?

Is a Home Sleep Test for You?

E-6

Sleep & Growing Older

National Institute on Aging
National Institutes of Health
U.S. Department of Health and Human Services

I. Introduction

Sleep needs change over a person's lifetime. Children and adolescents need more sleep than adults. Interestingly, older adults need about the same amount of sleep as younger adults -- seven to nine hours of sleep per night.

Unfortunately, many older adults often get less sleep than they need. One reason is that they often have more trouble falling asleep. A study of adults over 65 found that 13 percent of men and 36 percent of women take more than 30 minutes to fall asleep.

Also, older people often sleep less deeply and wake up more often throughout the night, which may be why they may nap more often during the daytime. Nighttime sleep schedules may change with age too. Many older adults tend to get sleepier earlier in the evening and awaken earlier in the morning.

There are many possible explanations for these changes. Older adults may produce and secrete less melatonin, the hormone that promotes sleep. They may also be more sensitive to -- and may awaken because of -- changes in their environment, such as noise.

Older adults may also have other medical and psychiatric problems that can affect their nighttime sleep. Researchers have noted that people without major medical or psychiatric illnesses report better sleep.

Not sleeping well can lead to a number of problems. Older adults who have poor nighttime sleep are more likely to have a depressed mood, attention and memory problems, excessive daytime sleepiness, more nighttime falls, and use more over-the-counter or prescription sleep aids. Poor sleep is also associated with a poorer quality of life.

Many people believe that poor sleep is a normal part of aging, but it is not. In fact, many healthy older adults report few or no sleep problems. Sleep patterns change as we age, but disturbed sleep and waking up tired every day are not part of normal aging. If you are having trouble sleeping, see your doctor or a sleep specialist. There are treatments that can help.

II. Sleep Disorders

If you have a sleep disorder it can be hard to get a good night's sleep. Sleep disorders can make it hard to fall asleep or stay asleep during the night and can make you drowsy during the day. The following are the most common sleep disorders among older adults:

1. Insomnia
2. Sleep-disordered breathing, such as snoring and sleep apnea
3. Movement disorders, such as restless legs syndrome

Insomnia

Insomnia is the most common sleep complaint at any age. It affects almost half of adults 60 and older.

If you have insomnia, you may experience any one or any combination of the following symptoms:

1. Taking a long time -- more than 30 to 45 minutes -- to fall asleep
2. Waking up many times each night
3. Waking up early and being unable to get back to sleep
4. Waking up feeling tired

Short-term insomnia, lasting less than one month, may result from a medical or psychiatric condition. Or it may occur after a change in personal circumstances like losing a loved one, relocating, or being hospitalized. If insomnia lasts longer than a month, it is considered chronic, even if the original cause has been resolved.

Many factors can cause insomnia. However, the most common reason older adults wake up at night is to go to the bathroom. Prostate enlargement in men and continence problems in women are often the cause. Unfortunately, waking up to go to the

bathroom at night also places older adults at greater risk for falling.

Disorders that cause pain or discomfort during the night such as heartburn, arthritis, menopause, and cancer also can cause you to lose sleep. Medical conditions such as heart failure and lung disease may make it more difficult to sleep through the night, too.

Neurologic conditions such as Parkinson's disease and dementia are often a source of sleep problems, as are psychiatric conditions, such as depression. Although depression and insomnia are often related, it is currently unclear whether one causes the other.

Many older people also have habits that make it more difficult to get a good night's sleep. They may nap more frequently during the day or may not exercise as much. Spending less time outdoors can reduce their exposure to sunlight and upset their sleep cycle. Drinking more alcohol or caffeine can keep them from falling asleep or staying asleep.

Also, as people age, their sleeping and waking patterns tend to change. Older adults usually become sleepier earlier in the evening and wake up earlier in the morning. If they don't adjust their bedtimes to these changes, they may have difficulty falling and staying asleep.

Lastly, many older adults take a variety of different medications that may negatively affect their sleep. Many medications have side effects that can cause sleepiness or affect daytime functioning.

Sleep-Disordered Breathing

Sleep apnea and snoring are two examples of sleep-disordered breathing -- conditions that make it more difficult to breathe during sleep. When severe, these disorders may cause people to wake up often at night and be drowsy during the day.

Snoring is a very common condition affecting nearly 40 percent of adults. It is more common among older people and those who are overweight. When severe, snoring not only causes frequent awakenings at night and daytime sleepiness, it can also disrupt a bed partner's sleep.

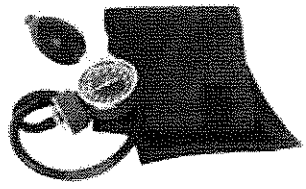
Snoring is caused by a partial blockage of the airway passage from the nose and mouth to the lungs. The blockage causes the tissues in these passages to vibrate, leading to the noise produced when someone snores.

There are two kinds of sleep apnea: obstructive sleep apnea and central sleep apnea. Obstructive sleep apnea occurs when air entering from the nose or mouth is either partially or completely blocked, usually because of obesity or extra tissue in the back of the throat and mouth.

If these episodes occur frequently or are severe, they may cause a person to awaken frequently throughout the night. This may disrupt their sleep and make them sleepy during the day.

Central sleep apnea is less common. It occurs when the brain doesn't send the right signals to start the breathing process. Often, both types of sleep apnea occur in the same person.

Obstructive sleep apnea is more common among older adults and among people who are significantly overweight. Obstructive sleep apnea can increase a person's risk for high blood pressure, strokes, heart disease, and cognitive problems.



However, more research is needed to understand the long-term consequences of obstructive sleep apnea in older adults.

Movement Disorders

Two movement disorders that can make it harder to sleep include restless legs syndrome, or RLS, and periodic limb movement disorder, or PLMD. Both of these conditions cause people to move their limbs when they sleep, leading to poor sleep and daytime drowsiness. Often, both conditions occur in the same person.

Restless legs syndrome is a common condition in older adults and affects more than 20 percent of people 80 years and older. People with RLS experience uncomfortable feelings in their legs such as tingling, crawling, or pins and needles.

This often makes it hard for them to fall asleep or stay asleep, and causes them to be sleepy during the day.

Although scientists do not fully understand what causes restless legs syndrome, it has been linked to a variety of conditions.

Some of these conditions include iron deficiency, kidney failure and dialysis, pregnancy, and nerve abnormalities.

Periodic limb movement disorder, or PLMD, is a condition that causes people to jerk and kick their legs every 20 to 40 seconds during sleep. As with RLS, PLMD often disrupts sleep -- not only for the patient but the bed partner as well. One study found that roughly 40 percent of older adults have at least a mild form of PLMD.

Another condition that may make it harder to get a good night's sleep is rapid eye movement sleep behavior disorder, also known as REM sleep behavior disorder (RBD). It is somewhat more common in men over the age of 50.

REM sleep, or rapid eye movement sleep, is the most active stage of sleep where dreaming often occurs. During normal REM sleep, the eyes move back and forth beneath the eyelids, and muscles cannot move. In more severe forms of REM sleep behavior disorder, the muscles become quite mobile and sufferers often act out their dreams.

III. Getting Help for Your Sleep

If you are often tired during the day and don't feel that you sleep well, you should discuss this with your doctor or healthcare provider. Many primary care providers can diagnose sleep disorders and offer suggestions and treatments that can improve your sleep.

Before you visit the doctor, it may be very helpful for you to ask for and keep a sleep diary for a week or more. A sleep diary will give you and your doctor a picture of your sleep habits and schedules and help determine whether they may be affecting your sleep.

During your appointment your doctor will ask you about your symptoms and may have you fill out questionnaires that measure the severity of your sleep problem.

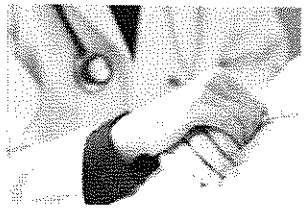
It is also helpful to have your bed partner come with you to your appointment since he or she may be able to report symptoms unknown to you like loud snoring, breathing pauses, or movements during sleep.

Since older people are more likely to take medications and to have medical problems that may affect sleep, it is important for your doctor to be aware of any health condition or medication your are taking.

Don't forget to mention over-the-counter medications, coffee or caffeine use, and alcohol since these also may have an impact on your sleep.

The doctor will then perform a physical examination. During the exam the doctor will look for signs of other diseases that may affect sleep, such as Parkinson's disease, stroke, heart disease, or obesity. If your doctor feels more information is needed, he or she may refer you to a sleep center for more testing.

Sleep centers employ physicians and others who are experts in problems that affect sleep. If the sleep specialist needs more information, he or she may ask you to undergo an overnight sleep study, also called a polysomnogram, and/or a sleepiness, or a nap test. A polysomnogram is a test that measures brain waves, heart rate, breathing patterns and body movements.



