

**SENATE AD HOC COMMITTEE ON OSTEOPOROSIS**

**FINAL REPORT AND RECOMMENDATIONS**

**December 2005**

**Members:**

**Senator Toni Hellon**

**Dr. Timothy Lohman**

**Senator Robert Cannell**

**Dr. Michael Maricic**

**Jane Canby**

**Margie Tate**

**Renea Gentry**

**Terri Verason**

**Dr. Jeffrey Lisse**

# SENATE AD HOC COMMITTEE ON OSTEOPOROSIS

## *INTRODUCTION*

This report contains the recommendations of the Senate Ad Hoc Committee on Osteoporosis. The report is being submitted to the Governor, the Speaker of the House of Representatives and the President of the Senate.

## *PURPOSE*

The Senate Ad Hoc Committee on Osteoporosis, established by the President of the Senate on November 26, 2002, is charged with the following

- (1) research and collect information on osteoporosis;
- (2) evaluate the various approaches used by the State and local governments to increase public awareness of the risk, treatment and prevention of osteoporosis;
- (3) identify areas where public awareness, public education, research and coordination about osteoporosis need improvement; and
- (4) study ways to:
  - (a) increase the number of individuals in this State who are regularly screened for osteoporosis,
  - (b) increase research and funding at State institutions that are studying osteoporosis, and
  - (c) improve coordination between State agencies and institutions that are involved in research and treatment of osteoporosis.

The Committee was repealed on January 1, 2006.

## *MEMBERSHIP:*

Senate Two members of the Senate, from different political parties and one designated as Chair, appointed by the President of the Senate:

**Cannell, Hellon (Chair)**

Other Seven members of the public, appointed by the President of the Senate:

**Ms. Jane Canby**

**Ms. Renea Gentry, Executive Director, Arizona Osteoporosis Coalition**

**Dr. Jeffrey Lisse, Arizona Arthritis Center**

**Dr. Timothy Lohman, University of Arizona**

**Dr. Michael Maricic, Southern Arizona VA Health Care System**

**Ms. Margie Tate, Office of Chronic Disease Prevention & Nutrition Services**

**Ms. Terri Verason, Director of Nutrition Services, Dairy Council of Arizona**

## ***COMMITTEE ACTIVITIES***

The Committee issued a final report in November 2004 that did not include recommendations. Information about Committee activities prior to November 2004 can be found in that report.

The Committee held a meeting on December 5, 2005 to adopt final recommendations. At the meeting, the Arizona Osteoporosis Coalition distributed its own report for the Committee, which is attached. Please also see the attached minutes for detail on the Committee discussion.

## ***RECOMMENDATIONS***

At its December 5, 2005 meeting, the Committee adopted the following recommendations:

### Legislative Actions

The Senate Ad Hoc Committee on Osteoporosis encourages the Legislature to:

1. Provide authorization and ongoing funding to the Arizona Department of Health Services (ADHS) for the collection of statewide data on the prevalence and burden of osteoporosis.
2. Provide authorization and funding to ADHS to develop a statewide network for conducting osteoporosis screening.
3. Provide funding for statewide screening for osteoporosis.
4. Encourage pediatricians to provide greater emphasis on childhood nutrition and physical activity related to optimal bone development.
5. Encourage physicians and emergency departments who treat patients with a hip, spine or other fragility fracture to recommend an osteoporosis screening as a followup.

### Arizona Department of Health Services Actions

6. If funding is available, ADHS should establish or designate a statewide clearinghouse for education and information about the prevention of osteoporosis, and to provide information and assist individuals and stakeholders in implementing the strategies outlined in *Bone Health and Osteoporosis: A Report of the Surgeon General (2004)*.
7. If funding is available, ADHS should add the Centers for Disease Control and Prevention's optional Osteoporosis module to the Behavioral Risk Factor Surveillance System Survey Questionnaire.

8. If funding is available, ADHS should collect statewide data on osteoporosis prevalence and burden, including data on nontraumatic fractures in individuals of all ages.
9. ADHS should combine strategies for reducing the prevalence and burden of osteoporosis with other initiatives such as the Obesity Prevention/ Nutrition and Physical Activity Program and the Falls Prevention for Older Adults Program.
10. If funding is available, ADHS should collaborate with County Health Departments, community health centers and private consumer organizations that have an interest in osteoporosis to develop a statewide network for conducting osteoporosis screenings. The network should include a focus on rural and underserved areas.

#### Arizona Osteoporosis Coalition Actions

11. The Arizona Osteoporosis Coalition should pursue the strategies identified in its *Report for the Senate Ad Hoc Committee on Osteoporosis* (attached).
12. The Coalition shall work closely with the Governor's Council on Health, Physical Fitness and Sports on promotion of physical activity programs, including osteoporosis prevention education.

#### **ATTACHMENTS**

Meeting agenda and minutes – December 5, 2005

Arizona Osteoporosis Coalition report (NOTE: This report includes a portion of the Committee's 2004 Final Report but does not contain the entire report. For a full copy of the report please contact the Senate Research Staff.)

## ARIZONA STATE LEGISLATURE

### SENATE AD HOC COMMITTEE ON OSTEOPOROSIS

**Minutes of the Meeting**  
**Monday, December 5, 2005**  
**1:30 p.m., Senate Hearing Room 2**

**Members Present:**

Senator Toni Hellon, Chair  
Jane Canby  
Dr. Jeffrey Lisse

Dr. Timothy Lohman  
Margie Tate  
Terri Verason

**Members Absent:**

Senator Robert Cannell  
Renea Gentry

Dr. Michael Maricic

**Staff:**

Beth Kohler Lazare, Senate Health Research Analyst

Chairman Hellon called the meeting to order at 1:33 p.m. and attendance was taken.

Senator Hellon requested that the members introduce themselves and they did so as follows:

- Terri Verason, Registered Dietician, Secretary for the Osteoporosis Coalition, Director of Nutrition Education for the Dairy Council of Arizona.
- Margie Tate, representing the Arizona Department of Health Services (ADHS).
- Jeffrey Lisse, Chief of Rheumatology at the University of Arizona, Intern Director of the Arizona Arthritis Center, President of the Osteoporosis Coalition.
- Senator Hellon, Senator from Tucson, Vice Chairman of the Health Committee.
- Dr. Timothy Lohman, Professor for Department of Physiology at the University of Arizona, Chair of the Public Policy for the Osteoporosis Coalition.

- Jane Canby, Retired, Past Board Member of the Osteoporosis Coalition.

**Beth Kohler Lazare, Senate Health Research Analyst**, gave the Committee charge as follows:

- Researching and collecting information on osteoporosis.
- Evaluate the various approaches used by State and local government to increase public awareness.
- Identifying areas where public awareness, education, research and coordination about osteoporosis need improvement.
- Studying ways to:
  1. Increase the number of individuals in the State who are regularly screened for osteoporosis.
  2. Increase research and funding at State institutions that are studying osteoporosis.
  3. Improve coordination between State agencies and institutions that are involved in the research and treatment of osteoporosis.

Ms. Kohler Lazare stated that the Committee has met twice, once in December of 2002 and again in September of 2004. She explained that the Committee did not adopt recommendations in either of those two meetings. She said that in response to her e-mail of potential recommendations (Attachment A), Dr. Lohman and the ADHS responded with their own recommendations (Attachment B).

### **Discussion and Adoption of Committee Recommendations**

Senator Hellon thanked the members for attending the meeting on such short notice. She stated that she met with the ADHS to see what changes would be practical for the Committee to make.

In regards to Attachment B, Dr. Lohman remarked that he agreed with the ADHS alternative to his recommendation and also wanted to add the words "or spine" to the second subtitle under number one. This change would read:

- Encourage physicians and emergency departments who treat patients with a hip [or spine] fracture to recommend a DXA scan as a follow up.

Ms. Tate said that due to changing technology, "DXA" should be replaced with "osteoporosis screening" in the second subtitle of number one of Dr. Lohman's recommendations (Attachment B). This change would read:

- Encourage physicians and emergency departments who treat patients with a hip or spine fracture to recommend an osteoporosis screening as a follow up.

In response to Senator Hellon, Ms. Verason remarked that having speakers at their continuing education seminars, putting information in journals and getting articles in newsletters would be examples of ways to encourage physicians to promote education of osteoporosis prevention.

In response to Senator Hellon, the Committee agreed on Dr. Lohman's first recommendation:

- Encourage pediatricians to provide greater emphasis on childhood nutrition and physical activity related to optimal bone development.

On his second recommendation, Dr. Lohman said that he would like to add "or other fragility fracture" to make it read:

- Encourage physicians and emergency departments who treat patients with a hip, spine or other fragility fracture to recommend an osteoporosis screening as a follow up.

Ms. Verason said that "including osteoporosis prevention education" should be added to the ADHS recommendation reading:

- The Coalition shall work closely with the Governor's Council on Health, Physical Fitness and Sports on promotion of physical activity programs including osteoporosis prevention education.

