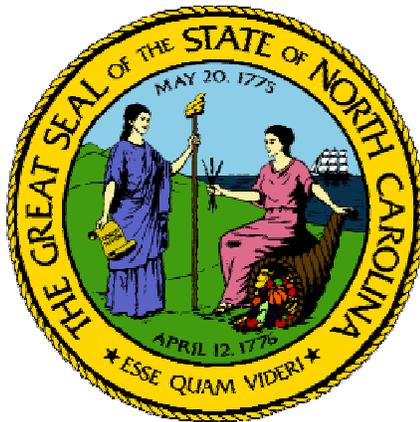


AGING INMATE POPULATION STUDY



**North Carolina Department of Correction
Division of Prisons**

**Submitted by
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EXECUTIVE SUMMARY

North Carolina's elderly inmate population has increased faster than any other inmate age group over the past five years. This is a trend seen nationwide in the correctional field. There has been a fundamental national shift over the past 20 years toward a more punitive response to crime, resulting in longer sentences. This shift combined with the overall aging of the U.S. population has led to the increased number of elderly inmates. In North Carolina, we have seen the number of inmates age 50 and older increase by 61% in the past five years while the overall inmate population has increased by only 16%. Accelerated medical and mental health issues and costs accompany the increase in inmate age.

The National Institute of Corrections defines elderly inmates as those with a chronological age of 50 years or older. The tendency of inmates to engage in risky behaviors such as drug and alcohol abuse, combined with their lack of preventive health care, leads to an "early aging" of inmates. Inmates tend to have health problems that are more common in persons ten years older in the general population.

Purpose of the Study

The purpose of this study is to assist the Division of Prisons in planning for the future of the increasing number of elderly inmates.

The major objectives of the Aging Inmate Population Study are:

- To examine the factors that have accelerated the growth in the elderly inmate population;
- To examine the demographics of the elderly inmates;
- To explore avenues taken by other states in addressing the issues of an aging inmate population;
- To analyze the costs of providing care to an aging inmate population;
- To explore possible resources to help the Division in dealing with the aging inmate population;
- To investigate innovative approaches for dealing with health and mental health issues of the aging inmates;
- To recommend possible solutions to the overwhelming expenses of housing and caring for the elderly inmates; and
- To increase Division knowledge regarding the needs of the aging inmate population.

Summary of Methodology

This Aging Inmate Population Study is a descriptive study building upon exploratory studies completed on the national and state levels. The study provides more precise information on the aging inmate population specific to North Carolina. It addresses the characteristics of the aging inmate population and the issues facing the Division in providing efficient and effective services to this population.

The case study method was applied involving an assessment of aging inmate population issues. Qualitative data sources included observation and field visits, inmate questionnaires, documents and texts. Specific data and information has been gathered from the North Carolina Offender Population Unified System (OPUS); Medical Operations Management System (MOMS); a survey of other states; national statistics; and site visits to North Carolina facilities housing a larger number of elderly inmates.

In order to further understand the nature and extent of the aging inmate population, a literature review focused on current research, articles, books, and other publications regarding elderly inmates. Areas reviewed were: 1) geriatric issues; 2) inmate health issues; 3) inmate mental health issues; 4) "compassionate release" programs; 5) cost of care; and 6) policy options.

Summary of Findings and Recommendations

As of June 30, 2005, North Carolina Division of Prisons had a total inmate population of 36,663 with slightly more than 10% (3,490) of those inmates being age 50 years or older. Though exact costs are difficult to determine, national estimates calculate the total cost of housing an older inmate (age 50 or older) as three times that of a younger inmate.

The health costs alone for housing an inmate age 50 or older is almost four times that of a younger inmate. The average cost for health care (dental, medical, mental health, and pharmaceutical) for an inmate under age 50 was \$1,919 in fiscal year 2004-2005 while that cost was \$7,159 for an average inmate age 50 or older.

Approximately 56% of the inmates age 50 and older are serving sentences for violent or sex crimes. Due to the seriousness of their offenses, 2140 (62%) are serving sentences of 10 years or longer with 964 (28%) serving a life sentence and 31 with a death sentence.

As part of this study, a survey was conducted with 245 inmates age 50 and over at six facilities. The average age of the inmates surveyed was 58 years with a range of 50 to 85 years.

- Almost 25% (61) of those surveyed were serving a life sentence.
- 141 (58%) of the inmates had been in prison previous to their present sentence.
- 182 (74%) were currently under medical care and receiving prescribed medications.
- 48 (20%) required a special diet for health reasons.
- 136 (55%) inmates claimed that their medical condition had declined since being in prison.
- 68 (28%) required special assistance such as a walking cane, brace, or wheelchair.
- 49 (20%) said they were currently under mental health care.

A review of literature and a review of other states' practices affirm that comprehensive correctional policies and procedures regarding aging inmates are still in their infancy.

As corrections professionals begin to assess and address the unique needs of older inmates, it is expected that more comprehensive approaches will begin to emerge.

Most states are attempting to address the issues facing the aging inmate population in an effort to reduce costs. Five states who responded to the Aging Inmate Survey have programs developed specifically to address the special needs of their elderly/geriatric inmates.

It is recommended that North Carolina take a pro-active approach to dealing with the issues of the aging inmate population. The following are recommendations that should be considered by the Department:

- Explore the release of terminally ill inmates who are low security risks to hospice facilities.
- Seek a way to release geriatric, special needs and severely disabled inmates to secure private facilities.
- Track inmate health care expenditures so that they can be analyzed by age and type of medical/mental health conditions and needs both internally and at outside providers.
- Review geriatric-specific programs in other states and determine which ones could be implemented successfully in North Carolina.
- Add age as a variable in the annual Prison Population Projections Report in order to better plan for the increasing aging inmate population.
- Review and consider legislation that would allow for releasing more geriatric inmates safely into the community.
- Review and correct the ethnic data on OPUS in order to reduce the 33% “unknowns” and to better understand the ethnic makeup of our inmates.