A common sleepiness test is the multiple sleep latency test. During this test, the person has an opportunity to nap every two hours during the daytime. If the person falls asleep too quickly it may mean that he or she has too much daytime sleepiness.

IV. Treatments for Sleep Disorders

Based on your sleep evaluation, your doctor or sleep specialist may recommend individual treatment options. It is important to remember that there are effective treatments for most sleep disorders.

If you are diagnosed with a sleep disorder, your doctor may suggest specific treatments. You should ask for information to find out more about your condition and ways to improve your sleep.

There are a number of therapies available to help you fall asleep and stay asleep. You may want to try limiting excessive noise and/or light in your sleep environment.

Or, you could limit the time spent in bed while not sleeping, and use bright lights to help with circadian rhythm problems. Circadian rhythm is our 24-hour internal body clock that is affected by sunlight.

Some specialists believe medications also can be useful early in your treatment, and if necessary, you can use them from time to time if you have trouble falling asleep.

People who are diagnosed with sleep apnea should try to lose weight if possible, but often they may need other treatments as well. Adjusting your body position during the night may benefit you if you experience sleep apnea more often when you lie on your back.

The most effective and popular treatment for sleep apnea is nasal continuous positive airway pressure, or CPAP. This device keeps your air passages open by supplying a steady stream of air pressure through your nose while you sleep.

To use the CPAP, the patient puts on a small mask that fits around the nose. Air pressure is delivered to the mask from a small, quiet air pump that sits at the bedside. The patient not only wears the mask at night but also during naps, since obstructions can occur during these times as well.

If you have a mild case of sleep apnea, sometimes a dental device or appliance can be helpful. If your condition is more severe and you don't tolerate other treatments, your doctor may suggest surgery to increase the airway size in the mouth and throat. One common surgical method removes excess tissue from the back of the throat.

Very often, people who suffer from movement disorders during sleep such as restless legs syndrome or periodic limb movement disorder are successfully treated with the same medications used for Parkinson's disease. People with restless legs syndrome often have low levels of iron in their blood. In such cases doctors often prescribe supplements.

Medications can also treat people with REM behavior disorder. If there are reports of dangerous activities such as hitting or running during these episodes, it may be necessary to make changes to the person's sleeping area to protect sufferers and their bed partners from injury.

Many sleep problems will improve with changes that you can make on your own. You can often sleep better by simply following the practices of good sleep hygiene.

Sleep hygiene consists of basic habits and tips that help you develop a pattern of healthy sleep. There are also easy ways to make your bed and your bedroom more comfortable. See the Resources section of this site to find out how you can start down the path to better sleep.

You can also take the Sleep and Growing Older Quiz to test yourself on what you read in this article.

Sleep & Men

For many men, sleep is just one more thing at the bottom of the list of all that needs to be done in a day. It seems like wasted time that prevents them from getting any work done. These wrong ideas about sleep keep men from tapping into the power of a well-rested mind and body.

In reality, sleeping is your most valuable activity of the day. The more you invest in your sleep, the bigger return you will see in everything else that you do.

Sleep allows your body to actively recharge itself and prepare for the next day. Sleeping well enables you to feel, think, and perform better. It allows you to maximize your time and your energy during the day.

The best way to do all that you want to do is to make sure that you get the sleep your body needs.

I. What Keeps Men from Getting Enough Sleep?

Lack of Awareness
Many men simply don't realize that they need more sleep. They view sleepiness as a positive sign that they must be working hard. They get used to being tired, and they think that's the way it's supposed to be. They believe that they just have to fight through it.

Every person has their own need for sleep. This need varies from one person to another. On average, most adults need seven to eight hours of sleep each night to feel alert and well rested.

Many men do not get this much sleep on a regular basis. As a result, they are not able to function at a maximum level of energy and concentration.

The following are signs that you are not getting enough sleep:

- You feel tired and lack energy during the day.
- You have a hard time paying attention during meetings.
- You are unmotivated and have trouble "getting going."
- You are irritable, grouchy or lose your temper easily.
- You must use an alarm clock to wake up on time in the morning.
- You start to doze off when you are driving a car.

Sleeping in later is not an option for most people who have to be at work early in the morning. Not too many employers are going to let you take a daytime nap, either. The solution is to go to bed earlier.

Plan to go to bed early enough so that you will have seven to eight hours before you have to get up in the morning. Set it as a goal and make it a priority. After doing this for a while, you will have a better idea if you need even more than eight hours of sleep, or maybe less than seven, to feel refreshed when you wake up.

Work Demands
A man's job can demand so much of his time that it doesn't leave much room for sleep. In order to get ahead, you may feel like you have to put in extra hours at night, go in on the weekends, or be the first one there in the morning. A long commute through heavy traffic may take away even more of your free time.

Even when you are away from the job, your work can consume your time. You may have paperwork that you have to finish at home. Your cell phone won't stop ringing. Your e-mail needs to be constantly checked. Before you are even aware of it, time has flown by and it is well past your normal bedtime.

The stress and pressure of a job can also affect your sleep. Each night might be filled with worries and anxiety about what is going to happen tomorrow. Your body wants to rest, but your mind won't stop spinning.

As a result, you toss and turn in bed late into the night. Maybe you fall asleep quickly but wake up in the middle of the night and can't go back to sleep. Before long, the alarm clock says that it's time to get up and start the day.

You need to try your best to leave your work at work. As much as it is possible, don't bring your job home with you. You need time away to relax both your body and your mind. Set boundaries and protect your personal free time.

This will be very hard if you work from home. You will need to find ways to get out of the house to relax and unwind.

You should also find a way to get your worries out of your system during the day. Talk to one of your buddies about them. Release them at the gym. Simply make sure that your bed is a place of rest, not worry.

Full Schedules
Many men have schedules that are filled with much more than just work. They go to the gym for a regular workout. They play sports or go see the local teams in action. They work on the car or on projects around the house. They are involved with a civic group, fraternal order, or local church.

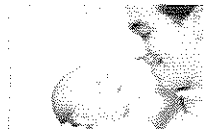
Single men go on dates or out on the town with friends. Married men pick up the kids from practice or help them with their homework. The list of people, places, and things that can exhaust a man's time is endless.

The key is to set priorities and balance your time. Take an honest look at your schedule to see if you are doing too much. Some things are more urgent than others. Not everything has to be done today, and not everything has to be done by you.

Some things that are important can still be re-arranged so that you make better use of your time. Other things may need to be scaled back so you don't do them as often or for so long. Still other things that are not a high priority may need to be eliminated right now. You can always come back to them if you free up more time in your schedule down the road.

As you are deciding which activities are important, make sure that sleeping is one of them. Put it at the top of your list, not at the bottom.

Life Changes
Life is full of changes that can have a big impact upon how you sleep. Some changes you expect, but others catch you by surprise. Negative changes will tend to disturb your sleep the most.



But positive changes can affect you too. Along with excitement, good changes bring new duties and stress that can keep you up at night.

Examples of these kinds of changes include the following:

- Getting married
- Having a baby
- Starting a new job
- Moving

Examples of the negative changes that can greatly affect your sleep include the following:

- Losing a loved one
- Losing a job
- Getting divorced
- Being in an auto accident
- Having a major illness
- Being involved in a lawsuit
- Making a bad investment

These changes can cause you to have feelings of depression. For many men, it begins so slowly that they never become aware that they are depressed. Over time, it can progress to the point where despair is just a normal part of their lives.

Depression can greatly disrupt the quality of your sleep. You might lie in bed tossing and turning late into the night. You also might sleep for a long time with no motivation to get out of bed.

As poor sleep progresses, men stop taking care of their bodies in other ways. They stop eating and exercising regularly. They abuse alcohol and drugs. Overall, they may lose their usual interest and pleasure in the normal activities of daily life.

Men are more likely to keep these feelings of depression trapped inside. They don't often deal with them openly. In some cases, these feelings one day explode in a violent outburst.

Depressed men often turn this violence on themselves. Statistics show that men are four times as likely as women to kill

themselves.

Many men resist seeking help from a counselor. They fear that people will think something is "wrong" with them. They need to understand that these feelings are perfectly normal. But while they are normal, they can also be hazardous to their health.

If you are struggling with feelings of depression, then at least start by talking to a spouse, friend, doctor or minister. Any of them can help you decide if you need to see a counselor. Don't fight this battle alone.

Bad Habits
Men can develop a number of habits that cause bad sleep. The use of alcohol, nicotine, and caffeine can all affect your sleep. You should avoid these substances in the afternoon and at night. Consuming them too close to your bedtime can keep you from sleeping well.

You may also eat big meals or exercise just before you go to bed. Both of these habits can also disturb your sleep. This can be hard to avoid if you have a lot going on in the evenings.

If needed, you might want to eat a bigger meal at lunch and a smaller meal for dinner. To fit in your workout, perhaps you can try to exercise before work or on your lunch break.