Senator Hellon listed the new recommendations as follows:

#### Legislative Actions

The Senate Ad Hoc Committee on Osteoporosis encourages the Legislature to:

1. Provide authorization and ongoing funding to the Arizona Department of Health Services (ADHS) for the collection of statewide data on the prevalence and burden of osteoporosis.
2. Provide authorization and funding to ADHS to develop a statewide network for conducting osteoporosis screening.
3. Provide funding for statewide screening for osteoporosis.

4. Encourage pediatricians to provide greater emphasis on childhood nutrition and physical activity related to optimal bone development.
5. Encourage physicians and emergency departments who treat patients with a hip, spine or other fragility fracture to recommend an osteoporosis screening as a followup.

#### Arizona Department of Health Services Actions

6. If funding is available, ADHS should establish or designate a statewide clearinghouse for education and information about the prevention of osteoporosis, and to provide information and assist individuals and stakeholders in implementing the strategies outlined in *Bone Health and Osteoporosis: A Report of the Surgeon General (2004)*.
7. If funding is available, ADHS should add the Centers for Disease Control and Prevention's optional Osteoporosis module to the Behavioral Risk Factor Surveillance System Survey Questionnaire.
8. If funding is available, ADHS should collect statewide data on osteoporosis prevalence and burden, including data on non-traumatic fractures in individuals of all ages.
9. ADHS should combine strategies for reducing the prevalence and burden of osteoporosis with other initiatives such as the Obesity Prevention/ Nutrition and Physical Activity Program and the Falls Prevention for Older Adults Program.
10. If funding is available, ADHS should collaborate with County Health Departments, community health centers and private consumer organizations that have an interest in osteoporosis to develop a statewide network for conducting osteoporosis screenings. The network should include a focus on rural and underserved areas.

#### Arizona Osteoporosis Coalition (AzOC) Actions

11. The Arizona Osteoporosis Coalition should pursue the strategies identified in its *Report for the Senate Ad Hoc Committee on Osteoporosis*.

12. The Coalition shall work closely with the Governor's Council on Health, Physical Fitness and Sports on promotion of physical activity programs, including osteoporosis prevention education.

**Senator Hellon moved that the Senate Ad Hoc Committee on Osteoporosis adopt the revised recommendations. The motion was CARRIED by voice vote.**

There being no further business, the meeting was adjourned at 1:55 p.m.

Respectfully submitted,



Jeff Turner  
Committee Secretary

(Tapes and attachments on file in the Secretary of the Senate's Office/Resource Center, Room 115.)

# *Senate Ad Hoc Committee on Osteoporosis*

## **I. Executive Summary: Trends, Challenges and Recommendations**

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## **II. Background**

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- **Senate Ad Hoc Committee on Osteoporosis**
- **Osteoporosis defined**
- **National Statistics about Osteoporosis**
- **Arizona Data**
- **Recent national attention**
- **Evidence supporting the need for aggressive statewide action**

## **TRENDS**

*There are good resources for information about osteoporosis across the state, but efforts to educate and communicate about this condition are fragmented and the consumer has no pathway to connect from one resource to another. They will either be left with incomplete information or become frustrated and stop investigating.*

Information and services appear to be grouped according to the following resources.

- **State:** BRFSS surveillance, minigrants supporting mandated initiatives from CDC (i.e. Obesity), no direct program for bone health at this time.
- **County:** Nutrition education usually available.
- **Cooperative Extension:** Funding dependent, nutrition and exercise information by Bone Builders (classes, toll free phone information, newsletters, community events) and some screening.
- **Cities:** (Department of Parks & Recreation) – General exercise classes, many include strength training and classes indirectly addressing balance (tai chi).
- **Area Agencies on Aging (federal, by state region = multiple counties)** – Do not provide services such as screening. By phone interview, staff was unaware of where to make referrals for bone health information. Units on Aging/ Senior Centers provide social services & oversight of nutrition programs (disease mgt – DM, heart) w/ guidelines. There is no physical activity programming. They provide more of a facilitative/supervisory role than providing any direct care or education. Supported primarily by federal and corporate funds. Seniors have aged in place... centers are not effectively recruiting younger elders.
- **Arizona Association of Community Health Care Centers** – nonprofit centers provide healthcare for underserved populations in rural and outlying areas around the state. Recently surveyed, 31 out of 33 centers do not have screening equipment nor much access to this service. Only a few of the centers even refer patients out for diagnostic osteoporosis tests.
- **Private Agencies:** Education and awareness materials – minimal funding for programs.
- **Hospital/Healthcare Systems:** Provide direct patient services for screening, provide educational materials and programming to target populations.
- **Health related consumer organizations:** AzOC is the only organization dedicated to a focus of ONLY osteoporosis, others include osteoporosis as one of several initiatives (Arthritis Foundation, Healthy Women for a Lifetime). Funding dependent. Provide consumer and provider education, public awareness materials and occasional screening.

## CHALLENGES

*In spite of scientific advances in the prevention, diagnosis and treatment of osteoporosis, there are significant disparities in both recognition and dedicated resources to effectively impact the prevalence of osteoporosis, and its serious implications for the aging population, AZ communities and the healthcare system statewide.*

- Bone health is not recognized as a compelling issue among policy makers, healthcare professionals and the general public. Priorities for underserved and disadvantaged women are many and urgent due to lack of resources, barriers to services and care and cultural issues. Osteoporosis is a disease with less immediate consequences and may therefore be less of a priority for action and designation of resources.
- Competition with other healthcare issues exists for both public and private dollars
- There is a lack of coordination or integration of resources across public and private organizations /agencies across the state (as described in “trends”).
- There is a lack of a single entry point into the osteoporosis network for the public (consumers) (i.e. AZ Heart Association for heart disease information, Arthritis Foundation for joint conditions, etc.).
- Insurance coverage for screening/DXA is variable and inconsistent among 3<sup>rd</sup> party payers.
- Insurance coverage for pharmaceutical and rehabilitative treatment is variable and inconsistent among 3<sup>rd</sup> party payers.
- Transportation/access to community programs for seniors is often unavailable
- Data suggests that osteoporosis is more common in Hispanics than previously believed. More than a quarter of Arizona’s population is Hispanic. Demographic, ethnic, and economic assessment of Arizona’s population tells us that we are not currently reaching the state’s minority populations with a message of osteoporosis prevention.
- Guidelines on Bone Mineral Density by credible organizations are inconsistent.
- There is inadequate access to preventative services and treatment across the state.
- Variable knowledge and priority is placed on issues and conditions related to bone disease by health care providers.
- At the national level, there is limited collaboration between the CDC (responsible for public health services) and the Administration on Aging (responsible for elder services). State health departments often focus on specific at-risk populations, however these programs rarely target older adults. Units on Aging often engage in health promotion activities and referral, but rarely collaborate with their public health counterparts.
- Variables that would further increase the magnitude of the bone health issue for Arizona would be:
  1. a higher fracture incidence rates (esp. hip fx) than currently measured
  2. a higher population growth (esp. in the 65+ population) than presently anticipated
  3. a higher cost of treating fractures than estimated at this point in time

## **RECOMMENDATIONS**

*Identify a coordinating agency/clearinghouse of osteoporosis programs, research and initiatives statewide for referral, collaboration, and integration of services.*

### **Key Points:**

- a) The Arizona Osteoporosis Coalition, in collaboration with ADHS, shall be designated as the state clearinghouse for education and prevention of osteoporosis and for implementation of the recommendations of the Surgeon General's report on osteoporosis, 2004.
- b) AzOC, in collaboration with ADHS, shall develop a statewide network for conducting osteoporosis screening, especially in rural counties and outlying areas, using DXA mobile units.
- c) AzOC with ADHS shall develop a pediatric prevention standard of care to be implemented statewide in conjunction with pediatricians throughout the state.
- d) ADHS will add the CDC module for osteoporosis to Arizona's Behavioral Risk Factor Survey.
- e) AzOC will pursue the need for managed care reform to reflect appropriate screening, diagnosis and treatment for osteoporosis, including mandatory screening for all women over 65.

### **STATE GOVERNMENT ACTIONS**

- Ask the Arizona legislature to provide leadership regarding appropriate legislation: 1) for funding for statewide screening, (*see AzOC Actions below*); 2) for Managed Care reform that provides patients with appropriate screening, diagnosis and treatment options. Bone mineral density screening should be mandatory for all post-menopausal women under 65 and all women over 65 regardless of the number of risk factors. (*The National Osteoporosis Foundation (NOF) has already made this recommendation. (Physician's Guide to Prevention and Treatment of Osteoporosis. National Osteoporosis Foundation. (p 1) Excerpta Medica, Inc: Belle Meade, NJ 1999) However, in many health plans women will only receive screening if referred by the primary care physician. Early detection through routine screening and appropriate subsequent intervention will significantly decrease the number of fractures. (statement from AzOC monograph 2000)*)
- Add CDC osteoporosis module to state BRFSS to improve surveillance, (*as found in the Inventory of State Osteoporosis Activities by Maryland Department of Health and Mental Hygiene 2004*)
- Ask ADHS to provide ongoing collection of statewide data on osteoporosis prevalence and burden of the disease, including data on non traumatic fractures in individuals of all ages, utilizing ADHS, managed care organizations and other routine data collection systems and sources within the state.
- Ask ADHS to combine osteoporosis with their major initiatives such as Obesity and Falls Prevention in elderly.