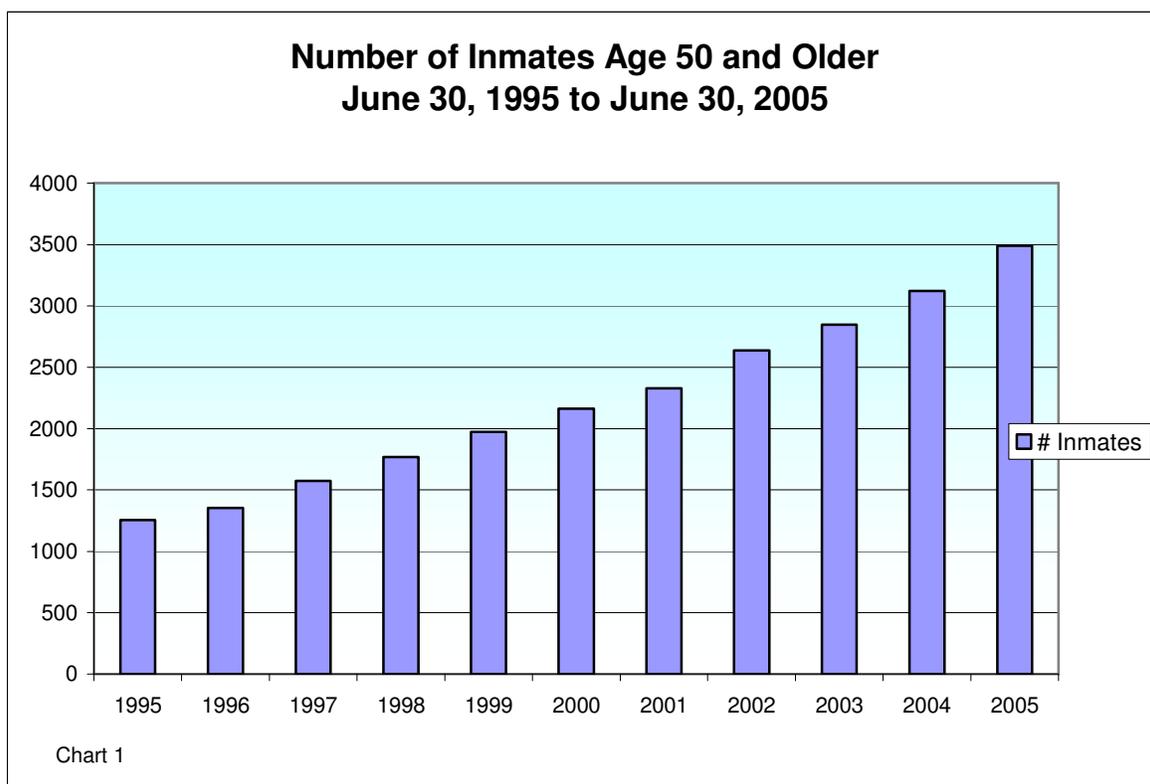
BACKGROUND

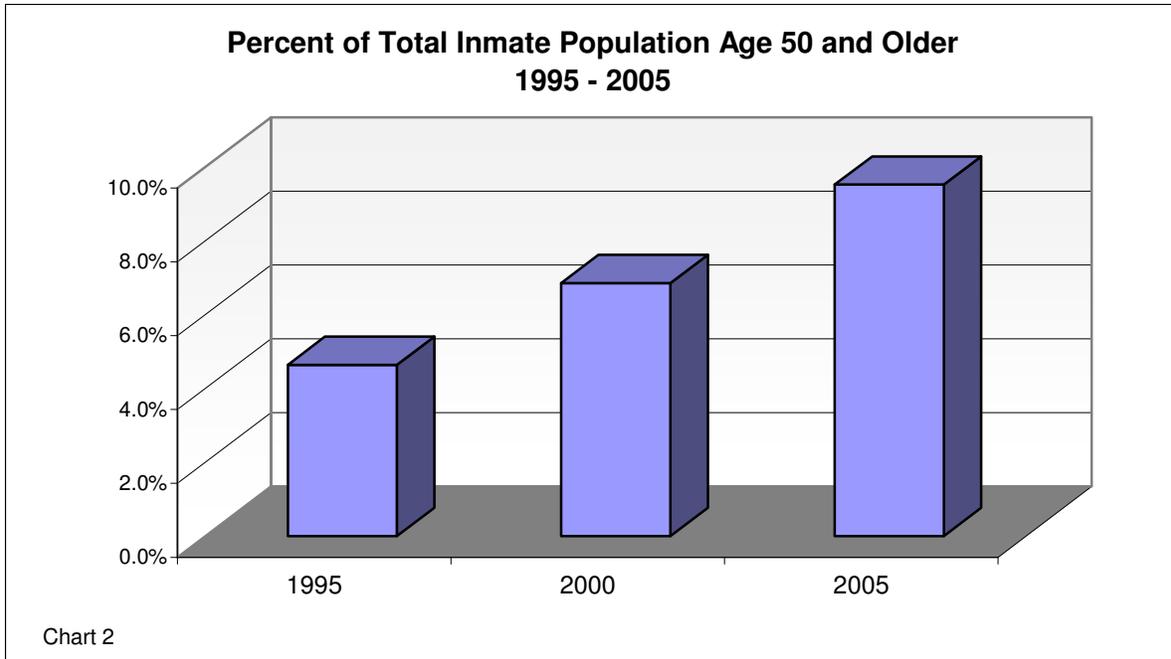
North Carolina had a total prison population of 36,663 as of June 30, 2005. Of this total population, 3,490 inmates were age 50 or older. The National Institute of Corrections defines elderly inmates as those with a chronological age of 50 years or older. The tendency of inmates to engage in risky behaviors such as drug and alcohol abuse, combined with their lack of preventive health care, leads to an “early aging” of inmates. Inmates tend to have health problems that are more common in persons ten years older in the general population.

The elderly inmate population in North Carolina has increased faster than any other inmate age group over the past five years. This is a trend seen nationwide in the correctional field. There has been a fundamental national shift over the past twenty years toward a more punitive response to crime, resulting in longer sentences. This combined with the overall aging of the U.S. population has led to the increased number of elderly inmates.

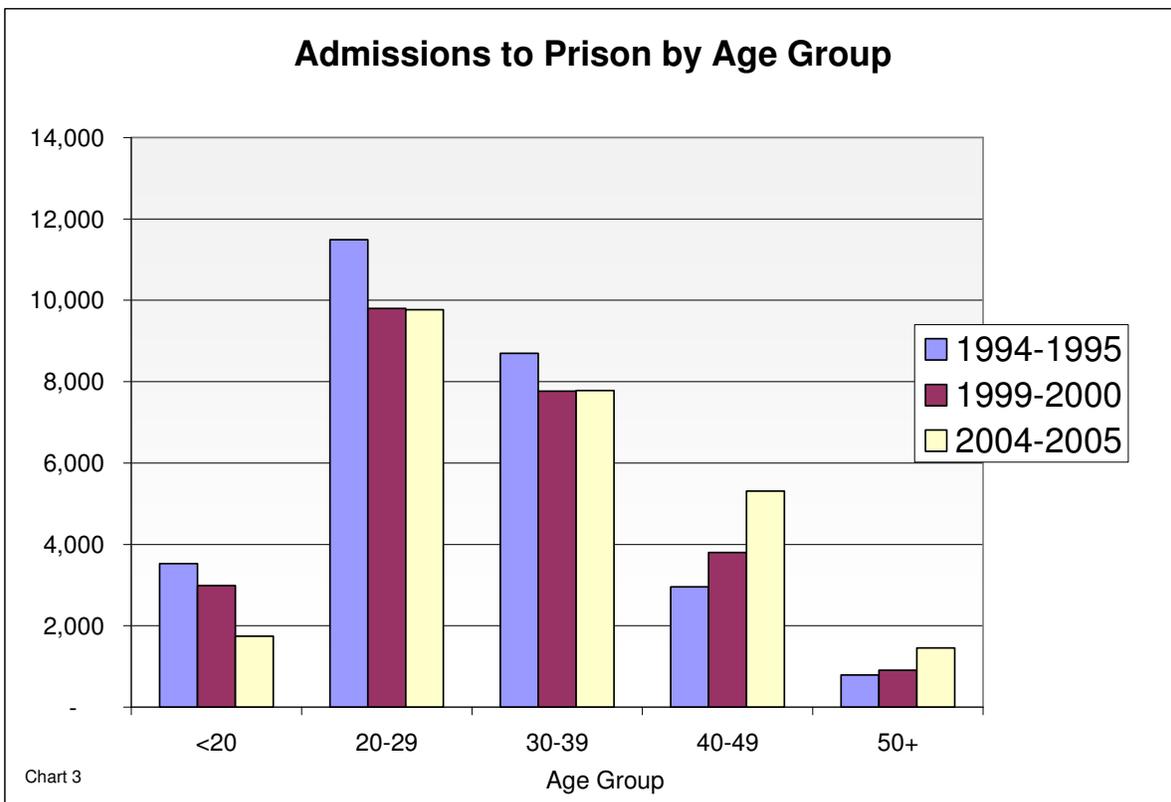
In North Carolina, we have seen the number of inmates age 50 and older increase by 61% in the past five years while the overall inmate population has increased by only 16%. With the increase in the inmate age, come accelerated housing costs especially in the areas of medical and mental health.

Chart 1 shows the steady increase in inmates age 50 and over since June 30, 1995, while Chart 2 shows the percent of the total population that is age 50 or older.





The Division of Prisons has also seen an increase in its admissions of inmates age 40 and older since fiscal year 1994 -1995 and a decrease in the admissions of younger inmates. This phenomenon can be seen in Chart 3.



In July 2005, the Director of Prisons asked that a study be conducted regarding the issues surrounding the aging inmate population. Lieutenant James R. Rollins of Johnston Correctional Institution, an undergraduate student at Mount Olive College, offered to assist the Division's Correctional Planner in this project. Together, they applied to the North Carolina Department of Correction Human Subject Review Committee and received approval to conduct the study.

As the inmate population ages, there are many implications for the correctional system. It is likely that North Carolina will require a range of policy and program options to effectively meet the special needs of its aging inmate population. However, sound policy and programmatic decisions cannot be made without reliable information. The purpose of this study of the aging inmate population is to assist the Division of Prisons in planning for the future of the increasing number of elderly inmates.