Men also may keep an irregular sleep schedule. They go to bed and wake up at different times every day. This can disrupt your internal body clock and keep you from sleeping soundly. You should try to wake up at the same time every day. This includes weekends and holidays. This will help to keep your internal clock set at the right time.

Try to avoid sleeping in later on the weekends to catch up on lost sleep. Instead, go to bed earlier at night when you are tired. You should also keep naps to less than one hour. Be sure to take them in the early afternoon so you are not wide awake at bedtime.

Medical Conditions
Many medical conditions can keep you from being able to sleep well. Some of these are only temporary. A sprained ankle, the flu, or minor surgery will disrupt your sleep for a short while. Other problems may stay with you for the rest of your life. These illnesses and medical conditions become more common as you grow older.

The following are examples of medical conditions that can greatly disturb your sleep:

- Epilepsy
- Asthma and other respiratory diseases
- Heart disease
- Arthritis

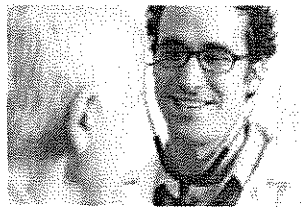
Medications used to treat these and other problems can also hinder you from getting quality sleep. Some drugs might make you jittery and keep you up at night. Others will cause you to be very sleepy during the day.

Discuss these medications with your doctor. Changing the dose or when you take the drug might make a big difference for you.

II. What Sleep Disorders Affect Men?

There are many men who are unable to get quality sleep even though they spend enough time in bed each night. It may take them a long time to fall asleep. Their sleep may be disrupted and broken. They may sleep through the night but still feel tired the next day.

These are all signs of sleep disorders that are common to men. Most men who have a sleep disorder are unaware of it. Even when they are aware, many times they will not seek help for it.



Detecting and treating a sleep disorder can cause a dramatic improvement in your sleep. This will allow you to sleep your best at night and feel your best during the day.

These are some of the most common sleep disorders that affect men:

Obstructive sleep apnea (OSA)
Obstructive sleep apnea (OSA) occurs when the tissue in the back of the throat collapses during sleep. This keeps air from getting in to the lungs. This is very common, because the muscles inside the throat relax as you sleep.

Gravity then causes the tongue to fall back and block the airway. It can happen a few times a night or several hundred times per night.

These pauses in breathing briefly wake you up and disturb your sleep. This can cause you to be very tired the next day. Men are twice as likely as women to have OSA.

Being overweight and having a large neck size also greatly increase your risk of suffering from it. These men have more fatty tissue in their throat that can block their airway.

The primary signs of OSA are daytime sleepiness and loud snoring. Snoring is due to a partial blockage of the airway during sleep. It tends to increase as you age. There is a range of snoring from simple to severe.

Simple, primary snoring is "normal" and is mostly harmless. But loud, severe snoring with gasps and snorts is a cause for concern.

Many men do not even know that they snore. It is often a spouse or bed partner who detects the loud snoring problem.

Some men consider snoring to be a badge of honor. It is a sign of true masculinity. But they don't realize that there are dangers that can come along with it.

Sleep apnea may make it hard for you to think or concentrate during the day. If left untreated, it may also put you at risk of heart disease, high blood pressure or diabetes.

Talk to your doctor if you snore loudly and are often tired during the day. He may refer you to a sleep specialist to find out if you have sleep apnea.

Losing weight and sleeping on one's side may help in some mild cases of OSA. Severe sleep apnea requires medical treatment.

Continuous positive airway pressure (CPAP) is the most common way to treat OSA in adults. CPAP provides a gentle and steady flow of air through a mask that is worn over the nose. This keeps the airway open and prevents pauses in breathing as you sleep.

Surgery or the use of an oral appliance (similar to a sports mouth guard) may be a better option for some people.

Narcolepsy
Narcolepsy is the term used to describe people who suffer from extreme sleepiness. It can cause you to suddenly fall asleep. These "sleep attacks" can happen while eating, walking or driving.

Narcolepsy usually starts between the ages of 12 and 20 and can last for your entire life. It does not get better without treatment.

Talk to your doctor if you are so tired that you might fall asleep at any time. He might refer you to a sleep specialist to find out if you have narcolepsy.

Medications can be used to treat narcolepsy and help you have a more normal pattern of being asleep and awake.

Delayed sleep phase disorder (DSP)
Busy work and social schedules can cause some men to get in the habit of going to bed very late. Delayed sleep phase disorder (DSP) is when you can only fall asleep a couple hours or more later than normal. This also causes you to have a hard time waking up early in the morning.

Your internal body clock makes you feel sleepy or alert at regular times every day. Everyone's body has this natural timing system. A consistent habit of staying up and sleeping late can throw off the timing of your body clock. This can prevent you from being able to fall asleep at a decent time.

To correct DSP, try to avoid bright light in the late afternoon and evening. Keep the lights in the house dim and make your bedroom dark when you go to sleep. Then get plenty of bright sunlight in the morning and early afternoon.

This will help to keep your body clock set at the right time. The key is for your eyes to see the light. They send the signals to your brain that will be used to set your body clock. Your skin does not need to be exposed to the sunlight.

Jet lag disorder and shift work disorder
Your work conditions can also cause you to have jet lag or shift work disorders. Men who often travel long distances by

airplane suffer from jet lag. A long trip quickly puts you in a place where you need to sleep and wake at a time that is different than what your internal body clock expects.

Your body clock does not have time to adjust right away to a new location due to the speed of the travel. This makes it very hard for you to sleep well.

Men who work rotating, early-morning or night shifts often suffer from shift work disorder. Your schedule requires you to work when your body wants to sleep. Then you have to try to sleep when your body expects to be awake. This causes you to have trouble sleeping and to be severely tired.

The use of melatonin supplements has been shown to help some people who suffer from jet lag. Melatonin is a hormone that is released by the brain at night. It seems to play a role in making you sleepy.

Light therapy also may help someone with jet lag or shift work. Light therapy is used to expose your eyes to intense amounts of light. This occurs for a specific and regular length of time.

This light is meant to affect your body clock in the same way that sunlight does. Talk to your doctor to see if either melatonin or light therapy might help you sleep better.

Inadequate sleep hygiene
This insomnia might also be called "bad sleep habits." It involves the things that you normally do every day. These habits keep your sleep from being refreshing. They can also keep you from feeling alert during the day.

These activities are all things that you should be able to control. They include such things as drinking alcohol or caffeine at night, taking long naps during the day, or keeping an irregular sleep schedule.

A sleep specialist can use behavioral therapy or sleep hygiene training to help you overcome these bad habits.

III. How Can Men Sleep Better?

Most men will sleep much better if they simply develop the habits of good sleep hygiene. Sleep hygiene consists of basic tips that help you develop a pattern of healthy sleep. See the Resources section of this site to find out how anyone can start down the path to better sleep.

Some men think that drinking alcohol will help them sleep better. Alcohol makes you sleepy and might help you fall asleep faster. But it is also likely to cause you to wake up during the night. Many people wake up too early after drinking alcohol in the evening.

This may be a "rebound" from the use of alcohol. It stays in your system for a long time after you have a drink. To improve your sleep, you should not have any alcohol within six hours of your bedtime. You should also limit how much and how often you drink. The heavy use of alcohol can be harmful to your overall health.

Men sometimes see sleeping pills as the answer to their sleep problems. These drugs can be useful in helping some people sleep better. But pills should not be seen as a long-term solution for better sleep. Doctors rarely prescribe them for more than a few weeks at a time.

You can also find many sleep aids on the shelves of your local drugstore. Most of these use antihistamine, the same ingredient found in many cold medicines. While they can have a positive effect on your sleep, they can also make you very groggy during the day. They should be used with caution.

You should not depend upon drugs to help you sleep on a regular basis. Talk to your doctor about other options that will help improve your sleep.

If you have trouble sleeping for more than a month, talk to your doctor about it. Don't think that it will just go away over time. He may encourage you to visit a sleep specialist to find the source of your sleeping difficulty.

Before going to see a specialist, complete a daily sleep diary for two weeks. The sleep diary will help the doctor see your sleeping patterns. This information gives the doctor clues about what is hindering your sleep and how to help you.

Your sleep is too important for you to ignore the signs of trouble. You have too much to gain by seeking help from a doctor. Don't put it off. Your sleep will affect the quality of every other area of your life.

Reviewed by Norman J. Wilder, MD
Updated on May 11, 2006

E-8

Sleep & Women

Sleep plays a vital role in promoting a woman's health and well being. Getting the sleep that you need is likely to enhance your overall quality of life. Yet as a woman you face many potential barriers that can disrupt and disturb your sleep. Overcoming these challenges can help you enjoy the daily benefits of feeling alert and well rested.

Experts suggest that most men and women need about seven to eight hours of sleep each night. Yet there are many differences in how men and women sleep. In general women tend to sleep more than men, going to bed and falling asleep earlier. A woman's sleep also tends to be lighter and more easily disturbed. Women are more likely to feel unrefreshed even after a full night of sleep.