## AzOC ACTIONS

- The Arizona Osteoporosis Coalition will develop a statewide osteoporosis screening/scanning program to reach rural and outlying areas with little access to healthcare, in conjunction with the County Health Departments and the Arizona Association of Community Health Centers during the 2004-'06 fiscal years. The project will also involve an education/information component for the rural areas visited by the screening teams.
- Plan network structure with the Arizona Department of Health Services to support coordinating agency functions and bring ADHS to the planning table.
- Agency will become a key player in osteoporosis information at gatherings such as the Governor's Office for Women and Children meetings, ADHS, Advisory Council on Aging, Council on Health, Physical Fitness and Sports, etc.
- Utilize existing materials
  1. Bilingual Brochures
  2. AzOC Newsletter
  3. AzOC list serve
  4. AzOC website, [www.fitbones.org](http://www.fitbones.org)
  5. AzOC website for children, [www.buildingbetterbones.org](http://www.buildingbetterbones.org)
  6. Toll-free # for information (Cooperative Extension)
  7. Statewide PSA's – organized by ADHS (AzOC tape)
    - a. Local Radio and TV
    8. Latino/Native American stations (see below)
    9. Provide osteoporosis information at other health focus events/programs (i.e. Women's Expo, Well Woman Health Check, other health and wellness venues)
- New materials/targets
  1. Primary care: Messages for healthcare professionals are focused on their desire to provide appropriate and thorough care to their patients. Provide information to key support staff that prompt screening for risk factors such as height loss and fractures.
    - a. Communicate through existing associations (AzMA, Family Practice etc.)
    - b. Partner with physician's offices and health clinics in Hispanic and Native American communities.
  2. Reaching the AZ Hispanic and Native American Communities:
    - a. Distribution of print materials placed at locations where these target populations acquire other forms of health services and information. (chain and grocery pharmacies in target neighborhoods, local food banks, Maricopa County AHCCCS health plan quarterly member newsletter, etc.) This will require developing an alliance with key resources in the community.
    - b. Spanish radio is a cost efficient way to reach the target of Hispanic women in AZ. Negotiate PSA spot time on the key radio outlets.

# Background

- I. Senate Ad Hoc Committee on Osteoporosis**
- II. Osteoporosis defined**
- III. National Statistics about Osteoporosis**
- IV. Arizona Data**
- V. Recent national attention**
- VI. Evidence supporting the need for aggressive statewide action to support osteoporosis programs, research and initiatives for referral, collaboration and elimination of barriers to appropriate screening, diagnosis and treatment options:**
  - Osteoporosis is under diagnosed and under treated
  - Bone Loss, T-Scores and Height Loss
  - Bone Mineral Density Scores provide motivation for behavior change
  - Guidelines for BMD screening/testing available
  - Current healthcare coverage for diagnosis and treatment

## Report for the Senate Ad Hoc Committee on Osteoporosis

### I. Senate Ad Hoc Committee on Osteoporosis

**PURPOSE:** To : (1) research and collect information on Osteoporosis; (2) evaluate the various approaches used by the Senate and local governments to increase public awareness of the risk, treatment and prevention of Osteoporosis; (3) identify areas where public awareness, public education, research and coordination about Osteoporosis need improvement; and (4) study ways to (a) increase the number of individuals in this State who are regularly screened for Osteoporosis, (b) increase research and funding at State institutions that are studying Osteoporosis, and (c) improve coordination between State agencies and institutions that are involved in research and treatment of Osteoporosis. The Committee shall submit a written report of its findings to the Governor, the Speaker of the House of Representatives and the President of the Senate, and provide a copy of this report to the Secretary of State and the Director of the Arizona State Library, Archives and Public Records by November 15, 2004.

#### **MEMBERSHIP:**

Senate Two members of the Senate, from different political parties and one designated as Chair, appointed by the President of the Senate:

**(Chair) Toni Hellon (R – district 26)**

**Robert Cannell (D – district 24)**

Other: 7 members of the public, appointed by the President of the Senate:

**Ms. Jane Canby**

**Ms. Renea Gentry, Arizona Osteoporosis Coalition**

**Dr. Jeffrey Lisse, Arizona Arthritis Center, University of AZ**

**Dr. Timothy Lohman, University of Arizona**

**Ms. Margie Tate, Arizona Department of Health Services**

**Ms. Terri Verason, Dairy Council of Arizona**

Contact: Julie Keane, Senate Research staff; Pete Wertheim, House Research staff

Report Date: \_\_\_\_\_

Expiration Date: 12/01/2004

Statutory Cite: Created by the President of the Senate in November 2002.

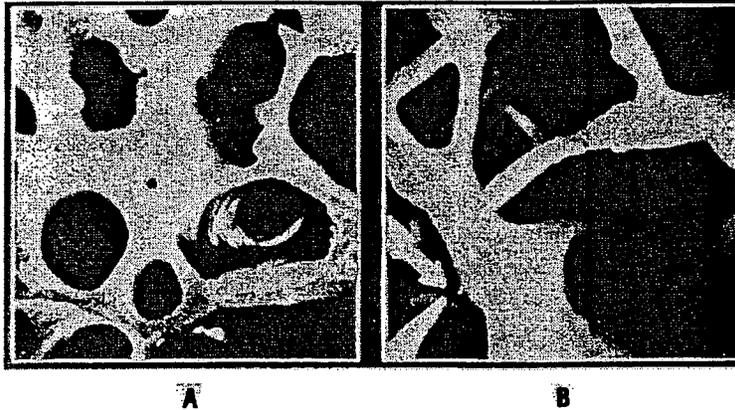
### II. Osteoporosis defined

Osteoporosis is the technical name for a disease in which bones become extremely thin and frail. The body typically has fully developed skeletal (bone) mass by the time an individual has reached the early twenties. After this point, a gradual loss of bone mass (known as bone mineral density or BMD) occurs throughout the rest of natural life. Once a person's BMD has decreased below a certain level, the risk of breaking a bone increases dramatically. Even the slightest slip or fall in a person with osteoporosis can result in fractures of the hip, spine, forearm, or wrist. These fractures decrease mobility, functionality and independence in the person suffering the fracture. Consequently,

## Report for the Senate Ad Hoc Committee on Osteoporosis

osteoporosis can significantly degrade one's quality of life. In fact, 25% of patients die during the first year after a hip fracture. The fact that most osteoporosis related fractures occur in the elderly also places tremendous burden on the caregivers who are often immediate family.

FIGURE 1. MICROGRAPHS



Micrographs of biopsy specimens of normal and osteoporotic bone. Panel A is from a 75-year-old normal woman. Panel B is from a 47-year-old woman who had multiple vertebral compression fractures. From Dempster DW, et al. *J Bone Miner Res.* 1986;1:15-21.

Osteoporosis is often undetectable because loss of bone mass typically occurs over a long period of time and is without symptoms until a fracture occurs. Thus osteoporosis is referred to as “the silent disease”. (excerpts from the Arizona Osteoporosis Coalition monograph titled “Osteoporosis and its effect on the people of Arizona”, 5/00 [www.fitbones.org/facts](http://www.fitbones.org/facts) )

### III. National Statistics about Osteoporosis

- 44 million people in the United States are affected by osteoporosis and low bone mass, according to the National Osteoporosis Foundation: 80% are women
- 33% of men over age 75 are affected
- 50% of women & 13% men older than 50 will have an osteoporosis related fracture in their lifetime
- ~1 of 5 (19.2 %) of women who suffered a vertebral fracture sustained a second fracture within 1 year (even with 1000mg Calcium and Vitamin D supplements)
- Patients with vertebral fracture have nearly double the risk for fractures at other sites
- Medicare beneficiaries significantly underutilize routine BMD testing, a covered benefit since 7/98 under the 1997 Balanced Budget Act. It is estimated that only 12% of women age 65+ received a Medicare reimbursed BMD test in 2001.
- Hispanic and Native American Populations: Osteoporosis Issues
  - Latino/Hispanic Population National Stats
    1. There are 36 million Latinos in the US
    2. Latinos are the 2<sup>nd</sup> largest ethnic group in the US
    3. The main immigrant group is Latino

## Report for the Senate Ad Hoc Committee on Osteoporosis

- Incidence of Osteoporotic Fractures in the Hispanic Community  
“Differences in fracture incidence according to racial/ethnic group were observed in NORA. Although the prevalence of osteoporosis was higher among Asian and Hispanic women than among whites, the likelihood of fracture was no different for Hispanics and was lower for Asians.”  
Siris E, Miller P, Barrett Conner E., et al. Identification and Fracture Outcomes of Undiagnosed Low Bone Mineral Density in Postmenopausal Women. JAMA. 2001;286:2815-2822.
- NHANES III Study results for Hispanic Women: Key Point - Osteoporosis is more common in Hispanics than previously believed

Age Criteria	>50
White Women	59%
Hispanic Women	49%
BMD site	Total Hip

Looker AC, Wahner HW, Dunn WL, et al. Updated data on proximal femur bone mineral levels of US adults. Osteoporos Int. 1998;8:468-489.