The major objectives of the Aging Inmate Population Study are:

- To examine the factors that have accelerated the growth in the elderly inmate population;
- To examine the demographics of the elderly inmates;
- To explore avenues taken by other states in addressing the issues of an aging inmate population;
- To analyze the costs of providing care to an aging inmate population;
- To explore possible resources to help the Division in dealing with the aging inmate population;
- To investigate innovative approaches for dealing with health and mental health issues of the aging inmates;
- To recommend possible solutions to the overwhelming expenses of housing and caring for the elderly inmates; and
- To increase Division knowledge regarding the needs of the aging inmate population.

METHODOLOGY

The Aging Inmate Population Study is a descriptive study building upon exploratory studies completed on the national and state levels. The study provides more precise information on the aging inmate population specific to North Carolina. It addresses the characteristics of the aging inmate population and the issues facing the Division in providing efficient and effective services to this population.

The case study method was applied involving an assessment of aging inmate population issues. Qualitative data sources included observation and field visits, inmate questionnaires, documents and texts. Specific data and information has been gathered from the North Carolina Offender Population Unified System (OPUS); Medical Operations Management System (MOMS); a survey of other states; national statistics; and site visits to North Carolina facilities housing a larger number of elderly inmates.

In order to further understand the nature and extent of the aging inmate population, a literature review focused on current research, articles, books, and other publications regarding elderly inmates. Areas reviewed were:

1. Geriatric issues;
2. Inmate health issues;
3. Inmate mental health issues;
4. Compassion release programs;
5. Cost of care; and
6. Policy options.

A five question telephone survey regarding aging inmates was conducted during the month of March 2006. Of the 49 states contacted, 38 (78%) responded to the survey. (See Appendix C for a copy of the questionnaire used in the survey.)

A 25 question survey was given to inmates in 6 facilities (5 male and one female) between October 13, 2005 and January 20, 2006. The survey was voluntary and offered to all inmates age 50 and over who were physically able and available to participate. A total of 245 inmates agreed to participate in the survey.

The survey asked for basic demographic information and then a series of questions regarding medical health, mental health, prison program/work involvement, and general concerns about aging in prison (see Appendix A.) The inmates at each facility were read the same survey instructions including a statement explaining that the survey was voluntary (see Appendix B.)

The six surveyed facilities were selected based upon their aging inmate population and the facility's mission. Three of the facilities had Geriatric Units, one had a Mental Health Unit, one a Skilled Medical Unit and one was a female facility.

McCain Correctional Hospital was selected as 30% of its inmates are age 50 or older. It also has one of three geriatric units in the Division. Of McCain's 112 inmates age 50 and older, 71 (63%) responded to the survey.

At **Randolph Correctional Center**, which also holds a Geriatric Unit, 25% of its inmates are age 50 or older. Of the 57 aging inmates at Randolph, 32 (56%) responded to the aging inmate survey.

Eastern Correctional Institution has a 23% aging inmate population. It also has a Mental Health Unit. Of the 102 aging inmates at Eastern, only 18 (18%) completed the aging survey. The remainder of the aging inmates were either unable to or unwilling to complete the survey.

Pender Correctional Institution was the third Geriatric Unit selected where 18% of its population is age 50 or older. Of the 138 aging inmates, 78 (57%) responded to the aging survey.

Central Prison was selected due to its Skilled Medical Unit. It houses 144 aging inmates (16% of its total population.) Of these aging inmates, only 15, slightly over 10% responded to the survey. The other aging inmates were either unable or unwilling to respond.

North Carolina Correctional Institution for Women has 77 aging inmates (only 7% of its total population.) Of these, 31 (40%) completed the aging survey.

LITERATURE REVIEW

In order to further understand the nature and extent of the aging inmate population, a literature review focused on current research, articles, books, and other publications regarding the aging population and in particular the aging inmate population:

The end of World War II was the beginning of the “Baby Boomer” generation. When the soldiers came home the number of births increased dramatically. As these baby boomers aged our culture “grew up” with them. The 1950’s through the 1990’s were decades where the baby boomers reigned supreme. For over fifty years the baby boomers controlled our politics, popular culture and music. These same baby boomers are now in their forties and fifties and an increasing number of them are ending up in prison. As our communities have aged, so has the people committing crimes against our communities (Montana, 1999.)

According to The Council of State Governments report, *Corrections Health Care Costs*, (Kinsella, 2004) the number one “change driver” for shaping trends in the United States is the “Aging of America.” This report indicates that Americans are living longer and having fewer children. These two trends have produced a higher percentage of older people in the United States. There are approximately 76 million people in the baby boomer generation that are approaching retirement age. According to the U.S. Census Bureau, between the year 2000 and 2050 the number of people age 65 will double. The number of people age 85 will quadruple. By the year 2011 the first wave of the baby boomers will reach age 65 and be ready for retirement.

Over the past decade the percentage of inmates in our prison system age 50 and older has increased. This trend has continued for the past several decades. From 1981 to 1990 the number of inmates in that age bracket more than doubled in the United States. In a similar report that summarized the changing demographics in 16 southern states, there was a 115% increase in inmates age 50 and older between 1991 and 1997. This was during a time when the total inmate population only grew 84% (Geriatric Psychiatry, 2002.)

As previously noted, the overall aging population of the United States is one of the trends causing this increase in the aging inmate population. The other aspect in this is the more stringent sentencing mandates that the different states have adopted. These include mandatory sentences for drug crimes, violent crimes and crimes involving the use of a firearm.

The Bureau of Justice Statistics (2004) reports that there were 2,131,180 people held as inmates in either federal or state prisons as of June 30, 2004. This number represented a 2.3% increase in the previous 12 months. What this means is that an incredible 486 out of every 100,000 Americans are in prison. From 1995 to 2001 63% of the growth of all state prisons was from inmates that had committed violent crimes.

Research indicates that several trends or movements have increased or at least have contributed to the aging inmate population in our country. During the 1980's there was an increase in violent crimes as a result of increased drug use with the introduction of crack cocaine. The public outcry about this increase in violence led to harsher sentences being handed down in all the states. The sentences became longer and judges were held to sentencing guidelines. The increase in crime also brought about abolishing discretionary early release programs. It also brought into play the "three strikes and you are out" mentality, which moved through the country quickly. The result was that more people were being sent to prison and they were staying there longer (Owens, 2003.)

The aging inmate population in Georgia is greatly represented by violent criminals. Almost seven out of ten older inmates in Georgia are serving sentences for violent crimes or sex crimes. With such serious crimes come serious sentences. Almost three-quarters of all inmates age 50 years or older are serving prison sentences of 10 years or more. The average 50 plus inmate is serving a sentence of at least 15 years (Owens, 2003.)

Simply put, tougher laws keep people in prison longer. That is one reason we have an aging inmate population. According to staff writer Gary L. Wright, of the Charlotte Observer (2005), North Carolina taxpayers spent more than \$583 million in the past three years on prison health care alone. The cost for caring for inmates of all ages has increased from \$76 million in 1997 to \$143 million in 2004. In 2005 that figure is expected to climb to \$169 million.

Nationwide the cost of health care has jumped from \$696 billion in 1990 to almost \$1.7 trillion in 2003. Looking back that is almost seven times the amount spent in 1980 on healthcare. Mr. Joe Weedon of the American Correctional Association has publicly stated that the two biggest problems facing corrections today are the rising health care cost and the aging inmate population. On a national level the states prison systems spent \$3.3 billion in 2001, or about 12% of their total operating expenditures.

This healthcare issue and others associated with the imprisonment of humans' raises many questions about what is moral and ethical. We as a society in the United States want to be sensitive to the needs of inmates; however we also have to keep in mind the enormous cost to the taxpayer due to the healthcare expenses of elderly inmates. Without fail the available literature is written from one of two angles. The studies conducted by the various state and federal systems talk about the rising cost of housing elderly inmates, which invariably relates the rising cost of health care as a major issue. The newspaper and journal articles seem more concerned with the human side. The

amount and quality of care elder inmates receive is more likely discussed in those formats, with sidebar mention about the cost to the taxpayer (Brunner, 2002.)