Women also tend to describe sleep problems using different terms than men. Women may be less likely to say that they feel sleepy during the day. Instead women often describe feeling tired, unrested or fatigued. These expressions reflect feelings of physical or mental exhaustion. Women also may report an overall lack of energy or vitality.

There are many complex factors that may affect how a woman sleeps. Some of these factors change over time. For example, excessive daytime sleepiness is more common when women are in their 20s and 30s. In contrast older women appear to adapt better to periods of sleep loss. This difference has been attributed to the many commitments that compete for a young woman's time. In particular working moms must balance the demands of their career, family, friends and personal health needs. Yet a recent study provides encouragement for mothers. It showed that having children does not increase a woman's risk of daytime sleepiness or fatigue.

Common factors that affect a woman's sleep include:

- Life events
- Depression
- Illness
- Bad sleep habits
- Medication use
- Physical or hormonal changes

Other factors that can affect a woman's sleep include:

Sleep Disorders

Millions of women suffer from an ongoing sleep disorder. These problems often remain undiagnosed. These are some of the 81 sleep disorders that are most likely to affect women:

- **Insomnia**

  Insomnia occurs when a person has trouble falling asleep or staying asleep, wakes up too early, or feels unrefreshed after sleeping. It is a common sleep complaint that tends to be more common in women than in men. It often is related to another problem such as depression, stress or anxiety, or medication use. In older women it often is caused by other medical problems.

- **Obstructive sleep apnea**

  OSA involves pauses in breathing that occur when tissue in the back of the throat collapses and blocks the airway as you sleep. It has been linked to other serious health problems such as heart failure, high blood pressure, stroke and diabetes. OSA occurs in about two percent of women. Yet this problem often is overlooked by both women and their doctors. Women with OSA are less likely than men to report having pauses in breathing or loud snoring. Instead they are more likely to have a history of depression or a problem with insomnia.

- **Snoring**

  Snoring occurs during sleep when breathing causes tissue in the back of your throat to vibrate. Habitual snoring occurs in about 24 percent of adult women. Loud and frequent snoring is a warning sign for OSA.

- **Restless legs syndrome**

  RLS involves an intense urge to move the legs. The intensity of this urge increases at night and as you lie or sit still. It is relieved only by walking or moving the legs. RLS may occur up to twice as often in women as in men. It can cause severe sleep disruption.

- **Sleep related eating disorder**

  SRED consists of repeated episodes of compulsive binge eating and drinking after waking up in the night. It tends to occur when you are only partially awake. The majority of people with SRED are women.

- **Leg cramps**

  Sleep related leg cramps are common in women. They involve sudden and intense feelings of pain in the leg or foot.

- **Nightmares**

  A nightmare is a bad dream that causes you to wake from your sleep. A nightmare disorder may develop if you have repeated nightmares that cause emotional distress. Recurring nightmares can cause sleep avoidance. They also have been linked to depression and suicidal thoughts. Women report nightmares more often than men and discuss them more openly.

Medical Problems

Many medical problems hinder your ability to sleep well. Treating an underlying medical problem often will lead to improved sleep. These are some of the most common medical problems that affect the sleep of women:

- Acid reflux
- Arthritis
- Asthma
- Back pain
- Epilepsy
- Fibromyalgia
- Multiple sclerosis
- Parkinson disease

Pregnancy

A woman's body goes through drastic changes during and after pregnancy. These changes can be physical, hormonal and emotional. All of these changes can affect a woman's sleep.

Most pregnant women experience daytime fatigue even though they may get more sleep. This is because the quality of their sleep tends to be worse. Physical discomfort and awakenings are common. The third trimester tends to be the time when it is hardest to sleep well.

Studies show that snoring often increases during pregnancy. Obstructive sleep apnea (OSA) also may develop as the pregnancy progresses. Warning signs for OSA may become more evident. These include gasping, choking sounds and pauses in breathing. OSA is more likely to develop if a woman had a high body mass index (BMI) prior to the pregnancy.

Two other sleep disorders that are more common during pregnancy are restless legs syndrome (RLS) and sleep related leg cramps. RLS affects nearly 25 percent of pregnant women. RLS may be related to low iron. So women who must take iron supplements during pregnancy may have a lower risk of RLS. Leg cramps occur in about 40 percent of pregnant women. They tend to go away after delivery.

Menopause

The hormonal and physical changes that occur during and after menopause can affect a woman's sleep. Sleep disturbances are more common, and sleep quality can decline. Insomnia related to menopause often occurs.

Obstructive sleep apnea (OSA) is much more common in postmenopausal women. This increase may be due in part to menopause-related weight gain. But it also appears to be hormone related. Estrogen seems to help protect women against OSA.

Fibromyalgia often develops due to menopause. Eighty percent of people with fibromyalgia are women. It peaks between the ages of 50 and 70 years. Widespread pain related to fibromyalgia can make it hard to sleep well. Restless legs syndrome (RLS) and sleep related leg cramps are more common as women age. But this increase is not linked directly to menopause.

More Information
Sleep Tips for Women

Sleep & Pregnancy

Sleep & Fibromyalgia

Insomnia Advice: Expert Q&A

Taking Sleep Medications

Reviewed by Rose Franco, MD
Updated August 6, 2007

E9

Sleep & Children

It is important to make sure that your child gets enough sleep and sleeps well. The value of sleep can be measured by your child's smiling face, happy nature and natural energy. A tired child may have development or behavior problems. A child's sleep problems can also cause unnecessary stress for you and the other members of your family.

Many parents are unsure of how much their child should sleep. Experts recommend that your child get the following amount of sleep at each stage of growth:

- Infants (3 to 11 months): 14 to 15 hours
- Toddlers: 12 to 14 hours
- Preschoolers: 11 to 13 hours
- School-age children: 10 to 11 hours

According to reports from parents, many American children are not getting enough sleep. Some children sleep different lengths of time, either shorter or longer. But most children do have the ability to sleep through the night. Children who do not sleep well may have a sleep problem.

These are some signs that your child has a problem with sleep:

- You spend too much time "helping" your child fall asleep.
- Your child wakes up repeatedly during the night.
- Your child snores very loudly or struggles to breathe during sleep.
- Your child's behavior, mood or school performance changes.
- Your child who used to stay dry at night begins to wet the bed.
- You lose sleep as a result of your child's bedtime and sleeping patterns.

Two Common Sleep Problems in Young Children

Many children have behavioral insomnia of childhood. This sleep disorder involves one or both of the two following problems:

1. Sleep-onset association

All of us wake up briefly a number of times during the night. This occurs most often during the stage of sleep when we have most of our dreams. This sleep stage is known as rapid eye movement (REM) sleep. Usually, we are unaware of these awakenings and return to sleep quickly.

Young children may cry when they wake up. Parents naturally may feel that they need to "help" their child return to sleep. Parents do this by feeding, rocking, holding or lying down with their child. As a result, many young children become unable to fall asleep on their own.

They depend on their parents' help instead of learning to comfort themselves. The child learns to connect or "associate" going to sleep with a person or activity. If this describes your child, then he or she may have a problem with sleep-onset association.

A parent may recognize this problem by saying something like this:

"I'm exhausted. I have to rock my child to sleep every night and for every nap. If she wakes up during the night, she won't fall asleep until I rock her again."

This parent's child appears to be connecting the action of falling asleep with being rocked. She is unable to fall asleep when that action is missing.

2. Limit-setting problems

Limit-setting problems usually begin after the age of two. It occurs when your child refuses to go to bed, stalls, or makes it hard for you to leave the bedside. Limit-setting problems can occur at bedtime, nap time, or when your child wakes up during the night.

Parents need to assert that they are the ones who decide when it is time for bed. They should enforce this time even if the child disagrees or seems active and alert. Children can get very creative when they want to stay up later.

They may ask for one more hug, a tissue, a drink of water, another story, to have the light turned off or on, or to "tell you something important." It can be hard to know what is real and what is simply a delay tactic.

You need to be firm and consistent when you respond to the delays. Giving in to them will only encourage the behavior. Parents need to give their children well-defined limits.

These are some tips to help your child sleep better:

- Follow a consistent bedtime routine. Set aside 10 to 30 minutes to get your child ready to go to sleep each night.
- Establish a relaxing setting at bedtime.
- Interact with your child at bedtime. Don't let the TV, computer or video games take your place.
- Keep your children from TV programs, movies, and video games that are not right for their age.
- Do not let your child fall asleep while being held, rocked, fed a bottle, or while nursing.
- At bedtime, do not allow your child to have foods or drinks that contain caffeine. This includes chocolate and sodas. Try not to give him or her any medicine that has a stimulant at bedtime. This includes cough medicines and decongestants.

A child who gets enough sleep and sleeps well is more likely to be cheerful during the day. The better the child sleeps, the happier the entire family will be. Most sleep problems in children are not a result of bad parenting. These problems also do not mean that there is something seriously wrong with your child.