### IV. Arizona Data

- Arizona has one of the nation’s fastest growing populations of people over age 50. Over the next 10 years, the size of the age-50 population will increase by 40% (from 1.3 million to 1.9 million). By 2025, there will be an increase of nearly 85%. The population over age 65 also will show rapid growth from its year 2000 total of 634,500, with increases of 27% by 2010, 52% by 2015, 82% by 2020, and 116% by 2025.
- The National Osteoporosis Foundation (NOF) estimates that 810,000 women and men had osteoporosis or low bone mass in 2003. By 2025, the NOF predicts AZ will have 1.1 million people with osteoporosis and low bone mineral density.
- 1997 Arizona Hospital Admissions for Osteoporosis Fractures:
  - 6,000 osteoporosis fractures
  - 31,000 hospital bed days
  - 4.6 days mean Length of Stay for vertebral fracture patients
  - 41% of vertebral cases and 60% of hip fracture cases were discharged to a long term care facility
- Conservative estimates using 1998 Arizona hospital discharge data place the cost of osteoporosis in the state at about \$177 million. This does not include the costs after being discharged, which can include significant costs for long-term care and/or additional rehabilitation and health care. It also does not account for the significant impact on quality of life.
- 2002 American Community Survey Profile, US Census Bureau AZ Population:  
5 % American Indian and Alaska Native  
27% Hispanic. (People of Hispanic origin may be of any race.)

## Report for the Senate Ad Hoc Committee on Osteoporosis

Among people at least five years old living in Arizona in 2002, 26 percent spoke a language other than English at home. Of those speaking a language other than English at home, 77 percent spoke Spanish (20% of total AZ population)

- Demographic, ethnic, and economic assessment of Arizona's population tells us that we are not currently reaching the state's minority populations with a message of osteoporosis prevention. More than a quarter of Arizona's population is Hispanic. Inadequate nutritional intake of calcium and inactivity are two primary lifestyle behaviors which increase risk for osteoporosis.
  - The 1999 Arizona Hunger Advisory Council reported 65% of those requesting emergency food boxes are women. Other populations identified most likely to be hungry and therefore lacking in adequate nutrition include the working poor and minorities. 82.2% of Hispanics in Arizona consume less than the RDA for calcium.
  - The Arizona BRFSS demonstrates that 50.3% of Hispanic adults have a greater risk for sedentary lifestyle as do low income individuals (<10,000/year) at a prevalence of 45.6% .
  - Issues of language barriers, low wages and lack of health insurance make these populations less likely to access healthcare system and services. Therefore, they are not in the mainstream of health information.

### **V. Recent national attention**

- Healthy People 2010 has set an objective to reduce the proportion of adults with osteoporosis, reduce hospitalization rates and falls.
- The Surgeon General workshop on Osteoporosis and Bone Health. 12/2002, began preliminary work for the Surgeon General's Report on Bone Health to be released in the fall of 2004.
- NIH consensus Development Conference on Osteoporosis Prevention, Diagnosis and Therapy was held 3/2000.
- US preventative Services Task Force, 2002 prepared a review of indications for screening.
- The Maryland Department of Health and Mental Hygiene's Osteoporosis Prevention and Education Task Force released in June 2004 a survey of all 50 states and their legislative and service activities related to osteoporosis. Thirty-two states have osteoporosis laws on the books; *Arizona is not among them.*
- The Administration on Aging recently (2002) requested an action plan to implement an osteoporosis awareness campaign, specifically targeting women age 65 and older. The Foundation for Osteoporosis Research and Education headed the project convening osteoporosis and aging services experts and stakeholders from around the country in a consensus building process in order to formulate this plan. The Arizona Osteoporosis Coalition was a member of the planning committee for this national effort.

**VI. Evidence supporting the need for aggressive statewide action to support osteoporosis programs, research and initiatives for referral, collaboration and elimination of barriers to appropriate screening, diagnosis and treatment options**  
**Osteoporosis is under diagnosed and under treated.**

## Report for the Senate Ad Hoc Committee on Osteoporosis

The vast majority of women do NOT receive drug treatment for osteoporosis following a fracture of the hip, wrist or vertebra.

1. Journal of Bone and Joint Surgery 82-A, No. 8 1063-1070; 2000.
  - Retrospective cohort study w/ use of claims database including over 3 million patients from 30 states
  - Identification of ALL women age 55+ w/ distal radial fracture w/in 12 mo period: N=1162
  - 2.8% received a bone density scan
  - 22.9% received a pharmacological intervention
  - = ONLY 24% received evaluation or treatment for osteoporosis
2. Arch Internal Medicine Vol 162, 421-426; Feb 2002
  - Retrospective cohort study, 343 postmenopausal women mean age 70.5, Olmstead County, MN w/ minimal trauma distal forearm fracture 1993-1997.
  - ONLY 18% had any evidence of intervention for osteoporosis within the following 12 month period
3. Osteoporosis International 11:577-582, 2000
  - Review of chest X-rays obtained for women age 60+ from routine hospital admissions (N=943)
  - 130 had a vertebral fracture present
  - 52% were mentioned in the radiology report
  - 23% mentioned in the report summary
  - 17% mentioned osteoporosis in the medical record
  - only 7% received Treatment
4. Archives of Internal Medicine, 9/22/03
  - Retrospective study of 7 HMO databases
  - N= 3492 women age 60+ with fx of the hip, wrist or vertebra
  - Only 24% received a drug for osteoporosis during the 1 yr period post-fracture
  - Increasing age was correlated with a decreased likelihood of receiving osteoporosis treatment
5. NHANES III 1997
  - only 19% of people over 50 with osteoporosis are diagnosed and treated.
6. Archives of Internal Medicine, 2003; 163: 2237-46
  - 4.6% of older population received osteoporosis treatment after fracture
7. Am Journal of Public Health, 2002; 92:271-3
  - PCPs identify less than 10% of women with osteoporosis or vertebral fractures and of those diagnosed, fewer than 36% are prescribed medication

**Bone Loss, T-Scores and Height Loss.** Understanding the objective measures which describe bone health support the need for early detection and intervention.

1. Bone loss with age

## Report for the Senate Ad Hoc Committee on Osteoporosis

- Genetic influences account for ~75% of variation in peak bone mass and rate of bone loss
  - Rapid bone loss of 2-3%/year over the 5-10 years after menopause
  - This results in up to 20% bone loss in the first 5-7 years post menopause
  - Bone mass continues to decline w/ age but at a slower rate than during the early menopausal years. (female more = to male)
2. Risk of fracture
- T score = a unit of measure expressing the variation from peak bone mass as a standard deviation score.
  - Fracture threshold = standard deviation of 2 (T score -2)
  - 2 fold increase in fracture risk for every standard deviation of reduction in bone mass (T score -3 = 8x fracture risk).
  - Necessary to establish baseline to assess response to treatment, and enhance compliance w/ interventions
  - Baseline at age ~35 gives best predictive risk
3. What about height?
- Normal aging of the intervertebral discs results in 1-1.5" loss of height
  - More than 1.5" loss – suspect silent vertebral compression fracture
  - Each compression fracture causes an additional ~1.5" loss of height
  - Height should be included in every primary care physical exam.
4. The Vertebral Fracture Cascade
- 3 large clinical trials, 2725 postmenopausal women in control groups
  - ~1 of 5 (19.2 %) of women who suffered a vertebral fx sustained a second fracture within 1 year (even with 1000mg Calcium and Vitamin D supplements)
  - Patients with vertebral fx have nearly double the risk for fractures at other sites
  - Emphasis on the need to prevent the first fracture!  
*World Congress on Osteoporosis 6/00*
5. Pre-menopausal fractures increase risk of subsequent fractures
- Study population 24 years post menopause
  - Independent of age, bone density, body weight, alcohol intake and history of smoking
  - Incidence of ANY fracture between the age of 20-50 increases risk of fracture after age 50 by 74% (not including motor vehicle accidents)  
Arch Intern Med Vol 162, 33-36, 2002

“Despite the accumulated evidence showing the importance of prevalent fractures in predicting future fracture risk,...most physicians fail to take diagnostic or therapeutic steps. Now is the time for the osteoporotic fracture to assume its rightful importance and signal an appropriate evaluation and treatment” *Elliott Schwartz, MD & Risa Keegan, MD, Foundation for Osteoporosis Research and Education*

**Bone Mineral Density Scores provide motivation for behavior change.** Studies demonstrate that to decrease osteoporosis prevalence and the related consequences by

## Report for the Senate Ad Hoc Committee on Osteoporosis

changing bone health behaviors and seeking treatment, we must increase the number of men and women who are tested, diagnosed and informed about preventive measures.