It seems that most studies conducted on the issue of the aging inmate population have made similar recommendations. As Ms. Kristin Brunner stated in her research none of them are either cost effective or very radical. Almost all recommend providing separate facilities for housing elder inmates. Centralize the health care system to cut cost. Provide better education and training for staff to enable them to treat older inmates fairly. Provide better education for the elder inmate population concerning their own health and transition for possible release. There are also recommendations that whenever possible prisons should provide early release and help with placement for the non-violent offenders in public healthcare institutions (Brunner, 2002.)

This is not just an American problem. Countries the world over are wrestling with the same problems and questions about the aging inmate population. In a study conducted by Ms. Anna Grant, with the Australian Institute of Criminology, she found that the inmates over age 50 had tripled in only 10 years, from 1987 to 1997. She found that in Australia over 50% of the inmates in that group were incarcerated at age 50 or older, while only 26% of the aging inmate population was younger than 50 when incarcerated and had aged in prison (Grant, 1999.)

The same researcher discovered that 63% of the offenses in the sexual violence offenses were committed by older offenders; compared to 47% by younger offenders. She also discovered that inmates age 50 and older committed homicides at 15.6% compared to 9.2% of inmates under the age of 50. These trends seem to be a reversed parallel of America.

Although Australian crime rates appear different from American crime rates, there are striking similarities between the Australian system and our own. For example, it cost three times as much to house older inmates in Australian institutions as compared to younger inmates. The same is true in America's prisons.

The recommendations that older inmates be housed in geriatric facilities have their own set of additional problems. On the human side there is the complication of the elderly inmates being able to maintain family contacts. There was also some indication that losing the intergenerational communication with younger inmates would make transition more difficult for older inmates when it comes to adjustment upon release (Grant, 1999.)

A review of literature released as a "Study of the Older Inmate Population in Virginia and its Budget Implications" for the Virginia House Appropriations Committee reveals many truths well documented in almost every major American study this researcher has found so far. Some of those truths are:

- Inmates are not eligible for Medicaid and Medicare.
- There is an increasing number of older inmates who are in poor health and who need assistance with daily living.

- Release can be a great challenge for older inmates with little or no marketable skills or means of support.

According to the Virginia study each year 500,000 people age 50 and older commit violent and sexual offenses. Pedophiles are 12.5% to 14.4% of those inmates age 60 years old or older. Convicted sex offenders are 7.5 times more likely than other ex-offenders to be rearrested. Virginia's prison population as of the middle of 2003 was 30,293. 10.4% of those incarcerated in Virginia were age 50 years old or older. There are many more following close behind in age with an additional 4,417 between the age of 40 and 44 years old and 2,764 more inmates at age 45 to 49 years old.

Virginia reports that older inmates suffer from more chronic illnesses. They take many times more medications that are costly. They also tend to exhibit poor coping skills, both while in prison and upon their release. Many older inmates also have co-morbid mental disabilities. Their special needs include prosthetic devices, wheelchairs, denture, access to lower bunks, limited ability to use stairways to walk for long distances. Older inmate also visits health clinics as much as five times more than younger inmates.

The Virginia study indicates that other states have take a variety of measures to at least attempt to cut the cost associated with elderly inmates. These steps include telemedicine, electronic monitoring of older chronically or terminally ill inmates, private managed care plans, inmate co-payment for medical services. Other states have also reassessed their "three strikes" laws, mandatory minimum sentence laws, and other issues that kept older inmates incarcerated longer. They also recommended seeking alternatives to incarceration and look for secure private facilities for released elderly inmates.

The Virginia study indicates that many states are not keeping adequate records to track the health care cost of any group of inmates including elderly inmates. Most states do not have adequate records of the cost associated with geriatric health care cost. The states and the federal government's records that do track inmate health care cost, and are delineated so that geriatric cost can be determined, indicate that on average elderly inmates cost two to three times more per year to house than younger, healthier inmates. Surprisingly enough, most states are not implementing any substantial cost-saving measures to alleviate the dramatic medical costs known to exist with a higher elderly inmate population.

The literature from the State of Virginia recommends that the process for releasing terminally ill inmates with low security risk to hospice facilities be streamlined. It further recommends that Virginia find a way to release geriatric, special needs and or severely disabled inmates to private facilities with sufficient security. It also recommends that tracking systems be implemented to keep up with the health care expenditures of the prison system so that any particular group can be analyzed by age and type of medical conditions. It recommends that each year elderly inmates be re-evaluated for early geriatric release; and explore the possible use of non-traditional approaches for reducing the geriatric inmate population such as electronic detention systems or house arrest. The final recommendation was that the State of Virginia reconsider laws that

require mandatory minimum sentences like the truth in sentencing laws. These types of laws increase the number of geriatric inmates and therefore are more costly to the taxpayers.

Sub-group of Offenders: Women over age 50:

Although it may be much more natural to think of elderly females as victims of crime instead of the perpetrators of crime, the fact of the elderly female inmate is a reality that every state will have to face. There are more and more elderly female inmates in state and federal prisons nationwide. The number of age 50 year old and older female inmates is small compared to their male counterparts, but their numbers are growing. The number of 50+ prison population is growing at a rate of 10,000 inmates per day. This is an increase that is expected to last for the next two decades. With these increases the number of older females in prison will continue to grow also. There were only approximately 6,000 women housed in state and federal prisons in 1972. That number had exploded by 2004 to 103,000 female inmates locked up in our prisons nationwide. Of that 103,000, 6,000 female inmates are already over 50 years of age and that number is continuing to grow (Justice, 2004.)

There are several contributing factors causing the increase in the aging female population in prisons such as longer mandatory sentences and the abolishment of parole for women committing crimes. Just as the number of women committing crimes has increased, so has the length of their sentences. Similar to their male counterparts, many women are spending their old age in prison (Colsher, Wallace, Loffelholz & Sales, 1992; Cranford & Williams, 1998; Ellsworth & Helle, 1994; Henderson, Schaeffer & Brown, 1998.)

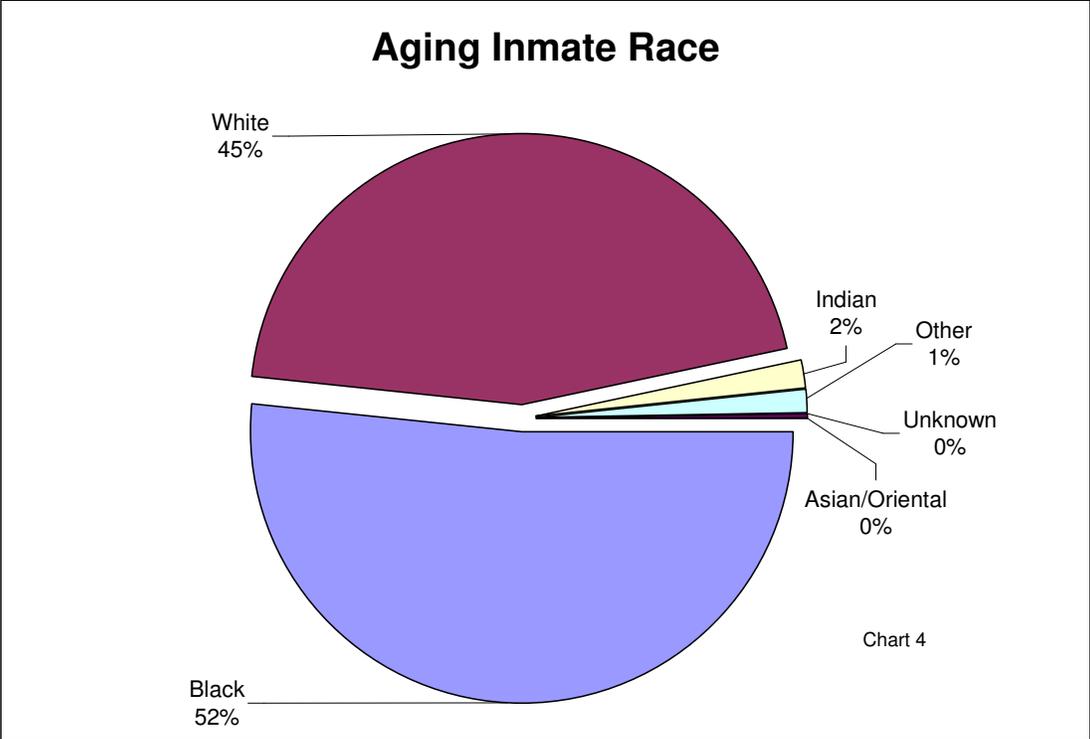
FINDINGS

As of June 30, 2005, North Carolina Division of Prisons had a total inmate population of 36,663 inmates. Of these, slightly less than 10% (3,490) were age 50 or older.