If your child has an ongoing sleep problem, then you should talk to your child's doctor or to a sleep specialist.

By Carin Lamm, MD
AASM Education Committee
Updated February 3, 2006

E 10

AMERICAN ACADEMY OF SLEEP MEDICINE
Setting Standards & Promoting Excellence in Sleep Medicine

Accreditation FAQs

Answers are provided below to common questions about American Academy of Sleep Medicine (AASM) accreditation and the application process:

DEFINITIONS

What is the difference between a sleep disorders center and a laboratory for sleep related breathing disorders?

1. Both facilities must be able to diagnose the full spectrum of sleep disorders.
2. The sleep center also must provide follow-up care for patients with all sleep disorders, while the laboratory must provide follow-up care for patients with sleep-disordered breathing.
3. A facility that provides no sleep specialist consultation, treatment, and follow-up services does not meet the standards for accreditation.

What is the difference between a referring doctor and a consultant?

A referring doctor is usually a primary-care physician who refers patients to the sleep center. A consultant is a clinician who refers patients to the sleep center and also sees patients from the sleep center for specialized evaluation or treatment.

What is a direct referral?

A direct referral is a patient who is never seen in consultation by a sleep staff physician. The referring physician (PCP for purposes of this document although it is recognized physicians other than primary care providers may send patients as direct referrals) orders the sleep study, then treats and provides longitudinal care for this patient. A patient who is sent by the PCP for a sleep study and is seen in consultation by a sleep staff physician within 3 months of the sleep study is not a direct referral.

What is a board-certified sleep specialist?

A board-certified sleep specialist is a Diplomate of the American Board of Sleep Medicine, or a physician who has passed the certification examination in sleep medicine offered by one of the following member boards of the American Board of Medical Specialties: Internal Medicine, Otolaryngology, Pediatrics, Family Practice, and Psychiatry and Neurology.

REQUIREMENTS

I just completed a fellowship in sleep medicine and am board eligible. Why can't I be the board-certified sleep specialist for my sleep disorders center?

The AASM does not recognize the term "board eligible" for accreditation purposes. However, a physician who has not yet been board certified in sleep medicine can fulfill Standard 2 for a sleep

disorders center by submitting with the accreditation application a letter indicating acceptance to sit for the sleep medicine subspecialty exam that is offered every two years by these member boards of the American Board of Medical Specialties: Internal Medicine, Otolaryngology, Pediatrics, Family Practice, and Psychiatry and Neurology.

A person who has completed a fellowship in sleep medicine may fulfill Standard 2 for a laboratory for sleep related breathing disorders.

I only test patients at my lab but a board-certified sleep specialist interprets all the sleep studies. The patients are treated by their primary care doctors, not the sleep-specialist. Can my lab be accredited?

A facility that provides only testing does not meet the *AASM Standards for Accreditation* as a sleep disorders center or a laboratory for sleep related breathing disorders (Standard 1, Intent 1), and, therefore, cannot be accredited by the American Academy of Sleep Medicine.

What percentage of patients tested in my program can be 'direct referral' patients?

A sleep program may accept directly referred patients; however, no program may be 100% direct referral. A directly referred patient is one who is never seen in consultation by a sleep staff physician. The referring physician orders the sleep study, then treats and provides longitudinal care for this patient. A patient who is sent by the referring physician for a sleep study and is seen in consultation by a sleep staff physician within 3 months of the sleep study is not a direct referral. The medical information provided by the referring doctor must be reviewed by the medical director or a designated sleep center staff physician (Standard 4.b.) prior to performance of the sleep study on the directly referred patient. The site visitor will review cases of direct referrals if a program accepts them.

How many technicians do we need on our staff?

Standard 3.c. of the *Standards for Accreditation* requires a maximum of two patients for each technician under usual circumstances. Technicians generally work 40 hours per week. Most programs have technicians work either three 12-hour shifts (with some daytime work to reach 40 hours) or four 10-hour shifts. The patient volume statistics on Form V of the application for accreditation should indicate that these parameters are being followed.

How many Registered Polysomnographic Technologists (RPSGTs) are we required to have on our staff?

Currently, none. However, passing the registry examination provides evidence of the commitment and level of expertise needed to perform sleep testing. Beginning July 1, 2009, at least one full time employee of the sleep program must be certified by the Board of Registered Polysomnographic Technologists (BRPT) or accepted to sit for its certification examination. Additionally, beginning July 1, 2009, all technicians not certified by the BRPT must be enrolled in A-STEP or enrolled in a CoA PSG training program, or a CoA END or CoARC training program with the add on track for polysomnography.

How big should our bedrooms be?

Standard 6.a. provides guidelines for bedroom size. The recommended size is 140 square feet with no dimension shorter than 10 feet. At least one bedroom and bathroom must be handicap accessible.

THE APPLICATION

What common mistakes can we avoid when submitting our application?

The most common mistake is failing to review the application for completeness and accuracy. Unnecessary delays of up to 8 weeks can be avoided by a detailed review of the application.

Examples of incomplete data in an application:

- The medical director's medical license has expired.
- CPR cards are not submitted for all sleep techs, some are expired, or CPR has not included hands-on (manikin) training.
- Templates for policies and procedures were purchased but were not revised to include information specific to your sleep facility.
- Patient cases are incorrect:
    - The case is of a patient with periodic leg movements during sleep but no clinical history to support the diagnosis of restless legs syndrome.
    - The insomnia patient is given information on sleep hygiene and a prescription for a hypnotic. There is no evidence of behavior therapy, i.e., stimulus control, sleep restriction, relaxation therapy.

Who should complete the application for accreditation?

It is expected that the medical director will take a major role in completing the application. The chief technical person and administrator for the sleep program should work with the medical director. Both the chief technical person and the medical director should review the application prior to submission. Once the application is complete, the medical director must sign a statement attesting that all information in the application is true (Form I).

Why does Form II require biographical information?

Form II provides the reviewer and site visitor with information about the training and outside commitments of the professional staff. This helps show that the physicians on staff will be able to meet the needs of the volume of patients you report on Form V.

The *Standards for Accreditation* require the regular participation of a physician and a board-certified sleep specialist, or an individual who has been accepted by an American Board of Medical Specialties-approved board to sit for the certification examination in sleep medicine, in the day-to-day activities of the facility. All staff physicians should be able to document some formal training in sleep medicine.

I see insomnia patients in the office of my private practice, not at the sleep center. Do they count in the patient volume statistics on Form V?

This question reflects a common misunderstanding of the nature of the sleep disorders program. A sleep program is not just a testing facility. Clinical patient care is provided in the form of evaluation, diagnosis, and treatment. Patient care can be provided in the testing facility, but more often, it is provided in a private office or clinic.

This means that the office or clinic is part of the sleep disorders program. Your patient volume statistics and your cumulative database (Standard 17.d.) should include patients seen in the office or clinic who

do not always need a polysomnogram, such as patients with insomnia or restless legs syndrome. The statistics also should include patients tested in the facility who are not seen by one of the program's professional staff members, that is, direct referrals.

What should I include in my quality assurance program?

This program should consist of regularly measured indicators that encourage continuous improvements in patient care. The program must provide for a regular review of polysomnogram scoring to ensure inter-scorer reliability with the board-certified sleep specialist, or with an individual who has been accepted by an American Board of Medical Specialties-approved board to sit for the certification examination in sleep medicine.

The program also must include at least three other indicators. Examples include the timeliness of reports, patient satisfaction, and sentinel events.

What are reviewers looking for in the inter-scorer reliability data?

They want to see that the board-certified sleep specialist, or an individual who has been accepted by an American Board of Medical Specialties-approved board to sit for the certification examination in sleep medicine, is the gold standard against which all technicians/technologists who score tests are compared. Applications that rate one scorer against the technical director or a chief technician are inadequate. Standard 14.c. on inter-scorer reliability changed as of January 2007. All accredited sleep facilities should modify their inter-scorer reliability protocols to meet the new Standard.

The gold standard and each scoring tech independently score the chosen epochs. Inter-scorer reliability is to be completed on 200 continuous epochs of three nocturnal polysomnograms per quarter for a total of twelve records per year. Inter-scorer reliability is to be compared for respiratory events, sleep stage scoring, and leg movements. Reliability of sleep stage scoring is on an epoch-by-epoch basis so that a percentage of agreement is reached.

Each sleep program determines its own acceptable percentage of agreement for each parameter, such as 85 percent or higher. A clear standard for a percent agreement with the gold standard meets the requirement.

The inter-scorer reliability policy also must include the steps that are taken when a scoring tech falls below the program-defined level of acceptability. Examples of remedial actions include regular reading sessions with a more experienced scorer, additional training at a school of sleep technology, or review of a computerized scoring training program.

Why were my sample cases rejected?