### 1. J Bone Min Res Vol 14:12; 2143-2149; 1999

- 669 healthy premenopausal women age 18-35
- Interview questionnaire assessing lifestyle behaviors
- Received BMD testing (20% were low) and written education
- Repeat questionnaire 1 year later
- Results – Those women with low BMD:
  - More likely to report increase milk intake and supplement Calcium
  - Less likely to smoke, consume alcohol and drink >3 caffeinated beverages/day

### 2. Calcif Tissue Int 66:113-118, 2000

- 701 women age 50+ referred to community osteoporosis prevention program, followed for 3 years
- 58% - normal bone mass
- 24% - moderately low bone mass
- 18% severely low bone mass
- Behaviors after bone densitometry
  - Started HRT
  - Increased exercise
  - Decreased caffeine intake
  - Stopped smoking
  - Increased dietary calcium and calcium supplements
  - Increased fall prevention & safety behaviors
- Greater % change w/ lower bone density

### **Guidelines for BMD screening/testing available (\*See Appendix 1)**

- International; Society for Clinical Densitometry position 2003
- National Osteoporosis Foundation 2002
- Foundation for Osteoporosis Research and Education 2002
- US preventative Services Osteoporosis Screening Recommendations, 2002
- American Association of Clinical Endocrinologists
- American College of Rheumatology
- Surgeon General's Report on Bone Health (pending) 2005

### **Current healthcare coverage for diagnosis and treatment**

- Medicare criteria (\*See Appendix 1 - #8)
- Healthplan Survey of Women's Health Services in AZ Health Plans (\*See Appendix 2 - #7)

**Report of the  
Senate Ad Hoc Committee  
on Osteoporosis**

**November 2004**

**Committee Members**

Senator Toni Hellon, Chair

Senator Robert Cannell

Ms. Jane Canby

Ms. Renea Gentry

Dr. Jeffrey Lisse

Dr. Timothy Lohman

Ms. Margie Tate

Ms. Terri Verason

## *Report of the Senate Ad Hoc Committee on Osteoporosis*

### **INTRODUCTION**

This report summarizes the efforts of the Senate Ad Hoc Committee on Osteoporosis. This report is being submitted to the Governor, the Speaker of the House of Representatives and the President of the Senate.

### **PURPOSE**

The Senate Ad Hoc Committee on Osteoporosis, established by the President of the Senate on December 2, 2002, was charged with the following:

- (1) Research and collect information on osteoporosis;
- (2) Evaluate the various approaches used by the state and local governments to increase public awareness of the risk, treatment and prevention of osteoporosis;
- (3) Identify areas where public awareness, public education, research and coordination about osteoporosis need improvement; and
- (4) Study ways to:
  - (a) Increase the number of individuals in this state who are regularly screened for osteoporosis,
  - (b) Increase research and funding at state institutions that are studying osteoporosis, and
  - (c) Improve coordination between state agencies and institutions that are involved in research and treatment of osteoporosis.

The Committee is repealed from and after December 1, 2004.

### **MEMBERSHIP**

Senate Two members of the Senate, from different political parties and one designated as Chair, appointed by the President of the Senate:  
**Hellon (Chair), Cannell**

Other Seven members of the public, appointed by the President of the Senate:  
**Ms. Jane Canby**  
**Ms. Renea Gentry, Arizona Osteoporosis Coalition, Executive Director**  
**Dr. Jeffrey Lisse, Arizona Arthritis Center**  
**Dr. Timothy Lohman, University of Arizona**  
**Ms. Margie Tate, Office of Chronic Disease Prevention and Nutrition Services**  
**Ms. Terri Verason, Director of Nutrition Services, Dairy Council of Arizona**  
**Vacant**

## *Report of the Senate Ad Hoc Committee on Osteoporosis*

### **COMMITTEE ACTIVITIES**

The Committee held two meetings during the past two years. The following provides a summary of each meeting, but please see the attached minutes and handouts for the Committee discussions and testimony.

#### **December 16, 2002**

The first meeting of the Committee began with introductions and a review of the committee charge and concluded with discussions of a plan of action for the following 12 months. There were two presentations given to the Committee:

- Overview of osteoporosis and its effect on the population of Arizona – Jennifer Koslo, M.S., R.D., Arizona Department of Health Services, Nutrition and Chronic Disease Prevention Services
- Overview of costs and projections over the years 2000 to 2025 and osteoporosis programs in Arizona and other states – Kathy Brewer, PT, GCS, Med, Arizona Osteoporosis Coalition

#### **September 22, 2004**

The second meeting of the Committee began with introductions. There were two presentations given to the Committee:

- Presentation on the research commissioned by the Arizona Osteoporosis Coalition entitled Arizona Hip Project – Dr. Jeffrey Lisse, Arizona Arthritis Center
- Presentation on the various resources for information about osteoporosis across Arizona, including its disparities and challenges, and recommendations regarding services – Renea Gentry, Arizona Osteoporosis Coalition

The Committee did not adopt any recommendations. Senator Cannell, who chaired the meeting in Senator Hellon's absence, stated that there are still outstanding issues, and felt that this meeting should not be the final meeting. Senator Cannell stated that he will meet with the President of the Senate to request a continuance of the Committee into next session.

### **ATTACHMENTS**

- Meeting agenda/minutes/handouts – December 16, 2002
- Meeting agenda/minutes/handouts – September 22, 2004

Agendas can be obtained via the Internet at <http://www.azleg.state.az.us/iagenda/iagenda.htm>

## ARIZONA STATE LEGISLATURE

### INTERIM MEETING NOTICE OPEN TO THE PUBLIC

#### SENATE AD HOC COMMITTEE ON OSTEOPOROSIS

**Date:** Monday, December 16, 2002

**Time:** 1:30 p.m.

**Place:** Senate Hearing Room 1

#### AGENDA

1. Introductions
2. Presentation by the Department of Health Services  
Jennifer Koslow
3. Presentation by the Osteoporosis Coalition  
Kathy Brewer
4. Review Committee Charge and Begin Developing a Plan for the Next 12 Months
5. Call to the Public
6. Adjourn

#### Members:

Senator Virginia Yrun, Chair  
Kathy Brewer  
Oscar Gluck  
Timothy Lohman  
Terri Verason

Senator Toni Hellon  
Jane Canby  
Jeffrey Lisse  
Margie Tate

Persons with a disability may request a reasonable accommodation such as a sign language interpreter, by contacting the Senate Secretary's Office: (602)542-4231 (voice). Requests should be made as early as possible to allow time to arrange the accommodation.

*Rescinded*

**ARIZONA STATE LEGISLATURE**

**AD HOC COMMITTEE ON OSTEOPOROSIS**

**Minutes of Meeting  
Monday, December 16, 2002 – 1:30 p.m.  
Senate Hearing Room 1**

**Members Present:**

Senator Virginia Yrun, Chair  
Oscar Gluck  
Timothy Lohman  
Terri Verason

Kathy Brewer  
Jane Canby  
Margie Tate

**Members Absent:**

Senator Toni Hellon  
Jeffrey Lisse

**Staff:** Julie Keane, Senate Health Analyst  
Brandy Martin, Senate Assistant Analyst

Chair Yrun called the meeting to order at 1:40 p.m., and attendance was noted. She asked the members to introduce themselves and to comment and identify the outcomes that they would like to see for the Committee.

**Jennifer Koslo, M.S., R.D., Arizona Department of Health Services (DHS), Nutrition and Chronic Disease Prevention Services (NCDPS),** presented an overview of osteoporosis and its effect on the population of Arizona. She provided an outline of her presentation to the Committee (Attachment A). She emphasized that osteoporosis is a pediatric disorder that manifests itself in the aging process; however, it is never too early to begin prevention efforts. She said after age 30 a gradual decline in bone mass occurs, and a healthy lifestyle is critically important to maintaining strong bones. She commented that bone fractures significantly increase health care costs and decrease the quality of life. She said osteoporosis is known as the "silent disease" because the loss of bone occurs over a long period of time. She noted that while there are treatments for osteoporosis, there currently is no cure. The four important steps in the prevention of osteoporosis are diet, activity, lifestyle and bone density testing.