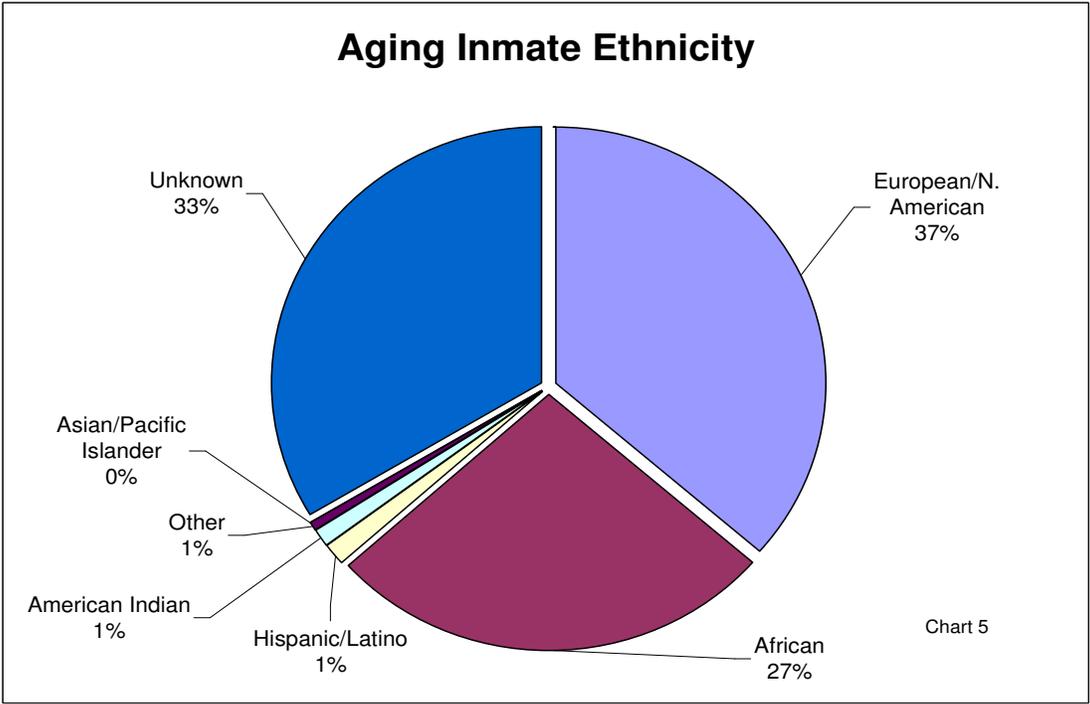
The majority (95%) of the aging inmates are male as compared to 93% of the total inmate population being male. There are 182 aging female inmates which make up 7% of the total female inmate population. The following additional demographic information was collected from the North Carolina Offender Population Unified System (OPUS).

Race/Ethnicity:

The majority of the inmates age 50 or older are Black (52%). White (Caucasian) inmates make up 47% of the aging inmate population with only 2% Indian (Native American) and approximately 1% Asian/Oriental. The other 1% of the aging inmates are either "unknown" or "other." The racial makeup of the aging population is seen below in Chart 4.

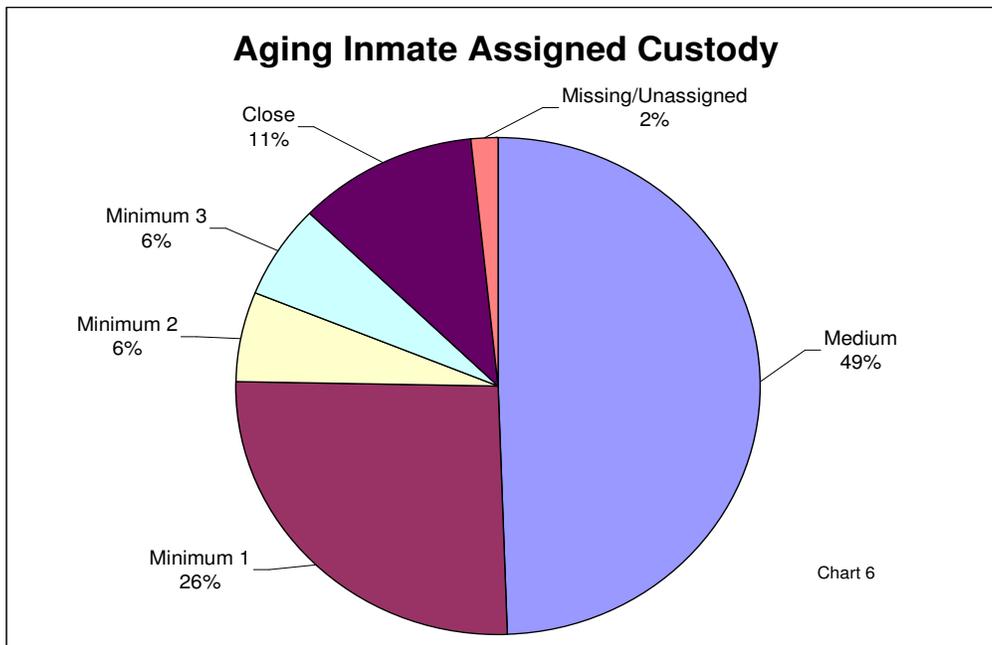


The ethnic background of the inmate population is more difficult to determine as 33% of the inmates' ethnic background is "unknown" according to OPUS. Chart 5 below shows the breakdown of the aging inmate population ethnicity.



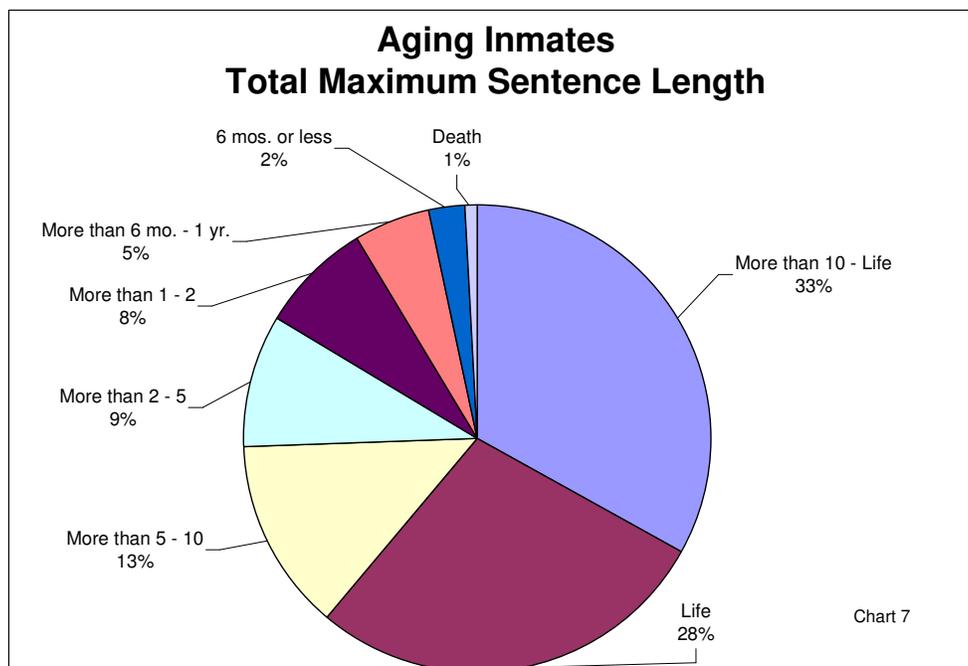
Custody Level:

Almost one half of the aging inmates are assigned to medium custody with the second largest number assigned to minimum custody. Chart 6 below shows the assigned custody breakdown of inmates age 50 and older:



Sentence Length:

The majority of aging inmates are serving a sentence of more than 10 years to life. Over 60% (2109) of the aging inmates are serving a long term of 10 years to life, life, or death. Chart 7 shows the total maximum sentence length of the aging inmates:



Crime Type:

Approximately 56% of the inmates age 50 and older are serving sentences for violent or sex crimes. Table 1 breaks down the crime categories for the aging inmates as compared to the total inmate population:

CRIME CATEGORY	Age ≥50	% of Age ≥50	Total Population	% of Total Pop.
Sexual Assault	700	20%	3651	19%
Habitual Felon	440	13%	4409	10%
Murder First Degree	412	12%	1880	22%
Murder Second Degree	404	12%	3178	13%
Drugs- Non-Trafficking	219	6%	3105	7%
Assault	207	6%	2894	7%
Robbery	164	5%	4476	4%
Drugs- Trafficking	137	4%	2074	7%
Other Sexual Assault	110	3%	822	13%
Driving While Impaired	106	3%	976	11%
Kidnapping & Abduction	81	2%	796	10%
Burglary	80	2%	998	8%
Larceny	80	2%	1531	5%
Fraud	77	2%	957	8%
Breaking, Entering	75	2%	2154	3%
Manslaughter	50	1%	487	10%
Other Public Order	44	1%	808	5%
Other Traffic Violations	38	1%	636	6%
Forgery	21	1%	302	7%
Burnings	20	1%	176	11%
Not Reported, Undefined	6	0%	26	23%
Other Offenses Against Person	6	0%	58	10%
Other Property Crimes	3	0%	65	5%
Auto Theft	3	0%	127	2%
Worthless Checks	1	0%	13	8%

Table 1

Education:

The average inmate age 50 or older has a slightly higher education level than the total inmate population. The majority (55%) of the aging inmates have less than a high school education; 967 (28%) have a high school degree or GED; while 578 (17%) have some college. Of the total inmate population, 27% held a high school degree or GED and only 9% had some college.

Medical Services:

As would be expected, the number of disabled and seriously ill inmates in the aging population is higher than in the total inmate population. A look at inmate *health grades* shows that less than 1% of the total inmate population falls into the categories of

“severely restricted activity” and “no work, recreation or training.” This percent increases to 3% for inmates age 50 and older.

The inmate *medical/mental health acuity* measure shows even a larger discrepancy between the two groups. Only 3% of the total inmate population falls into the 3 or 4 acuity levels (3A – Chronic Disease; 3AB Chronic and Residential Mental Health; 3B – Residential Mental Health; 4A – Inpatient Medical; 4AB Inpatient Medical/Mental Health; and 4B – Inpatient Mental Health.) Over 10% of the aging inmates have an acuity level of 3 or 4.

The health costs for housing an inmate age 50 or older is almost four times that of a younger inmate. The average cost for health care (dental, medical, mental health, and pharmaceutical) for an inmate under age 50 was \$1,919 in fiscal year 2004-2005 while that cost was \$7,159 for an average inmate age 50 or older.

Although a review of the North Carolina Medical Operations Management System (MOMS) does not provide a full picture of the medical cost of inmate aging, it does provide information regarding the number of encounters internally and externally, as well as the cost of medical care. During fiscal year 2004-2005, the Division spent \$24,983,247 for the health care of its inmates age 50 and older. The following chart breaks down the health care costs for inmates by age groups:

Internal Health Care	Under 20	Age 20-29	Age 30-39	Age 40-49	Age 50+	Total
# Dental Encounters	2,242	27,784	28,478	21,586	8,540	88,630
# Medical Encounters	21,573	186,084	226,919	223,282	144,925	802,783
# MH Encounters	6,458	63,848	77,038	66,474	36,892	250,710
# Rx Filled	3,909	98,172	197,065	244,544	196,972	740,662
External Medical Care	Under 20	Age 20-29	Age 30-39	Age 40-49	Age 50+	Total
# Encounters	704	11,320	17,240	19,649	19,334	68,247
Health Care Costs	Under 20	Age 20-29	Age 30-39	Age 40-49	Age 50+	Total
Dental Care	\$26,947	\$436,455	\$473,162	\$357,485	\$135,382	\$1,429,431
Medical Care	\$129,752	\$1,176,585	\$1,495,574	\$1,478,574	\$917,276	\$5,197,762
Mental Health Care	\$110,254	\$1,312,213	\$1,878,732	\$1,828,176	\$907,580	\$6,036,955
Pharmacy	\$91,270	\$2,648,828	\$6,258,798	\$8,586,335	\$4,927,956	\$22,513,186
External Care	\$446,766	\$7,303,973	\$11,415,676	\$16,196,341	\$18,095,053	\$53,457,808
TOTAL HEALTH CARE COSTS	\$804,989	\$12,878,053	\$21,521,942	\$28,446,911	\$24,983,247	\$88,635,142

Data from NC Medical Operations Management System (MOMS)

Aging Inmate Survey:

As part of this study, a survey was conducted with 245 inmates age 50 and older at six facilities (McCain Correctional Hospital, Randolph Correctional Center, Eastern Correctional Institution, Pender Correctional Institution, Central Prison, and North Carolina Correctional Institution for Women.) The average age of the inmates surveyed was 58 years with a range of 50 to 85 years. Of those surveyed, 31 were female and

214 were male. According to the survey, 77 (31%) of the inmates were married with 81 (33%) being military veterans.

Almost 25% (61) of those surveyed said they were serving a life sentence. The average length of the non-life sentence was 11.15 years. The average amount remaining on the non-life sentence was 5.26 years. The average inmate was 43 years old when he/she first came to prison. Approximately 28% (68) of the inmates reported that they were sentenced for violent or sexual crimes.

Of the inmates surveyed, 141 (58%) had been in prison previous to their present sentence. The average inmate has been in prison twice prior to his/her current stay.

Of those surveyed, 182 (74%) said they were currently under medical care and receiving prescribed medications. The most prevalent self-reported medical conditions among the respondents were:

1. Heart Disease
2. Diabetes
3. Bone and Joint Disease
4. Respiratory Problems
5. Cancer
6. Seizures
7. Liver Disease
8. Kidney Disease
9. Parkinson's Disease
10. HIV
11. Hepatitis C
12. Tuberculosis
13. Paralysis
14. Prostate Problems
15. Vision Problems
16. Hearing Loss
17. Anemia

Survey questions 12 through 20 addressed general medical and dental issues:

- A special diet was required by 48 (20%) of those surveyed due to health reasons.
- 136 (55%) claimed that their medical condition had declined since being in prison.
- Special equipment/assistance such as a walking cane, brace, or wheelchair was required by 68 (28%) of those surveyed.
- 195 (79%) had seen either a nurse or a doctor within the past 6 months for medical treatment.
- 116 (47%) reported that they wore dentures or other dental devices.
- 135 (55%) had seen a dentist within the past 12 months.
- 77% of the respondents wore eyeglasses

Of those surveyed, 49 (20%) said they were currently under mental health care. Of those receiving mental health services, 33 (67%) have been under mental health care for over two years. Reported mental health illnesses included:

1. Depression
2. Schizophrenia
3. Nerves
4. Sleep Disorder
5. Anxiety

Of those surveyed, 145 said they were currently involved in prison programs. These programs included:

1. AA/NA
2. Religious Programs
3. DART
4. CBI
5. GED/Education
6. Work Programs
7. Vocational
8. Social Clubs

The majority (65%) of those surveyed felt that they were treated about the same as younger inmates by prison staff. Slightly more than 22% felt they were treated worse and 12% felt they were treated better by staff than younger inmates.

Of those surveyed, half (50%) believed they were treated the same as the younger inmates by other inmates. Slightly more than 32% felt that they were treated worse by other inmates and 17% felt they were treated better.