Sample cases are rejected most often because they are incomplete. Many applications include only polysomnography results. Required supplemental materials include history and physical examination, results of sleep studies (if any), results of consultation with specialists (if any), and office follow-up to discuss results of the sleep study and treatment.

Reviewers will check the history and physical exam data to ensure that patients studied with polysomnography meet the indications in the AASM Practice Parameter. Polysomnographic results are not required for the insomnia and restless legs syndrome cases.

A brief summary of the polysomnogram results is not an adequate treatment plan. Submitting a case that is "lost to follow-up" is another reason for rejection.

I'm a pulmonologist and I see only sleep apnea patients. How do I find a restless legs syndrome (RLS) patient for my application?

RLS is a common sleep disorder and will be encountered even when the focus of a sleep medicine practice is on sleep related breathing disorders. Most sleep specialists will have a patient referred for daytime sleepiness or restless sleep who receives a final diagnosis of RLS. A patient with both a sleep related breathing disorder and RLS may serve as the sample case for restless legs syndrome.

The requirement of a sample RLS case ensures that the patient history includes questions that are necessary to diagnose the syndrome. It also shows that patients with this disorder are treated appropriately.

Many applications mistakenly include a case of asymptomatic periodic limb movements in sleep in the place of the RLS case.

ACCREDITED CENTERS AND LABORATORIES

My facility is relocating, merging, or changing ownership. Am I required to contact the AASM?

Yes. Facilities that are undergoing a significant change such as relocation or change in ownership status must contact the AASM within 90 days of the change. In most circumstances, a center or laboratory will be required, under the special circumstances section of the application, to submit a complete application. Applications fees will be waived. The facility will receive a 90-day extension of accreditation while the application is being reviewed. This will be followed by a site visit, the direct costs of which will be paid by the facility. The report of the site visitor will be reviewed by the Executive Committee and, if approved, accreditation will continue through the original term.

Contact the AASM national office for more information about accreditation.

CITY OF GROSSE POINTE WOODS

BUILDING DEPARTMENT

MEMORANDUM

TO: Public Safety

FROM: Gene Tutag, Building Official

DATE: August 25, 2010

SUBJECT: 20160 Mack Avenue

The Building Department received a complaint that a sleep clinic has been established in the basement of the above address.

Please check the premises after 10:00 p.m. for either:

1) Cars in the lot; or
2) Operation of clinic and staff present

I can be reached on my cell phone #313-363-8337 if you have any questions/comments.

Thank you.

Gene Tutag
Building Official

cc:
Joe Provost

CITY OF GROSSE POINTE WOODS
20025 Mack Plaza Drive
Grosse Pointe Woods, Michigan 48236-2397

September 8, 2010

SUBJECT: 20160 and 20176 Mack Avenue, Grosse Pointe Woods

Dr. H. Policherla, DDS
20160 Mack Avenue
Grosse Pointe Woods, MI 48236

Dear Dr. Policherla:

In accordance with the attached Michigan Building Code, Sections 2702.2.2 and 2702.2.3, you are required to hire an electrical contractor to obtain an electrical permit, install required emergency exit lights in the stairs and hallways, and then have the work inspected and approved. **Compliance is required by October 9, 2010** or a ticket will be issued.

In addition, it has come to our attention that a '**sleep clinic**' is operating in your lower level. This type of business is not approved by the City, no Business License has been issued, and **must cease and desist immediately. Also, the new sign you had installed must be removed immediately.** Failure to comply immediately will result in the issuance of a ticket.

Sincerely,

Gene Tutag
Building Official

George Washnak
Property Maintenance & Electrical Inspector

Encls
MI Bldg Code (Secs #2702.2.4 & #2702.2.3)

cc:
Fire Inspector Provost

GW/sjs

CHAPTER 27

ELECTRICAL

SECTION 2701
GENERAL

2701.1 Scope. This chapter governs the electrical components, equipment, and systems used in buildings and structures covered by the code. Electrical components, equipment, and systems shall be designed and constructed in accordance with the Michigan electrical code, R 408.30801 to R 408.30880.

R 408.30448

[F] SECTION 2702
EMERGENCY AND STANDBY POWER SYSTEMS

2702.1 Installation. Emergency and standby power systems shall be installed in accordance with the Michigan electrical code, R 408.30801 to R 408.30880.

R 408.30448

[F] 2702.1.1 Stationary generators. Stationary emergency and standby power generators required by this code shall be listed in accordance with UL 2200.

[F] 2702.2 Where required. Emergency and standby power systems shall be provided where required by Sections 2702.2.1 through 2702.2.20.

[F] 2702.2.1 Group A occupancies. Emergency power shall be provided for voice communication systems in Group A occupancies in accordance with Section 907.2.1.2.

[F] 2702.2.2 Smoke control systems. Standby power shall be provided for smoke control systems in accordance with Section 909.11.

[F] 2702.2.3 Exit signs. Emergency power shall be provided for exit signs in accordance with Section 1011.5.3.

[F] 2702.2.4 Means of egress illumination. Emergency power shall be provided for means of egress illumination in accordance with Section 1006.3.

[F] 2702.2.5 Accessible means of egress elevators. Standby power shall be provided for elevators that are part of an accessible means of egress in accordance with Section 1007.4.

2702.2.6 Accessible means of egress platform lifts. Standby power in accordance with this section and the Michigan elevator code, R 408.7001 to R 408.8695, shall be provided for platform lifts that are part of an accessible means of egress in accordance with section 1007.5 of the code.

R 408.30448

[F] 2702.2.7 Horizontal sliding doors. Standby power shall be provided for horizontal sliding doors in accordance with Section 1008.1.3.3.

[F] 2702.2.8 Semiconductor fabrication facilities. Emergency power shall be provided for semiconductor fabrication facilities in accordance with Section 415.8.10.

[F] 2702.2.9 Membrane structures. Standby power shall be provided for auxiliary inflation systems in accordance with Section 3102.8.2. Emergency power shall be provided for exit signs in temporary tents and membrane structures in accordance with the *International Fire Code*.

[F] 2702.2.10 Hazardous materials. Emergency or standby power shall be provided in occupancies with hazardous materials in accordance with Section 414.5.4.

[F] 2702.2.11 Highly toxic and toxic materials. Emergency power shall be provided for occupancies with highly toxic or toxic materials in accordance with the *International Fire Code*.

[F] 2702.2.12 Organic peroxides. Standby power shall be provided for occupancies with silane gas in accordance with the *International Fire Code*.

[F] 2702.2.13 Pyrophoric materials. Emergency power shall be provided for occupancies with silane gas in accordance with the *International Fire Code*.

[F] 2702.2.14 Covered mall buildings. Standby power shall be provided for voice/alarm communication systems in covered mall buildings in accordance with Section 402.13.

[F] 2702.2.15 High-rise buildings. Emergency and standby power shall be provided in high-rise buildings in accordance with Sections 403.10 and 403.11.

[F] 2702.2.16 Underground buildings. Emergency and standby power shall be provided in underground buildings in accordance with Sections 405.9 and 405.10.

[F] 2702.2.17 Group I-3 occupancies. Emergency power shall be provided for doors in Group I-3 occupancies in accordance with Section 408.4.2.

[F] 2702.2.18 Airport traffic control towers. Standby power shall be provided in airport traffic control towers in accordance with Section 412.1.5.

[F] 2702.2.19 Elevators. Standby power for elevators shall be provided as set forth in Section 3003.1.

[F] 2702.2.20 Smokeproof enclosures. Standby power shall be provided for smokeproof enclosures as required by Section 909.20.

[F] 2702.3 Maintenance. Emergency and standby power systems shall be maintained and tested in accordance with the *International Fire Code*.

Gene Tutag

From: Joseph Provost
Sent: Tuesday, October 26, 2010 2:13 PM
To: Gene Tutag
Cc: Andrew Pazuchowski
Subject: 20160 Mack Pointe Neurology

CITY OF GROSSE POINTE WOODS

BUILDING DEPARTMENT

MEMORANDUM

TO: Gene Tutag, Building Inspector

FROM: Joseph Provost, Fire Inspector/Investigator

DATE: 10-26-2010

SUBJECT: 20160 Mack, Pointe Neurology Sleep Clinic

Mr. Tutag;

Yesterday, an inspection was conducted at Pointe Neurology located at 20160 Mack Ave, after a zoning variance request was received by your office. The purpose of the inspection was to determine if the basement of the building where the proposed Sleep Clinic is located meets all International Fire Codes and Life Safety Codes. The proposed area for the Sleep Clinic in its current state does not meet all of the required International Fire Codes and Life Safety Codes. If the zoning variance is granted, these deficiencies will have to be addressed prior to the granting of the business license for this business use.