Ms. Koslo identified the risk factors as modifiable and non-modifiable. The modifiable factors are calcium intake, weight-bearing exercise, smoking and medications. The non-modifiable factors are age, gender, ethnicity and genetics. She indicated that certain medications used in treating other chronic conditions could also contribute to the thinning of bones.

Ms. Koslo commented on the prevalence and incidence data outlined on page 2 of the handout.

### **Presentation by the Osteoporosis Coalition**

**Kathy Brewer, PT, GCS, MEd, Arizona Osteoporosis Coalition**, presented an overview on Item II of Attachment A pertaining to costs and projections for the years 2000-2025. She noted that the role of bone mineral testing is critical. She commented on the human factor statistics regarding bone fractures as highlighted in the handout. Ms. Brewer reviewed the findings of surveys taken of various health plans regarding insurance reimbursement issues.

In response to Senator Yrun's inquiry regarding bone replacement therapy, Dr. Gluck outlined the various treatments currently available.

Ms. Brewer stated that there are various programs in other states, which are listed in the handout. She said Arizona is involved in several programming activities that have been successfully implemented throughout the country. She addressed three osteoporosis program efforts currently underway in Arizona:

- Maricopa County Office of Nutrition Services
- Healthy Women for a Lifetime
- Arizona Osteoporosis Coalition

Ms. Brewer noted that web site resources are available as listed on the handout. She stated that proposals have been submitted to various sources of funds for expansion of the public awareness programs.

Senator Yrun asked whether any data is available on the number of eligible women in Arizona who actually receive Medicare-sponsored screening. Ms. Brewer responded that information could possibly be extrapolated from a national database through the Medicare system. She suggested that the percentage is probably fairly low, which indicates there is room for improvement.

In response to Ms. Verason, Ms. Brewer presented an overview on the programs in Arizona regarding possible continuance and funding.

Senator Yrun asked whether a medical standard exists to indicate that bone screening should begin prior to age 65. Dr. Gluck responded that the National Prevention Task Force published two months ago that all women over 65 should be screened. Also, women 60 years of age or older with a risk factor should be screened. Dr. Lohman stated that it is preferable for screening to occur sooner because women at 65 have already lost 10% to 25% of bone density during their late twenties.

Ms. Verason commented on the importance of having bone density testing. She stated that the Academy of Pediatrics has emphasized the importance of teenagers to exercise

and to have enough calcium in their diets to help prevent osteoporosis and related costs later in life.

### **Review Committee Charge and Begin Developing a Plan for the Next 12 Months**

Senator Yrun asked the members to comment on the outcomes they would like to see on this issue during the next twelve months. Ms. Canby responded that the issue of data collection needs to be addressed, and the best way to use the available resources to collect the data. Senator Yrun asked Ms. Koslo to address the issue of collecting incidence data and to distinguish the differences between prevalence and incidence data. Ms. Koslo responded that prevalence data indicates the portion of population that has the disease obtained through available data. Incidence data indicates new cases within a period of time, which involves screening and re-screening. She noted that data is very costly to collect. Ms. Canby remarked a previously-funded program that could possibly be expanded is the Behavioral Risk Factor Survey. She indicated new questions could be added to the survey regarding osteoporosis risk factors. Ms. Koslo noted that the added cost would amount to \$1,200 per question on the survey, and she described some examples of questions. In response to Senator Yrun, Ms. Tate said the survey is administered by DHS, but is nationally sponsored by the Center for Disease Control (CDC). She noted that CDC provides some funding to the states for a core module of the survey, and the cost for any additional questions would have to be funded by the states.

Ms. Brewer added that a data research committee conducted a study in 2000. She indicated it was an attempt to encapsulate the issues related specifically to Arizona, and said it would be the intention to repeat and update the study every two to three years.

Dr. Gluck stated a primary outcome that would be helpful is to partner with Arizona hospitals in accumulating data on routine bone fractures. He said it would be helpful to have a baseline of knowledge regarding the patients who experience bone fractures along with intervention with other partnering entities. He stated that the Center of Medicare and Medicaid Services (CMS) would likely be interested in partnering.

Ms. Verason stated that Dr. Gary Chan at the University of Utah is currently conducting research on children and bone density, and similar research is underway in other parts of the country. She commented that the issue of children and adolescence leads to the topic of primary and secondary prevention. Primary prevention is building strong bones and appropriate health behaviors. Secondary prevention is the prevention of fracture. She said there are many approaches and perspectives to address this issue through public and private means.

Ms. Tate stated that osteoporosis is perceived as a disease of the elderly; however, it is important to note that it is a life-spanning disease. She said primary prevention takes place with elementary and school-age children, and then evolves into a secondary and treatment-type prevention.

Dr. Lohman stated statistics indicate that those treated with fractures are not generally tested for bone density at the time of the treatment. Dr. Gluck stated it could be feasible within a year to collaborate with other entities to conduct a study on patients treated for bone fractures. He said data gathering could be undertaken in the form of a questionnaire at the time a patient receives treatment for a common bone fracture.

Senator Yrun stated that a representative from the Hospital Association should be included on the Committee when Senator Bennett reappoints the members. Dr. Gluck suggested that Anita Murcko would also be a welcome addition to the Committee.

Dr. Gluck indicated that the cost of the project would depend on the amount of data obtained. He suggested including women over age 50 and men over age 60, and anyone who is treated for a bone fracture at a hospital facility would be given the questionnaire. Senator Yrun wanted to know if data exists regarding the percent of all fractures that are treated at a hospital versus another facility. Dr. Gluck responded that approximately 90 percent of hip fractures are treated at hospitals, and only a third of spine or vertebrae fractures are discovered clinically. He said the focus should be based on hip fractures or those fractures that require intervention by a surgeon.

Senator Yrun commented another factor to consider is lost productivity as a result of fractures. She asked whether any data is available on loss of work due to fractures. Dr. Gluck responded such data exists, but may not be available in Arizona. He indicated that if the hospital project is successful, the study could also be expanded at a later date to include children and other age groups.

Ms. Canby noted that the Committee report is due in November 2004. Dr. Gluck stated there is enough time to conduct the project before the report is due.

Dr. Lohman stated that screening is one of the most important factors, and he suggested examples of how to conduct the screening.

Senator Yrun suggested that the members could be divided into two groups. One group would focus on the hospital study, and another group could handle the screening issue.

**Liana Martin, Legislative Liaison, DHS,** responded to Senator Yrun regarding the hospital project and costs. She said depending on how the project is handled, any possible federal funding to Arizona would be a decision of CMS.

Senator Yrun commented that the screening survey would be an expensive undertaking, but perhaps private grants may be available. She said it is doubtful that any State funds would be available due to the current budget deficit. Ms. Canby said perhaps some private funding sources may be interested, such as pharmaceutical companies. She said another issue to consider is who would be analyzing the data, writing the report and duplicating the report.

Dr. Gluck stated that the project would include data gathering, intervention and other issues, which would require certain expertise. He said the results of the project could be divided into certain geographical areas, and the ultimate results would improve the quality of care for the State.

Ms. Verason referred to the screening portion of the project. She said many groups handle screenings throughout the State. She asked whether there is a way to survey those groups with respect to the data being collected.

Dr. Lohman said although he is not sure how comprehensive it would be, but certainly those groups would have data that could be useful to this project.

Dr. Gluck commented that a recent nationwide Nora Project sponsored by certain pharmaceutical companies worked in conjunction with physicians' offices to measure patient bone density. He said 300,000 women were screened and the bone density findings were published in the Nora Project report, which is available. He noted that Arizona is unique in terms of population and needs. He added there is a significant elderly population, and he is interested in knowing how Boswell Hospital data compares with that of other hospitals regarding the required information for this project.

Senator Yrun suggested dividing the Committee into two groups. One group would consist of Dr. Gluck, Ms. Tate, Dr. Lisse, and Dr. Anita Murcko. Dr. Gluck indicated he would contact Dr. Murcko. He would also like input from the University of Arizona. Dr. Gluck also suggested adding Dr. Michael Maricic to the group, and said he would contact him. Ms. Koslo would also be a member of that group.

Senator Yrun said she will also contact the Hospital Association to find out how to proceed. Ms. Keane indicated she will have a representative from the Hospital Association contact Dr. Gluck. Senator Yrun asked Ms. Keane to provide a directory of Committee members, their telephone numbers and email addresses for the Committee's use.

The other group will include Dr. Lohman, Ms. Canby, Ms. Brewer, and Ms. Verason. Senator Yrun stated that Senator Hellon will probably be chairing the full Committee henceforth. When Senator Bennett reappoints the Committee, a suggestion will be made to include the additional names of Dr. Anita Murcko and Dr. Michael Maricic.