When asked about other concerns the inmates had about aging in prison, almost 43% of the concerns expressed were in regards to medical care. The following are the concerns expressed by the inmates in order of responses:

1. Medical issues/poor medical care in prison
2. Fear of dying in prison
3. Not enough programs for the elderly
4. Being away from home/family
5. Fear of release
6. Being taken advantage of by younger inmates
7. Not enough appropriate work assignments for elderly
8. Depression/life has no meaning
9. Security issues/not feeling safe

Survey of Other States:

A telephone and email survey of other state correction departments was conducted during the month of March 2006. (See Appendix C for the survey instrument.) Of the

49 states contacted, 38 responded to the survey (a 78% return rate.) In these 38 states, there was a total prison population of 1,091,739 as of June 30, 2005. Of these inmates, 116,007 (11%) were age 50 or older. Twenty of the states have special housing for geriatric inmates and 27 have an early release program for elderly inmates who are terminally ill or severely disabled. States with an early release program for elderly inmates released 317 inmates as part of that program during 2005. Only five states surveyed have any other special programs for aging inmates.

Comments from the states responding to the survey were varied in regard to types of ***special housing available for elderly/geriatric inmates:***

- **Washington State** has one minimum custody assisted living facility that houses elderly and disabled offenders.
- **Texas** has one Type I Geriatric Facility in which a portion of the unit was specifically designed to house geriatric offenders and eight Type II Geriatric Facilities which have been enhanced to house geriatric offenders in portions of the unit.
- **New Mexico** has one geriatric unit.
- **Minnesota** has a 100-bed special needs unit for adult males age 55 or older or who have medical needs that require additional nursing care.
- **Michigan** has a men's geriatric unit and a long-term care unit.
- **Massachusetts** has a medium custody Assisted Daily Living Unit that can house 13 inmates. These inmates do not require hospital or infirmary level care, but cannot live in general population due to needing help with one or more daily living activities.
- **Indiana** has an assisted living unit, but it is not based on age. It is based on infirmity.
- **Colorado** has a 500 bed prison for able bodied, geriatric and mentally ill inmates who need skilled nursing care. Approximately 36 beds are dedicated to elderly geriatric care.
- **Arkansas** has special barracks that are denoted as Sheltered Living Units. These subunits are for elderly inmates.
- **Rhode Island** has special housing for wheelchair bound/frail male inmates.
- **Pennsylvania** has a long-term care facility for geriatric and terminally ill inmates.
- **Nevada** has one geriatric facility.

- **Mississippi** has one small geriatric unit.
- **Illinois** has one unit consisting of 94 beds at one correctional facility.
- **Idaho** has geriatric (ADA) housing in one housing unit at one male prison.
- **Georgia** has two regular state institutions where only elderly inmates with medical issues are transferred there.
- **Florida** has two facilities for elder/geriatric inmates and has dorms at two other facilities.
- **California** has a skilled nursing facility for older female inmates and a geriatric unit for geriatric men.
- **Alabama** has a geriatric facility for elderly and medically disabled inmates.

Of the five facilities who responded that they have ***other specialized programs for elderly/geriatric inmates***, the following responses were given:

- **Oklahoma** has palliative care for terminally ill inmates who are not eligible for medical parole (due to the crime). Also, Oklahoma's laboratory testing is age specific.
- **Utah** classifies inmates as "Aggressive" (Kappa) and "Passive" (sigma). They have a dormitory housing unit where elderly inmates in wheelchairs or on oxygen are assigned a Sigma inmate to help with daily chores, replacement of oxygen bottles, movement to the infirmary, etc. The Sigma "helpers" must volunteer.
- In **Minnesota's** 100 bed special needs unit, offenders under the age of 55 are required to participate in some sort of facility programming, i.e., education, treatment, or light industry, if they are able to do so. If they are 55 or older, they can choose to be "retired" and not participate in programming. The unit also has religious activities, social activities, and a veterans group.
- **Pennsylvania's** elderly inmates have access to general programming available to all other inmates. In addition, there are a number of programs specially designed for elderly inmates. S.T.E.P. (Services to Elderly Prisoners) is the major program specifically targeted for elderly offenders incarcerated in the Pennsylvania Department of Corrections. It is contracted from the Pennsylvania Prison Society. The S.T.E.P. program is multifaceted including leisure time activities; skills development; pre-release planning; parole planning; and it provides information on social security benefits and Medicaid. In addition, a wide range of social services for release/reintegration are provided.

- **Ohio** had the most extensive list of programs for elderly inmates of those surveyed. Each Ohio prison has programs specifically designated for inmates 50 and older and/or for geriatric inmates.

Ohio programs for the elderly include the following:

Assisted Living/H.O.T. Program – Residents live in a one-floor dormitory that features its own commissary, food service and recreational programming. Those with severe physical limitations are provided with a H.O.T. (Helping Others Together) partner to assist them.

Aunt Jane's Storybook – Participants in this program choose an age-appropriate book to share with a young member of their family. They read the story which is audio taped and send the book, tape and personal message to their young relative(s) as a gift. This program promotes literacy as well as family bonding.

Don't Forget! – Many older inmates experience memory loss due to aging, long-term substance abuse or other ailments. This program uses memory improvement techniques, audio- tapes, note taking, handouts and mental exercises to retain and improve memory.

Medication Education – A series of informative lectures along with participant discussions teach older inmates who take psychotropic medications about the effects of medications, dosages, and the importance of taking them regularly.

Fifty Plus and Aging – This program provides information on aging for inmates. Participants attend lectures and identify their own experiences in the aging process. They explore current events and keep journals recording their insights about aging. Discussion topics focus on issues such as death and dying, financial planning, family reintegration, grief, etc.

Grandparenting – Using open discussion, lectures and handouts, these classes help older inmates learn to deal with extended, blended and other family groupings. It also helps them support their families by being active and effective grandparents.

Healthy, Well and Wise, Personal Dynamics for Elderly Inmates; A Way Out; and Eye on the Future – These types of programs, often co-sponsored and taught by the Central Ohio Area Agency on Aging, discuss health and mental health concerns. Participants learn about dementia, confusion, vision, osteoporosis, depression, strokes, insurance issues, hospice and more. They are encouraged to learn how to use communication, information and humor to cope with aging issues. Counseling, assertiveness training, meditation and relaxation techniques

are used to instruct the older/medically fragile inmate on ways to increase their coping skills for stresses encountered in prison.

Grief Workshop; Life Beyond Loss; and Heart to Heart – These programs explore the issues of death, dying and significant loss. Using the book, On Death and Dying (Elizabeth Kubler-Ross) and other handouts, participants learn about the grieving process as it relates to their family members and friends, the loss of physical health and the reality of their own eventual death.

Aerobic Exercise Program - An exercise program that is geared toward the older and/or disabled individual. Three levels of exercise (chair, intermediate, advanced) allow inmates with different levels of physical ability to participate. The Medical Department examines inmates to determine ability to progress to a higher level.

Older Resourceful Women - A program at the Ohio Reformatory for Women which allows the older inmate to contribute to the community by making quilts, knitting articles of clothing and toys, and embroidering items donated to needy families and to disabled children at the Heinzerling Foundation.

Huggy Bears – a program that consists of older inmates assembling soft teddy bears donated to children of battered women.

Recovery Programs - Substance abuse programs are available to all inmates. In order to attain and maintain a healthy lifestyle, both inside prison and after release, it is essential they address and learn the dynamics of substance abuse. DRC offers alternatives to recovery programs that are usually attended by younger inmates. For example, *No More* is structured as an alternative to the standard Narcotics and Alcoholics Anonymous programs attended by younger inmates. *Seeking a New Direction* is a program that provides intensive outpatient treatment to older, chemically dependent inmates. The program uses materials and videos from the Hazelden Foundation and Kindred Publishing.

Recreation - Maintaining optimal physical condition is crucial to productive and rewarding “older years.” For obvious reasons, older inmates are often reluctant to join recreational programs that include younger and more physically fit participants. DRC offers several recreational programs targeted to the older inmate. For example, *Exercise for Better Health; Over Forty Physical Fitness; Jogger/Walker Fitness; Silver Fox; and Steppin’ Up* programs are all fitness related programs that offer low impact, age-appropriate regular exercise for older and infirm inmates. Exercising with others of their own age group encourages inmates to compete without fear of ridicule or worry about “keeping up” with younger groups.

Forty-five and Over Intramural Basketball League – was developed to be “a league of their own.” This league provides recreational team activity for older inmates. The teams encourage self-discipline, organization and conditioning. Weekly games and tournaments add entertainment to the inmates’ daily life in prison.