Joseph Provost
Grosse Pointe Woods Public Safety Department
Fire Inspector/Fire Investigator
20025 Mack Plaza Dr
Grosse Pointe Woods, MI 48236
(313)343-2415
jprovost@gpwmi.us

TO: City Administrator/Director Fincham

FROM: PSO J. Provost #35

DATE: 10-30-2010

SUBJECT: 20160 Mack, Pointe Neurology Sleep Clinic

Dear Sir;

On 10-26-2010, an inspection was conducted at Pointe Neurology located at 20160 Mack Ave, after a zoning variance request was received by the Building Department, Inspector Gene Tutag. The purpose of the inspection was to determine if the basement of the building where the proposed Sleep Clinic is located meets all International Fire Codes and Life Safety Codes. The proposed area for the Sleep Clinic in its current state does not meet all of the required International Fire Codes and Life Safety Codes. If the zoning variance is granted, these deficiencies identified on the attached list, will have to be addressed prior to the granting of the business license for this business use, to meet all International Fire Codes and Life Safety Codes.

Joseph Provost
Grosse Pointe Woods Public Safety Department
Fire Inspector/Fire Investigator
20025 Mack Plaza Dr
Grosse Pointe Woods, MI 48236
(313)343-2415
jprovost@gpwmi.us

Listed below are the deficiencies identified during the inspection of the proposed Sleep Clinic area of Pointe Neurology located at 20160 Mack. The City of Grosse Pointe Woods follows and has adopted both the International Fire Code and the Life Safety Code. If the item is addressed in both codes, the strictest code is followed. The proposed Sleep Clinic Classification of Occupancy is Ambulatory Health Care Occupancy.

- All walls shall be made of Non-Combustible or Limited Combustible Material and must have a minimum Fire Resistance Rating of not less than1 hour and shall extend from the floor slab below to the floor or roof above. (Life Safety Code 21.3.7.1(1), International Fire Code 803.12).
- All drapes, curtains or loose hanging furnishings and decorations shall be flame resistant according to NFPA 701 *Standard Methods of Fire Test for Flame Propagation of Textiles and Films.* (Life Safety Code 10.3.1).
- Fire Doors including Panic Hardware need to be installed at all building exits, exits from the proposed sleep clinic, and at all doorways adjacent to a stairwell. All doors must swing outward. (Life Safety Code 8.3.3).
- All interior doors must be at least 1 ¾ inches thick, solid bonded wood core or the equivalent, and shall be equipped with positive latches. (Life Safety Code 21.3.7.1(2)).
- Doors shall be self closing and shall be kept in the closed position except when in use (Life Safety Code 21.3.7.1(3)).
- Any windows in these barriers shall be of fixed fire window assemblies in accordance with section 8.3 (Life Safety Code 21.3.7.1(4)).
- Occupancy Load must be posted upon calculation being completed by the Fire Inspector. (Life Safety Code 21.1.7).
- Fire Alarm System shall be installed throughout the entire building. (Life Safety Code 21.3.4.1).
- The elevator shall conform to the fire fighters' emergency operations requirement ASME A17.3 *Safety Code for Existing Elevators and Escalators* (Life Safety Code 9.4.3.2)
- The elevator shall be subject to periodic tests and inspections as specified in ASME A17.1 *Safety Code for Elevators and Escalators* (Life Safety Code 9.4.6)
- The administration of every ambulatory health care facility shall have, in effect and available to all supervisory personnel, written copies of a plan for the protection of all persons in the event of a fire, for their evacuation to areas of refuge, and for their evacuation from the building when necessary. Additionally, fire drills shall be conducted quarterly on each shift and employees shall be instructed in life safety procedures and devices in accordance with this section. (Life Safety Code 21.7.1).
- No Smoking regulations shall be adopted and signs posted that read No Smoking. (Life Safety Code 21.7.4)
- Key Box (or Knox Box) installed containing all keys for all doors of the building. (International Fire Code 506.1)

MEMO 10 - 49

TO: Lisa K. Hathaway, City Clerk

FROM: Joseph J Ahee, Jr., Director of Public Works

DATE: October 26, 2010

SUBJECT: Pointe Neurology at 20160 Mack Avenue

I have reviewed the ZBA request from Dr. Haranath Policheria of Pointe Neurology, 20160 Mack Avenue, who is requesting a use variance to allow for an over-night sleep clinic.

I have no objections to this project.

If you have any questions please contact me.

c.c. Gene Tutag
O/F

dm

AFFIDAVIT OF LEGAL PUBLICATION

Grosse Pointe News

96 Kercheval
Grosse Pointe Farms, Michigan 48236
(313) 882-3500

COUNTY OF WAYNE
STATE OF MICHIGAN, SS.

Peter J Birkner

being duly sworn deposes and says th

City of Grosse Pointe Woods

was duly published in accordance with
the following date:
October 28, 2010
#1 GPW 10/28 ZBA Notice

and knows well the facts stated herein,
newspaper.

Subscribed and sworn to before me this

SALLY A. SCHUMAN
Notary Public, State of Michigan
County of Macomb
My Commission Expires Dec. 29, 2012
Acting in the County of Wayne

Notary Public, Macomb County, Michigan
Acting in Wayne County

My Commission Expires December 29th, 2012

City of Grosse Pointe Woods, Michigan

NOTICE OF HEARING

NOTICE IS HEREBY GIVEN that the Zoning Board of Appeals of the City of Grosse Pointe Woods will hold a public hearing under the provisions of Michigan Compiled Laws, Sections 125.3101 through 125.3702 as amended, to consider the application of Dr. Haranath Policherla of Pointe Neurology, 20160 Mack Avenue, Grosse Pointe Woods, MI, who is appealing the denial of the Building Inspector to issue a permit; a use variance is required due to noncompliance with Section 50-448(2), which does not allow any type of medical facility permitting overnight patients. The ZBA hearing is scheduled for Monday, November 15, 2010, at 7:35 p.m. in the Council Room of the Municipal Building. Agenda documents are available for inspection at the City Clerk's Office, 20025 Mack Plaza, between 8:30 a.m. and 5:00 p.m. Monday through Friday. All interested persons are invited to attend and will be given opportunity for public comment. The public may appear in person or be represented by counsel. Written comments will be received in the City Clerk's office, up to the close of business preceding the hearing. A group spokesperson is encouraged on agenda items concerning organized groups. Individuals with disabilities requiring auxiliary aids or services at the meeting should contact the Grosse Pointe Woods Clerk's Office at 313 343-2440 seven days prior to the meeting.

Lisa Kay Hathaway, MMC
City Clerk

G.P.N.: 10/28/2010

AFFIDAVIT OF PROPERTY OWNERS NOTIFIED

Re. 20160 Mack Avenue
POINTE NEUROLOGY/H. POLICHERLA, MD, PC

State of Michigan)
) ss.
County of Wayne)

I HEREBY CERTIFY that the notice of Hearing was duly mailed First Class Mail on October 28, 2010 to the following property owners within a 300 foot radius of the above property in accordance with the provisions of the 2007 City Code of Grosse Pointe Woods. A Hearing fee of $250.00 has been received and acknowledged with check # 1.041775.

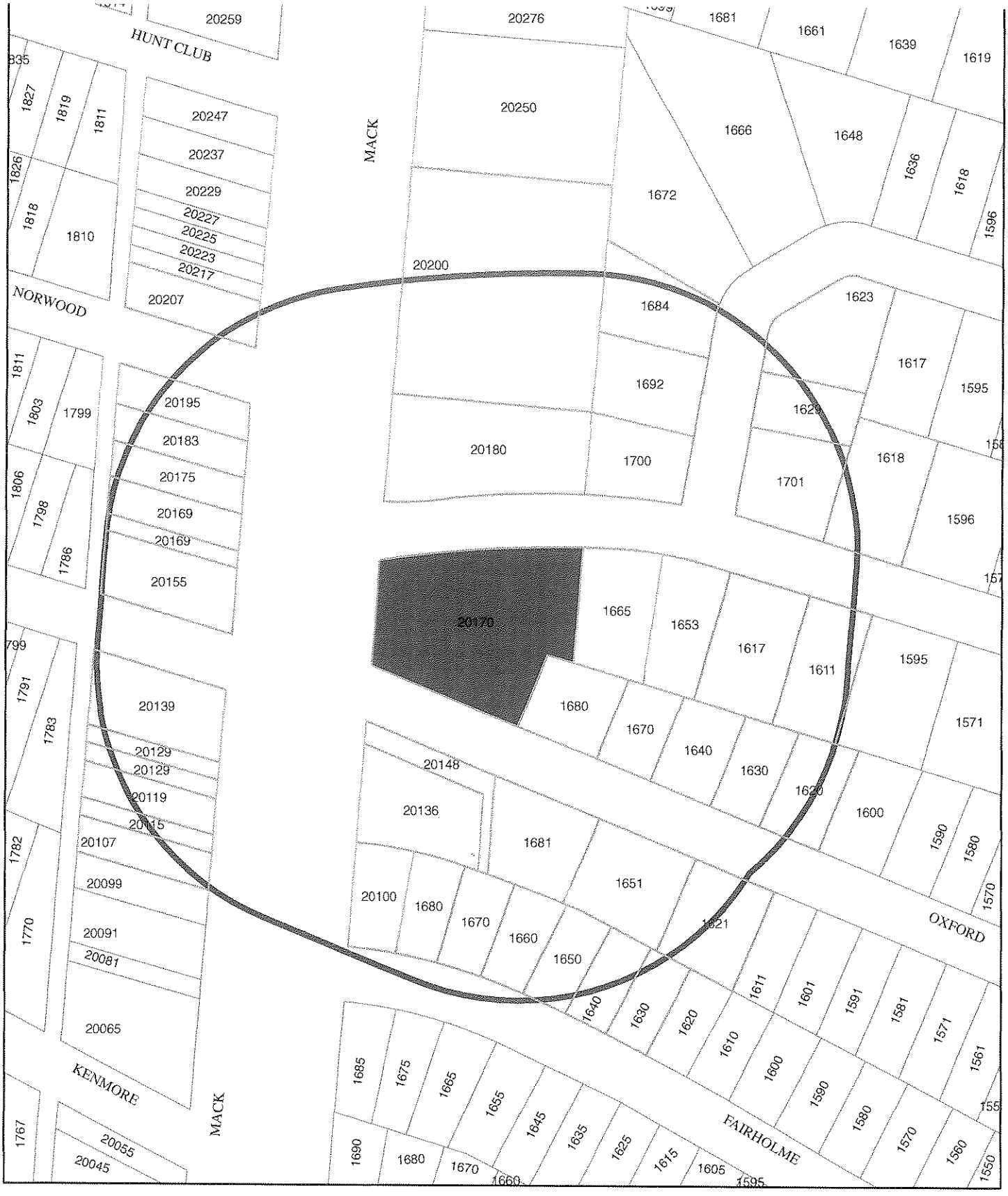
Lisa Kay Hathaway

City Clerk

See attached document for complete list.

Mailing List for 20160 Mack Ave (300' Radius)

ownersname	ownersname2	ownerstree	ownercity	ownerstate	ownerzipco
RAHI, DR DAHER B		17266 MACK	GROSSE POINTE	MI	48230
RUSSELL & ASSOC.		130 KERCHEVAL STE 200	GROSSE POINTE FARMS	MI	48236
OTTAWAY, ANDREW W. AND PAULA R.		54 WEBBER PL	GROSSE POINTE SHORES	MI	48236
BRODERICK, JEFFREY, LIVING TRUST		1611 S RENAUD	GROSSE POINTE WOODS	MI	48236
PRUSS, MICHAEL C		1617 S RENAUD	GROSSE POINTE WOODS	MI	48236
BESSETTE, JOHN & JENNIF		1618 S RENAUD	GROSSE POINTE WOODS	MI	48236
BOGEN, CLINTON		1620 OXFORD	GROSSE POINTE WOODS	MI	48236
MCATEE, JOHN R. AND VERONICA		1621 OXFORD	GROSSE POINTE WOODS	MI	48236
ROZYCKI, RICHARD J		1623 N RENAUD	GROSSE POINTE WOODS	MI	48236
HALOOSTOCK, ART A.	HALOOSTOCK, MARARET M.	1629 N RENAUD	GROSSE POINTE WOODS	MI	48236
STANFIELD, WILLARD		1630 FAIRHOLME RD	GROSSE POINTE WOODS	MI	48236
BLAINE, SCOTT & JAMIE		1630 OXFORD	GROSSE POINTE WOODS	MI	48236
DONALDSON, GAIL F		1640 FAIRHOLME RD	GROSSE POINTE WOODS	MI	48236
WORDEN, WILLIAM T. AND ALICE E.		1640 OXFORD	GROSSE POINTE WOODS	MI	48236
LAZARUS, NICHOLAS AND	MAHAR, MARY ELLEN	1650 FAIRHOLME RD	GROSSE POINTE WOODS	MI	48236
PEPPLER, JANET L.		1651 OXFORD	GROSSE POINTE WOODS	MI	48236
KOVACS, ANDREW		1653 S RENAUD	GROSSE POINTE WOODS	MI	48236
LABADIE, DIANA		1660 FAIRHOLME RD	GROSSE POINTE WOODS	MI	48236
COE, PATRICIA		1665 S RENAUD	GROSSE POINTE WOODS	MI	48236
SMITH, VIOLET M		1670 FAIRHOLME RD	GROSSE POINTE WOODS	MI	48236
FRANCES, JAMES W		1670 OXFORD	GROSSE POINTE WOODS	MI	48236
JOHNSTON, MICHAEL C		1680 FAIRHOLME RD	GROSSE POINTE WOODS	MI	48236
VANDENBOOM, CJ & MARI		1680 OXFORD	GROSSE POINTE WOODS	MI	48236
CIARAVINO, SALVATORE		1681 OXFORD	GROSSE POINTE WOODS	MI	48236
DAUW, RICHARD & BRENDA		1684 RENAUD N	GROSSE POINTE WOODS	MI	48236
SHENSTONE, BRIAN & J P		1692 RENAUD N	GROSSE POINTE WOODS	MI	48236
MALBOUEF, THOMAS & BARB		1700 S RENAUD	GROSSE POINTE WOODS	MI	48236
TRIPP, WILLIAM		1701 N RENAUD	GROSSE POINTE WOODS	MI	48236
OCCUPANT		1920 LENNON	GROSSE POINTE WOODS	MI	48236
RAHI, DR DAHER B		20100 MACK AVE	GROSSE POINTE WOODS	MI	48236
OXFORD BEVERAGE		20107 MACK AVE	GROSSE POINTE WOODS	MI	48236
SERRA, SALVATORE P		20115 MACK AVE	GROSSE POINTE WOODS	MI	48236
HENRYS CLEANERS		20119 MACK AVE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		20129 MACK AVE	GROSSE POINTE WOODS	MI	48236
OTTAWAY, ANDREW W. AND PAULA R.		20136 MACK AVE	GROSSE POINTE WOODS	MI	48236
AHEE, EDMUND T. JEWELRY		20139 MACK AVE	GROSSE POINTE WOODS	MI	48236
KOVALCHICK, LOIS, DDS, P.C.		20148 MACK AVE	GROSSE POINTE WOODS	MI	48236
GROSSE POINTE COLLECTION		20155 MACK AVE	GROSSE POINTE WOODS	MI	48236
POINTE NEUROLOGY/H. POLICHERLA, MD, PC		20160 MACK AVE	GROSSE POINTE WOODS	MI	48236
SHOWHOUSE INTERIORS		20169 MACK AVE	GROSSE POINTE WOODS	MI	48236
OCCUPANT		20170 MACK AVE	GROSSE POINTE WOODS	MI	48236
GOODIS ENDODONTIC SPECIALISTS		20175 MACK AVE	GROSSE POINTE WOODS	MI	48236
MANOS, DEBORAH, D.D.S.		20176 MACK AVE	GROSSE POINTE WOODS	MI	48236
COMERICA WEALTH & INSTITUTIONAL MANAGEMENT		20180 MACK AVE - 2ND FLOOR	GROSSE POINTE WOODS	MI	48236
MARCO, WATKINS & OWSIANY, LLP		20180 MACK AVE 100	GROSSE POINTE WOODS	MI	48236
SUMMIT CLEANERS		20183 MACK AVE	GROSSE POINTE WOODS	MI	48236
BANKS POINTE VACUUM CO.		20187 MACK AVE	GROSSE POINTE WOODS	MI	48236
BOSTON MARKET #0059		20195 MACK AVE	GROSSE POINTE WOODS	MI	48236
COMERICA, MACK/LOCHMOOR 161		20200 MACK AVE	GROSSE POINTE WOODS	MI	48236
LABARA, ONOFRIO J		20207 MACK	GROSSE POINTE WOODS	MI	48236
SURFSIDE GROUP LLC		611 ROSLYN RD	GROSSE POINTE WOODS	MI	48236
SERRA, SALVATORE P		234 LAKEVIEW	LAKE ORION	MI	48362
COLLIERS INTERNATIONAL	ATTN: PROPERTY TAX GROUP	2 CORPORATE DRIVE, STE 300	SOUTHFIELD	MI	48076



CITY OF GROSSE POINTE WOODS
URBIS MAGNA PULCHRITUDINE
MICHIGAN

INFORMATION TECHNOLOGY DEPARTMENT
Geographic Information Systems (GIS) Division

Subject: 20160 Mack Ave

Date: 11/15/2010

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CITY OF GROSSE POINTE WOODS
URBS MAGNA PULCHRITUDINE
MICHIGAN

INFORMATION TECHNOLOGY DEPARTMENT
Geographic Information Systems (GIS) Division

Subject: 20160 Mack Ave

Date: 11/15/2010

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