In response to Senator Yrun, Ms. Liana Martin stated that today's meeting provided a good discussion on the issue. She said as progress develops, DHS could provide some advice on funding needs and other issues for the Committee. Senator Yrun asked Ms. Martin to check with the Director of DHS to see if partnering could be provided as needs are identified and developed in this project regarding epidemiology input.

Dr. Lohman asked whether an interim report would be available as the project moves along. Senator Yrun stated that the Committee is required to submit a final report, but is not prohibited from issuing an interim report. Dr. Lohman suggested an interim report

would be very helpful, and Senator Yrun agreed. She said as most of the survey work will be completed in the first year, it could lead to suggestions for revisions or initiating public policy in the second year. Therefore, an interim report would be very beneficial as back-up data.

At Senator Yrun's request, Ms. Keane introduced herself and explained her role with the Committee. Senator Yrun explained that the groups would meet at their convenience.

### **Public Testimony**

There was no public testimony.

There being no further business, the meeting adjourned at 3:10 p.m.

Respectfully submitted,



Nancy L. DeMichele, Committee Secretary

(Tapes and attachments on file in the Secretary of the Senate's Office/Resource Center, Room 115)

*Arizona State Legislature  
AD HOC Committee on Osteoporosis  
Monday December 16, 2002*

**Contacts:**

Jennifer Koslo, M.S., R.D., Arizona Department of Health Services, NCDPS  
Kathy Brewer, PT, GCS, MEd, Arizona Osteoporosis Coalition

**I. OSTEOPOROSIS AND ITS EFFECT ON THE PEOPLE OF ARIZONA**

**Objectives:**

1. To better understand the scope and impact of osteoporosis in Arizona
2. To define osteoporosis
3. To state several risk factors
4. To identify the ethnic populations at the highest risk
5. To understand the value of prevalence and incidence data
6. To gain information on programs in other states
7. To describe current programming in Arizona
8. To understand the scope of cost and reimbursement issues related to the disease

**Disease Overview:**

**Definition:** Osteoporosis is a chronic disease characterized by decreased bone mass with decreased density and enlargement of bone spaces producing porosity and fragility resulting from a disturbance in nutrition and mineral metabolism.

- Bone Mineral Density (BMD) achieved when an individual reaches twenties
- After this point a gradual decline occurs
- Both modifiable and non-modifiable factors affect this process
- Decreased BMD associated with increased risk of fracture, especially in the elderly
- Most common sites of fractures include hip, spine, forearm, or wrist
- Fractures significantly decrease quality of life and increase health care costs
- Also known as the "Silent Disease"
- **This disease is thought to be preventable for most people. While there are treatments for osteoporosis, there is currently no cure**
- Four important steps in the prevention of osteoporosis: diet, activity, lifestyle, bone density testing

**Pathology:**

First step in prevention is to determine risk factors.

**Risk factors:** Can be categorized as both modifiable and non-modifiable.

*Non-modifiable factors:*

- Age
- Gender
- Ethnicity
- Genetics

*Modifiable factors:*

- Calcium intake
- Weight bearing exercise (WBE)
- Smoking

**Etiology:** Disturbances in nutrition and bone metabolism related to the occurrence of one or more risk factors results in a gradual loss of bone which occurs over a long period of time. The disease is generally asymptomatic until fractures occur.

**Prevalence and incidence data:**

**Prevalence data:** Tells us the proportion of the population that has the disease

**2002 Prevalence Data for Arizona**

<b>Totals:</b>	Total Women with Osteoporosis and Low Bone Mass	Total Men with Osteoporosis and Low Bone Mass	Grand Total for Men and Women
State of Arizona	543,800	263,900	807,700
<b>By Congressional District:</b>			
District 1	65,900	31,300	97,200
District 2	64,400	30,800	95,200
District 3	131,200	65,300	196,500
District 4	76,100	36,000	112,100
District 5	99,200	47,900	147,100
District 6	107,500	54,000	161,500

**Incidence data:** Indicates new cases within a period of time. Important because it assess how quickly the disease is developing among the population at risk showing the trend. This type of data is very costly to collect which has resulted in a dearth of osteoporosis incidence data.

## II. COSTS

### Arizona Projections for 2000-2025:

Data source: Agency for Healthcare Policy Research and Quality

Analysis: Pharmacoeconomics Department, Procter and Gamble Pharmaceuticals

#### **Hospitalization (1977)**

- 1997 – 6,077 patients identified by primary diagnosis fracture by ICD-9 coding for hosp admission
- \$97 million in charges
- 31,000 hospital days
- 51% discharge to long term care

#### **Total medical costs (2000)**

- Inpatient - \$136 million (acute care, physician costs, acute rehab)
- Outpatient - \$18.4 million (home care, physician visits, out patient therapy and services)
- Long term care - \$83 million
- Total: \$237 million for all fracture types, both male and female

#### **Projections**

	2000	2005	2010	2025
<b>COST</b>	\$237 mill	\$275 mill	\$309.3 mill	\$438.2mill
<b>FRACTURES</b>	19k	22k	25k	35.5k

#### **Role of Bone Mineral Density (BMD) Testing:**

(presented 10/02 – American College of Rheumatology)

- Based on BMD testing done in 2001 on women age 65 and older with osteoporosis or osteopenia
- Cost and fracture outcomes were assessed over 3 years (2001-2003)
- 10% increase in BMD testing (an additional 180,000 women) could reduce the incidence of hip, spine and wrist fracture by 6,683
- Reduction in direct medical costs of fractures estimated at \$32.3 million
  - \$12.1 million in testing costs
  - \$4.7 million in costs for medical therapy initiated
  - resultant \$15.5 million Medicare savings

#### **The Human Factor:**

- One woman in 2 and 1 in 8 men over age 50 will have an osteoporotic fracture in their lifetime
- For women, this risk is greater than for breast, uterine and ovarian cancer combined
- An osteoporosis fracture occurs every 20 seconds in the US
- 1 in 5 women who sustain an osteoporotic fracture will have a second fracture within one year

- 75% of women aged 45 – 75 have never discussed osteoporosis with their physician
- 24% of hip fracture patients die within one year
- 28% of patients with hip fracture will require institutionalization

#### Insurance Reimbursement Issues:

Source: Healthy Women for a Lifetime Coalition – 2000-2001 Health Plan Survey of Women's Health Services in AZ Health Plans

- 7 health plans surveyed: BC/BS, Cigna, Health Choice, Maricopa County Health System, Mercy Care, Pacificare
- All offer BMD screening, 1 limited to specific age group (over 60)
- Initial referral and frequency of repeat testing is determined by physician and/or prior authorization for all (not criteria driven)
- Factors include family history, over age 60, specific benefit coverage
- None of the 7 were able to report the % of women who receive BMD in their plan
- Drug therapy availability:
  - HRT covered by all, most SERMs and bisphosphonates require prior authorization
  - 2 plans - all drugs prescribed at physician discretion, no limitations.
  - 5 plans - formulary drugs must be tried first. Prescriber must then submit patient's clinical information for review by Medical Director showing need for non-formulary and failed trials of formulary equivalents.

### III. PROGRAMS IN OTHER STATES

2000 report from Women's Health Council of the Association of State and Territorial Chronic Disease Program Directors

- National legislation has required Medicare Part B to cover BMD testing since July 1, 1998
- 50% of states require the state to conduct public education; in 1998 14 states had earmarked separate funds and 7 states used existing health department dollars
- 8 states have passed laws requiring private insurance to cover BMD testing
- Federal funds have supported osteoporosis via grants under various units of the CDC

2002 report from the Elder Floridians Foundation

- 24 states programs listed: housed under various departments
  - State DHS
  - Health and Human Services
  - Office of Nutrition Services
  - Older Adult Health
  - Department of Aging
  - Office of Women's Health
  - Department of Public Health

- Department of Agriculture
- Other partners integrating osteoporosis programs
  - Worksite wellness programs
  - Cooperative extension networks
  - Fall prevention programs
  - State Medical Association and other health professions groups
  - Arthritis centers
  - Women's health groups
  - Cancer centers
  - Maternal and child and family health
  - Physical activity initiatives
  - Anti-smoking initiatives
- State programming
  - Media campaigns
  - PSA's for radio and TV
  - Toll free information lines
  - Written public awareness and educational materials
  - Screening programs
  - Consumer education programs
  - Healthcare provider and physician education
  - Web sites
  - Support groups
  - Pre-adolescent curriculum
  - Older adult exercise classes
  - Surveillance systems – BRFSS

#### **IV. ARIZONA OSTEOPOROSIS PROGRAMS**

##### **Maricopa County Office of Nutrition Services:**

“Building Better Bones” curriculum for 5<sup>th</sup> and 6<sup>th</sup> graders

- Arizona Nutrition Network and state health department funding currently provides for programming in low-income schools, in 6 AZ counties
- Arizona Osteoporosis Coalition – collaboration for development of a kids interactive website [www.buildingbetterbones.org](http://www.buildingbetterbones.org)
- After school and community based programming in Maricopa County provided by grant funding

##### **Healthy Women for a Lifetime:**

- 4 issues: Depression, Heart Health, Breast Cancer and Osteoporosis
- Health Plan Survey information
- Collaboration with Cigna – professional staff inservice training on osteoporosis
- Planning May event on osteoporosis

##### **Arizona Osteoporosis Coalition:**

Mission: To raise awareness of the impact of osteoporosis on residents of Arizona through education, communication and public activity.

The coalition has been in existence since 1998, begun with a small seed-grant from the American Public Health Association. Membership is comprised of more than 650 interested organizations and individuals. AzOC is incorporated in Arizona and received federal nonprofit status in 2001.

AzOC developed many of its programs recently under a two-year contract (7/99-6/01) with the Arizona Department of Health Services. Through this work, AzOC established the following resources and programs:

- Through a partnership with the Maricopa County Cooperative Extension, the Bone Builders train the trainer prevention education program for young adult individuals was expanded to 8 AZ counties
- A health care provider curriculum designed to address the issues of osteoporosis prevention, diagnosis and management in more than 15 disciplines
- The first data monograph about osteoporosis in Arizona
- A public awareness message and plan for a campaign including a professional brochure in both Spanish and English, a 30-second television advertisement along with a radio version for public service announcements
- A statewide directory of prevention, screening and treatment resources
- A web site for osteoporosis information and coalition activities, feature articles and documents such as the monograph and resource directory listed above ([www.fitbones.org](http://www.fitbones.org))
- A toll free number of taped information on 13 osteoporosis topics in both English and Spanish (1-800-611-3410 or 602-470-0961)

The design and implementation of these projects were the first steps in establishing a presence in the AZ public health community regarding the critical issue of osteoporosis.

Current projects and programs in addition to those stated above.

- Development of a kids interactive website [www.buildingbetterbones.org](http://www.buildingbetterbones.org), expanding and enhancing the classroom curriculum, in collaboration with the Maricopa County Office of Nutrition Services
- Bone Builders trained 80 volunteers in the past year. Statewide, Bone Builders staff and volunteers taught 403 classes to 9724 people, participated in 72 health fairs, taught 2335 individuals and provided BMD screening to 2346 people, reaching a total of 28,161 people with an osteoporosis message.
- A health care provider training program was presented in July 2002 utilizing videoconferencing and telemedicine networks across the state. The target audience was physician assistants, nurse practitioners, physical therapists and dieticians
- The "fitbones" web site continues to receive apx. 1000 visits per month
- The Foundation for Osteoporosis Research and Education (FORE) was awarded a grant from the Administration on Aging to develop an action plan for a national osteoporosis awareness campaign for post-menopausal women. AzOC will be a participating partner on the planning committee, council and final report.

Proposals have been submitted to various funders for expansion of our public awareness campaign, distribution of brochures and written information, additional Bone Builders volunteer training and additional opportunities to present osteoporosis education to health care providers across Arizona.

#### V. WEB SITE RESOURCES

1. [www.nof.org](http://www.nof.org) (National Osteoporosis Foundation)
2. [www.fitbones.org](http://www.fitbones.org) (Arizona Osteoporosis Coalition)
3. [www.bonebuilders.org](http://www.bonebuilders.org)
4. [www.fore.org](http://www.fore.org) (Foundation for Osteoporosis Research & Educ)
5. [www.4women.gov](http://www.4women.gov)
6. [www.obgyn.net/osteoporosis](http://www.obgyn.net/osteoporosis)
7. [www.endocrineweb.com](http://www.endocrineweb.com)
8. [www.osteorec.com](http://www.osteorec.com)
9. [www.osteoporosis.nih.gov](http://www.osteoporosis.nih.gov) (NIH osteoporosis and related bone diseases)
10. [navigator.tufts.edu](http://navigator.tufts.edu) (nutrition information)
11. [nutritiononestop.com](http://nutritiononestop.com) (nutrition information)
12. [www.asbmr.org](http://www.asbmr.org) (Am Society of Bone and Mineral Research)

Janet Napolitano  
Governor

# Office of the Governor

**\* OSTEOPOROSIS AWARENESS MONTH \***

**WHEREAS**, Osteoporosis is the most common disease of postmenopausal women; and

**WHEREAS**, in 2004 the U.S. Surgeon General estimated that by 2020, one in two Americans over the age 50 will be at Risk for Fracture from Osteoporosis or Low Bone Mass; and

**WHEREAS**, The estimated lifetime risk of developing a spine, hip, or wrist fracture after age 50 is 50% for women and 13% in men; and

**WHEREAS**, in Arizona there are an estimated 810,000 cases of osteoporosis and low bone mass, and the costs for medical care for osteoporosis-related fractures in Arizona is \$236 million annually; and

**WHEREAS**, about half of the women in Arizona aged 50 and older report that they have never had a bone density test; and

**WHEREAS**, the Arizona Osteoporosis Coalition, and the University of Arizona Cooperative Extension Bone Builders program have been educating women and health professionals that osteoporosis is a preventable and treatable disease, and fracture protection is needed to help prevent or reduce fractures in postmenopausal women; and

**WHEREAS**, Osteoporosis Awareness Month helps raise awareness about maximizing your bone strength, appropriate calcium and vitamin D consumption, understanding the treatment options, and most importantly, knowing your risk for fracture.

**NOW, THEREFORE**, I, Janet Napolitano, Governor of the State of Arizona, do hereby proclaim May as

**\* OSTEOPOROSIS AWARENESS MONTH \***



**IN WITNESS WHEREOF**, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Arizona

*Janet Napolitano*  
GOVERNOR

**DONE** at the Capitol in Phoenix on this 22<sup>nd</sup> day of March in the year Two Thousand and Five and of the Independence of the United States of America the Two Hundred and Twenty-ninth.

**ATTEST:**

*Janice K. Brewer*  
Secretary of State

# ARIZONA HIP PROJECT

*RESEARCH COMMISSIONED BY*

The Arizona Osteoporosis Coalition for

THE ARIZONA STATE SENATE  
AD HOC COMMITTEE ON OSTEOPOROSIS

**Principal Investigator:** Jeffrey R. Lisse, M.D.

**Sub-Investigators:** Deborah Jane Power, D.O., Isidro Villanueva, M.D., Timothy Lohman, Ph.D., Scott Going, Ph.D., B Austin Vaz, M.D., Ph.D., Janet Campion, M.D., M.P.H., Belinda Botzong, R.T., Michael Maricic, M.D., Oscar Gluck, M.D.

9/22/04

**AZ Hip Project**  
**03/08/2005**

During the five year time period 1998 – 2003 there were 729 patients treated for fractures at the University Medical Center in Tucson, Arizona. At this time, 725 of the 729 patient charts with ICD-9 diagnostic codes for fractures have been reviewed. 208 of the 725 charts meet the non-traumatic fragility fracture inclusion criteria for the AZ Hip Study. This means that the fractures were not incurred as a result of trauma more forceful than falling from a standing height. 208 medical charts have been screened. The collected information has been entered into a database.

Of the 208 screened patient charts, 152 (73.1%) are female subjects and 56 (26.9%) are male subjects. The mean age of the patients is 73.7 years old. There are 10 (4.8%) American Indians, 3 (1.4%) Asians, 3 (1.4%) African American and 191 (91.8%) Caucasians. There are 24 (11.5%) patients of Hispanic ethnicity. 161 (77.4%) of the patients are retired. There are 91 (43.8%) married subjects and 68 (32.7%) widowed subjects. There are 73 (35.1%) admissions for fractured hips and 127 (61.1%) admissions for vertebral fractures. Fractures that occurred prior to the indexed fracture are categorized into 5 groups: prior trochanter fractures, prior femoral neck fractures, prior vertebral fractures, prior wrist fractures and prior other fractures. Prior to their indexed fracture, 3.4% of patients had a trochanter fracture, 8.6 % of patients had at least one femoral neck fracture, 39.4% of patients had at least one prior vertebral fracture, 4.3% of patients had a wrist fracture and 23.2% of patients had other fractures. 78.9% of patients had at least one other (vertebral, hip or other) fragility fracture before the indexed fracture date. 21.1% had no prior fragility fracture of any kind. Prior to their indexed

fracture, 22.1% of patients had DXA (the accepted way to diagnose osteoporosis) examinations. After their indexed fracture, 3.9% of patients had DXA examinations.

Of the 208 screened patient charts, 35.6% of the patients were taking at least one anti-osteoporosis medication prior to their indexed fracture. 43.3% of the patients were recommended (either told to continue their osteoporosis medicine regiment or to start taking osteoporosis medication) to use at least one anti-osteoporosis medication. After their fracture, 61.1% of the patients were taking at least one anti-osteoporosis medication.

This data is derived only from the hospital charts. It is possible that these patients had other studies performed by other physicians as outpatients.