Expressive Arts with the Aged and Third Age Arts and Crafts Programs are programs that are offered to all inmates and use art as a creative medium to encourage mobility and self-expression in older inmates regardless of their infirmities. Senses are stimulated through color and texture and coordination is improved while using a variety of art supplies for self-expression. By displaying and explaining their art to fellow students, the participants develop better self-confidence.

Days Gone By is a journaling program developed by Hocking Correctional Facility’s Kevin Bryan, Unit Manager. The program is facilitated by college tutors and it enables older inmates to give something tangible and worthwhile to their families. “It’s sad to think their [family’s] only memory is that their loved one was a criminal and died at Hocking,” says Bryan. “Through their journals they can write about positive and interesting aspects of their lives such as marriage, historical events they witnessed, the prices of food and activities in 1911 and things like that.” The journals are then presented to a chosen family member at a special presentation.

ACT (Action, Communication and Tolerance) is a program that incorporates responsibility for the crime, the impact on the victim and society, changing behavior prior to release and a segment with the inmates’ families. Family members come into the prison and discuss real issues that are affecting them. “Many of these problems are not brought up during regular visits because neither the family nor the inmate wants to ‘ruin’ the visit,” says Unit Manager Kevin Bryan. “We work on formatted questions that bring up problems such as the wife having to work two or three jobs while her husband is in prison. We work through many issues so that the inmate knows his family’s expectations before he is released.” (Moore and Unwin, 2002).

In addition, each Ohio prison has a designated administrator for the older population as well as a system-wide administrator. In the near future a website that will be part of the Ohio Department of Rehabilitation and Correction’s internet website will be available. The website will exclusively address all the issues and programs available for the older inmate population. Currently one Ohio prison is dedicated exclusively to housing older inmates.

RECOMMENDATIONS

A review of literature and a review of other states' practices affirm that comprehensive correctional policies and procedures regarding aging inmates are still in their infancy. As corrections professionals begin to assess and address the unique needs of older inmates, it is expected that more comprehensive approaches will begin to emerge.

Most states are attempting to address the issues facing the aging inmate population in an effort to reduce costs. Five states who responded to the Aging Inmate Survey have programs developed specifically to address the special needs of their elderly/geriatric inmates.

It is recommended that North Carolina take a pro-active approach to dealing with the issues of the aging inmate population. The following are recommendations that should be considered by the Department:

- Explore the release of terminally ill inmates who are low security risks to hospice facilities.
- Seek a way to release geriatric, special needs and severely disabled inmates to secure private facilities.
- Track inmate health care expenditures so that they can be analyzed by age and type of medical/mental health conditions and needs both internally and at outside providers.
- Review geriatric-specific programs in other states and determine which ones could be implemented successfully in North Carolina.
- Add age as a variable in the annual Prison Population Projections Report in order to better plan for the increasing aging inmate population.
- Review and consider legislation that would allow for releasing more geriatric inmates safely into the community.
- Review and correct the ethnic data on OPUS in order to reduce the 33% "unknowns" and to better understand the ethnic makeup of our inmates.

May 15, 2006

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**2005 Aging Inmate Population Study
Inmate Questionnaire**

DATE: _____

FACILITY NAME: _____

1. How old are you? _____
2. Are you married? Yes No
3. Are you a military veteran? Yes No
4. What is your race? White/Caucasian African-American (Black)
 Latino/Hispanic Asian/Pacific Islander Native American (Indian)
 Other (specify) _____
5. What crime are you in prison for? _____
6. What is the total length of your prison sentence? _____
7. How much time is remaining on your prison sentence? _____
8. How old were you when you first came to prison? _____
9. How many times have you been in prison before this time? _____
10. Are you currently under Medical care? Yes No
If yes, for what? _____
11. Are you currently on any prescribed medicines? Yes No
12. Are you on a special diet? Yes No
If yes, for what? _____
If yes, which special diet are you on? Regular with 3 snacks Mechanical Soft
 Renal Vegan 2000 calorie 2500 calorie 3000 calorie
 Other special diet (specify) _____
13. Do you have medical concerns that are not listed above? Yes No
If yes, what? _____
14. Has your medical condition changed since you have been in prison? Yes No
If yes, has it: Improved (gotten better) Declined (gotten worse)
15. When was the last time you saw a doctor or nurse?
 Within the past month 1 – 6 months ago 7 – 12 months ago
 1 – 2 years ago More than 2 years ago

16. Do you require any special assistance such as a wheelchair, handrails, ramp, walking cane, braces, or such? Yes No

If yes, what? _____

17. Do you have dentures or other dental devices? Yes No

18. When were you last seen by a dentist?

- Within the past month 1 – 6 months ago 7 – 12 months ago
 1 – 2 years ago More than 2 years ago Never

19. Do you wear eye glasses? Yes No

20. When was your last eye exam?

- Within the past month 1 – 6 months ago 7 – 12 months ago
 1 – 2 years ago More than 2 years ago Never

21. Are you currently under the care of Mental Health Services? Yes No

If yes, for what? _____

If yes, how long have you been under Mental Health Services care?

- One month 1 – 6 months 7 – 12 months
 1 – 2 years Over 2 years

22. Are you currently involved in any prison programs? Yes No

If yes, which one(s) - check all that apply:

- AA/NA
 DART
 CBI (Thinking for a Change, Reasoning & Rehabilitation, etc.)
 Religious programs or activities
 GED/Educational programs
 Vocational programs
 Service clubs
 Work programs
 Other, specify _____

23. Compared to younger inmates, how do you think older inmates (age 50 and over) are treated by prison staff? Better Worse The Same

24. Compared to younger inmates, how do you think older inmates (age 50 and over) are treated by other inmates? Better Worse The Same

25. Do you have other concerns about your aging in prison? Yes No

If yes, what?

Thank you for completing this questionnaire.

**Aging Inmate Population Study
Oral Consent Statement**

Thank you for joining us today. Let me tell you about our research project and your part in it. You are being asked to take part in completing a questionnaire regarding the study of the aging inmate population (age 50 and over). The study is being conducted by Charlotte Price, a correctional planner for the Division of Prisons and James Rollins, a student at Mount Olive College.

The intent of this research project is to learn about the aging inmate population in order to assist the Division of Prisons in planning for the future of this growing population.

We are doing questionnaires like this one in prisons where there is a larger number of inmates age 50 and over. We hope to gather general information about your experiences and opinions in order to share this information to be used in planning for future programs and services for aging inmates.

We think that any risk to you is minimal although you may feel some sadness thinking about some of the issues in the questionnaire.

You will not benefit directly from taking part in this study. Neither your sentence nor your treatment by prison staff will change. Your answering questions may help people know more about the aging inmate population.

Your participation is voluntary and you will remain anonymous. No names will be associated with the questionnaires. If you do not want to participate, please do not complete the questionnaire. We do ask that you wait until the others have finished before leaving the room. By completing the questionnaire and turning it in, you are consenting to participation in the study.

No participant will be identified in any report or publication about this study. You are asked not to put your name or OPUS number on the questionnaire. Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records. This is very unlikely, but if disclosure is ever required, the Department will take all steps allowable by law to protect the privacy of personal information.

Although answers that you give will be kept confidential, there are several exceptions to this: if you tell the investigators that you are thinking about hurting yourself, or hurting someone else or planning an escape. These matters are not confidential and the investigators must pass this information on to the prison staff.

Do you have any questions?

AGING INMATE POPULATION STUDY TELEPHONE SURVEY OF OTHER STATES

DATE: _____

STATE: _____

NAME & TITLE:
_____1. What was your state's **total inmate population** as of **June 30, 2005**?2. Of these, how many were **age 50 or older** as of **June 30, 2005**?3. Does your state have specialized housing for elderly inmates (i.e. nursing home facilities; geriatric units, etc.)? Yes No
If yes, what type and how many facilities?4. Do you have an early release program in your state for elderly inmates that are terminally ill or severely disabled? Yes No
If yes, please describe the program:

If yes, how many inmates received an early release last year as part of this program? _____

5. Does your state have other specialized programs for elderly/geriatric inmates?
Yes No
If yes, please describe: