

**A REVIEW OF THE CIRCUMSTANCES SURROUNDING
THE DEATH OF M.A.**

**NEGLIGENT SUPERVISION AND FAILURE TO PROVIDE
APPROPRIATE AND TIMELY BEHAVIORAL PROGRAMMING LEAD
TO BATHTUB DROWNING AT MANZANITA RESIDENCE,
SONOMA DEVELOPMENTAL CENTER**

Note: When this report was originally published, we were known as Protection & Advocacy, Inc. (PAI). In October 2008, we changed our name from PAI to Disability Rights California.

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I. INTRODUCTION

This report presents the results of Protection and Advocacy Incorporated's (PAI's) review of the circumstances surrounding the drowning death of resident M.A. on July 13, 1992 at the Manzanita residence, Program 4, Sonoma Developmental Center (SDC). This review was undertaken as part of PAI's responsibility pursuant to federal and state mandates to investigate incidents of abuse or neglect of persons with developmental or mental disabilities when such incidents are reported or if there is probable cause to believe such incidents have occurred.

From its review, PAI determined that:

- Resident M.A. was left unsupervised in a bathtub full of water for a period of at least half an hour, during which time he drowned and was eventually found by a janitor. (The Coroner's office ruled M.A.'s death as an accidental drowning.)
- The staff to client ratio at the time M.A. was found was 2:3.
- Although the use of unsupervised bathtub play was used frequently and casually as a behavioral technique for resident M.A., there was no behavioral treatment plan delineating its use in his clinical records.
- Significant clinical events -- such as a seizure resulting in loss of consciousness that occurred only two months prior to M.A.'s unsupervised bath and drowning; and a previous incident in which M.A. was discovered by direct care staff lying motionless under the water in the bathtub -- were not communicated properly among staff, allowing M.A.'s health and safety to be further jeopardized by the continued utilization of unsupervised bathtub play.
- Many SDC direct care, supervisory, and professional staff claimed that it was common practice to allow certain clients to take long baths unsupervised, in direct violation of SDC policy, as part of a behavioral reinforcement schedule or for relaxation purposes.

PAI has concluded that M.A.'s death could have been prevented if SDC had followed its own policies concerning safety and behavioral programming. In addition, unit staff failed to communicate properly about events that demonstrated the need for supervision of M.A. while in the bathtub.

The practice of allowing developmental center residents with active seizure disorders in or near water without adequate supervision should be stopped. PAI supports the corrective actions already implemented by SDC administration and recommends that the Department of Developmental Services (DDS) address the issue of safe, dignified bathing practices and related behavioral programming issues for all developmental center residents on a statewide basis. The need for DDS to address these issues is immediate and critical. As PAI was completing this report on the drowning of M.A., we were notified that in January, 1993, a 37-year-old resident of Stockton Developmental Center died under similar circumstances.

PAI's review included:

- **Reviewing resident M.A.'s clinical records from SDC.**

- **Reviewing all SDC Administrative and Nursing Policies that were in effect at the time of M.A.'s death, and reviewing revised bathing policies following M.A.'s death.**

- **Reviewing the physical plant of Manzanita residence, including photographing the central nursing station and bathroom #409.**

- **Reviewing Sonoma County Coroner's investigation report, including M.A.'s autopsy, toxicology report, and death certificate.**

- **Reviewing California Department of Health Services Licensing and Certification's (DHS L&C) "AA" Citation #01-0268-00577, and Statement of Deficiencies and Plan of Correction, both issued in response to M.A.'s death.**

- **Reviewing SDC's Special Investigation reports, with attachments, regarding M.A.'s drowning.**

- **Reviewing DDS Policy Memoranda and Client Development Evaluation Report (CDER) guidelines.**

- **Reviewing standards promulgated by the Accreditation Council on Services for People with Developmental Disabilities (ACDD), a national quality assurance program.**

- **Reviewing the literature regarding deaths caused by bathtub drownings.**

This report is divided into five sections. The first section provides background information on SDC, client M.A., applicable policies and procedures, and findings from research regarding bathtub drownings. The second section summarizes the sequence of events on the day of M.A.'s death on July 13, 1992. It also discusses other significant events and factors that, if addressed and corrected properly, could have prevented this tragedy. The third section outlines corrective actions taken by SDC. The last two sections set forth PAI's findings, conclusions, and recommendations.

II. BACKGROUND

SDC

Sonoma Developmental Center, one of seven centers operated by the State of California's DDS, is a general acute and intermediate care facility serving persons with developmental disabilities. The facility is located on Arnold Drive about six miles north of the city of Sonoma and one mile south of the town of Glen Ellen. There are approximately 1,300 individuals with developmental disabilities residing at SDC. They are served by approximately 2,000 staff members.

Program 4, which includes the Manzanita residence, cares for individuals with autism and those needing specialized behavioral programming and related services. The Manzanita residence serves 26 male and female children, adolescents, and young adults, ages 16 to 22.

Resident M.A.

M.A. was a 22-year-old African-American man who was admitted to SDC on November 6, 1990. His diagnoses were severe mental retardation (an I.Q. of 16), autism, and epilepsy. M.A. received a daily dose of 1200 mg. Carbamazepine (Tegretol) for his seizures. Since his admission to SDC, M.A. had six documented seizures. The last two occurred in 1992, on February 11 and May 14. The last documented seizure, which occurred two months before his death on July 13, 1992, lasted approximately 70 seconds. During this seizure, M.A. lost consciousness, fell to the ground, and had to be carried to his room.

During the course of his treatment at SDC, staff discovered M.A. enjoyed opportunities to play in the bathtub and often resisted getting out of the tub. Staff reported that M.A. would rock himself in the bathtub and liked to do "whale spouts" from underneath the water.

Policies and Practices

One of the fundamental goals stated in SDC's Philosophy and Mission Statement (Policy #101) is that every treatment plan should be designed to address the identified needs of the individual resident while allowing opportunity for self-reliance and independence. M.A.'s treatment team failed to identify the need for and design a safe treatment plan for M.A. Although M.A.'s bathtub play was discussed at his annual conference on June 23, 1992, and during a special meeting on July 2, 1992, just days prior to his death, Manzanita staff failed to recognize the need to develop and implement

a treatment plan regarding its safe use as a behavioral intervention. This failure to develop and implement a timely and appropriate behavioral plan, combined with the repeated lack of adequate supervision constituted a pattern of neglect resulting in M.A.'s death.

At the time of M.A.'s death on July 13, 1992, both of SDC's Nursing Policies regarding showers and baths (#831 - Shower Bath, revised July 11, 1992; and #838 - Tub/Pedestal Bath, revised April 5, 1991) stated explicitly: **"NEVER LEAVE CLIENT UNATTENDED."** On the day of his death, M.A. was left in the bathtub for over two hours and was left unsupervised in the bathtub for a period of at least half an hour.

SDC defines neglect in Policy #413 (Abuse, Mistreatment or Neglect, revised December 1991) as: "Any act or omission that results in a failure to provide for medical care, mental health needs, assistance with personal hygiene, adequate clothing and nutrition, protection from health and safety hazards, and required habilitation or training services." Given M.A.'s seizure disorder, failure to provide adequate supervision while he was in a bathtub full of water was, in reality, failure to protect him from a serious health and safety hazard. This negligent practice eventually led to M.A.'s death.

According to SDC Policy #348 (Reporting Illegal Acts or Violations of Facility Policies and Procedures, revised December 1991): "It is the responsibility of every employee ... because of their employment, association, or moral obligation, to report to the appropriate staff of Sonoma Developmental Center any actions which they believe to be illegal or in violation of facility policies and procedures." Despite this policy, unsupervised baths of M.A. and, reportedly, of other residents continued even though many direct care and supervisory staff were aware of the prohibited practice.

M.A.'s treatment team also failed to follow procedures for approval of the use of bathtub play, a "non-customary therapy," as a tool for behavioral programming. SDC's Policy regarding "Non-Customary Therapies" states: "SDC wishes to promote the development and use of innovative therapies but recognizes the need to insure the rights, health and safety of individuals it serves." According to this policy, any treatment which may be of potential risk or discomfort must be reviewed and approved prior to implementation. SDC defined potential risk or discomfort as: "the reasonable possibility of distress, pain, or suffering or the reasonable possibility of exposure to physical, psychological, social, or legal injury or harm which is beyond the ordinary risks and discomforts of daily life."

Because of M.A.'s active seizure disorder and his proclivity for playing under water, procedures for the safe use of bathtub play should have been delineated clearly. Had his treatment team done this, appropriate precautions could have been implemented that would have prevented M.A.'s death.

SDC's policies and procedures are, in part, derived from ACDD's Standards and Interpretation Guidelines for Services for People with Developmental Disabilities. Standards #609 and #610 state that "residents bathe or are bathed:

- at the degree of independence indicated by their developmental level;
- with due regard and provisions for privacy."

While the practice of allowing M.A. to play in the bathtub without supervision allowed him absolute privacy, the practice also left him at undue risk of harm constituting active neglect. Due to his known history of seizures and playing underneath the water, active supervision with appropriate attention to M.A.'s privacy needs was necessary. PAI recognizes the sometimes delicate balance between privacy and supervision. Adequate supervision can, however, be provided in a manner that neither unduly offends residents' privacy or safety rights. DDS Policy Memo #107 reiterates this balance: "The rights of each individual residing in a Developmental Center to personal dignity, privacy and safety in the performance of personal activities of daily living (such as bathing, dressing, toileting) are to be assured to the maximum degree." (Emphases added.)

ACDD's guidelines for training staff on seizure management state, in part: "Training should include recognition of seizures, appropriate assistance to the person during and after a seizure, and safety considerations for persons with epilepsy." (Emphasis added.)

Certainly a safety consideration for persons with epilepsy is the provision of adequate supervision whenever such at-risk individuals are in or near water.

Seizure Disorder History a Prevalent Risk Factor in Bathtub Drownings

Bathtub drownings are the second major site of drownings in or near the home. On the average, one person per day drowns in a bathtub in the United States. In their study of bathtub-related drownings from 1979 to 1981, Budnick and Ross determined four personal risk indicators, listing seizure disorder history as the most common indicator. Budnick and Ross suggested education for caretakers and residents alike. Bathing instructions for persons with epilepsy include: taking showers instead of baths; using hand-held showering devices; maintaining a depth of no more than 7.5 centimeters; not showering alone; avoiding hot baths (which may lower the seizure threshold); and maintaining adequate blood concentrations of anticonvulsants. [Budnick and Ross, "Bathtub-Related Drownings in the United States, 1979-81" (June 1985), 75 American Journal of Public Health.]

In another study, 37% of adult drownings occurred in bathtubs, with the history of a seizure disorder identified as a significant contributing factor. [Wintemute, Kraus, Teret, and Wright, "The Epidemiology of Drowning in Adulthood: Implications for Prevention" (November 1988), 4 American Journal of Preventive Medicine.]

Because seizure disorders are prevalent among developmental center residents, there is a compelling need for developing and implementing appropriate preventive safety measures in order to safeguard against future drownings. Given the recent bathtub drowning at Stockton Developmental Center, the need for both immediate and comprehensive action by DDS on a statewide basis is also indicated.

III. SEQUENCE OF EVENTS

July 13, 1992

Between 8:45 and 9:00 AM on the morning of July 13, 1992, M.A. was placed in bathroom #409, which is located approximately 15 feet across the hallway from Manzanita's nursing station. According to M.A.'s clinical records, he became "extremely agitated when asked to get dressed prior to breakfast. He screamed, charged at staff several times, attempting to grab staff (antecedent to his biting). He was kept away from staff until calm enough to direct to bathing area where he was allowed a bath...."

According to both DHS L&C's and SDC's investigations, at approximately 10:00 AM, the staff member who originally placed M.A. in the bathtub (SP #1) left for his lunch break. SP #1 told investigators that prior to his lunch break, he checked on M.A. every 10 to 15 minutes. M.A.'s clinical records do not contain any documentation supporting these stated checks. At the time SP #1 left for his break, he went into the nurses' station and informed his acting supervisor (SP #2) that M.A. was still in the bathtub. After SP #1 left, SP #2 then assumed responsibility for checking on M.A.

SP #2 told investigators that he observed M.A. at approximately 10:25 or 10:30 AM, and stated that at that time, M.A. was still enjoying his bath and was not in any apparent distress. M.A.'s clinical records do not contain any supportive documentation of this observation. From 10:30 AM and afterwards, SP #2 remained in the nurses' station completing paperwork with the unit physician. Fifteen minutes later, SP #2 stated that he called out to a student assistant (SP #3) to get M.A. out of the bathtub. Other SDC staff present in the nurses' station and on the unit did not recall hearing this directive. The direct care staff-to-client ratio at this time was two staff to every three residents.

The unit janitor, during the course of his duties, entered room #409 at approximately 10:55 AM. The unit janitor told SDC's investigator that he observed M.A. lying on his right side, tucked into a fetal position, motionless and totally submersed in the bathtub water. The janitor then went across the hall and notified staff in the nurses' station that there was a problem. According to M.A.'s clinical records: "Unit janitor came into the nursing station and requested medical personnel in the adjacent bathing room.... [Staff] ran to the bathing room and found client under the water lying still, pulled him immediately from the water, and he was immediately worked on...." A response team arrived at 11:05 AM. Despite vigorous resuscitative efforts, M.A. was pronounced dead at 11:30 AM.

The Sonoma County Coroner's Office ruled M.A.'s cause of death as: "[d]rowning, findings consistent with" other significant conditions contributing but not related to the cause as: "[s]evere mental retardation, autism, epilepsy (generalized tonic/clonic); behavior reaction." M.A.'s death certificate lists the events that resulted in M.A.'s injury as: "Apparently drowned in bathtub, left unattended, found unresponsive in tub." There was no apparent physical trauma to indicate an attack or fall, nor were there any clear indications of a seizure. Although M.A.'s toxicology report indicated a slightly elevated blood level of anticonvulsant (Tegretol - 13.5 mcg/mL [therapeutic range is 4.0 to 12.0 mcg/mL]), there were no signs that this level contributed to his death.

Significant Events Preceding M.A.'s Death

There were at least two significant events that occurred in the months preceding M.A.'s death that should have alerted staff to the dangers of allowing him to play in the bathtub unsupervised. Had the significance of these events been recognized and responded to, M.A.'s treatment team would have identified and implemented safe bathtub play procedures as a part of an overall sound and appropriate behavioral plan. The proper implementation of such an appropriate and timely plan likely would have saved M.A.'s life.

Staff had previously observed M.A. lying motionless under water in bathtub

According to one staff member (SP #4) who was interviewed by SDC's Senior Special Investigator, over one year before M.A.'s death, SP #4 found M.A. lying completely still under the water when he returned to check on M.A. after 15 minutes. SP #4 stated that when he went over to pull M.A. out of the bathtub, M.A. jumped up when he was first touched. This incident frightened SP #4, who stated that he never again placed M.A. in the bathtub unsupervised. SP #4 also stated that he informed several other staff members about the incident. There is, however, no documentation in M.A.'s clinical records regarding this event.

Staff observed M.A. completely lose consciousness during a recent seizure

On May 14, 1992, at 3:30 PM, two months before M.A.'s death, direct care staff (SP #5) observed and documented in M.A.'s clinical records that he: "dropped to ground, eyes rolled to back of socket, heavy rapid breathing, apparent loss of consciousness, unresponsive to verbal activity, lasted approximately 70 seconds after which client slept. Staff carried client to bed room...." SP #5 also documented the incident on M.A.'s Seizure Record. It was the sixth documented seizure in his clinical record. However, SDC's Senior Special Investigator was unable to locate any evidence that SP #5 entered the information about M.A.'s seizure in the unit's staff communications log book, a book that staff relies upon as a source of information concerning significant client-related events.

The unit physician told the Senior Special Investigator that she was not aware of M.A.'s seizure until three weeks later, when she was alerted by a pharmacist who read about the seizure in M.A.'s clinical records. The unit physician had missed this documentation when completing M.A.'s annual medical history and review of systems on June 9, 1992. The unit physician stated that if she had been informed of the seizure in a timely manner, she would have considered increasing M.A.'s anticonvulsant.

Other Significant Factors

M.A.'s bathing addressed superficially at annual conference and special meeting

On June 23, 1992, just twenty days before M.A.'s death, M.A.'s treatment team met for his annual conference to review his treatment needs and goals. The only documentation from that meeting regarding M.A.'s bathing practices stated:

"Bathing tasks require staff action for completion. Staff agree that taking baths helps to calm him down when he is agitated. The team rejected the psychologist's recommendation to offer him a bath in the morning between 6:30 and 7:00 AM. Staff report that the interval between 6:30 and 7:00 is the busiest time and agreed to offer him an opportunity to take a bath after he returns from class in the early afternoon."

There were no indications in M.A.'s clinical records that staff recognized the need for developing a written treatment plan for the safe and behavioral use of bathtub play.

Bathing as a preferred activity for M.A. was again discussed on July 2, 1992, at a special meeting convened to discuss M.A.'s increased aggression. During this discussion, staff hypothesized that one of the causes for this increase was "... increased hours spent in 'class' resulting in less time spent in preferred activities such as bathing and, or sitting in bathroom/bedroom...." Staff agreed that when M.A. was not in "class," he "should be offered positive reinforcers at high frequency to reinforce his attending 'class.'" Despite the fact that bathing was identified as a powerful behavioral reinforcer for M.A., again, there was no treatment plan developed regarding its safe and effective use as such.

Unit noise

According to SDC's Senior Special Investigator, although room #409 is only approximately 15 feet from the nurses' station, when the door is closed, "normal unit noise" would prevent effective auditory monitoring of events going on inside room #409 from the outside. Upon physical inspection of the unit, PAI's investigator noted that the normal unit noise included an obvious loud, whirring and rumbling fan above the ceilings of both Room #409 and Manzanita's nurses' station.

Upon inquiry, PAI's investigator was told by staff that the noise had been occurring for some time and even though there had been many attempts to fix the problem, the noise persisted. Because the door was closed when M.A. engaged in unsupervised bathtub play, this noise, coupled with general noise on the unit, further endangered M.A.'s health and safety by preventing staff from hearing any sounds of distress.

Unsupervised bathtub play common knowledge among direct care and supervisory staff

Twenty-five statements from SDC staff regarding the use of unsupervised bathtub play were received during the course of SDC's investigation. In these statements, interdisciplinary staff attested that it was common practice to allow certain clients to take long unsupervised baths as part of their behavioral reinforcement schedules or for relaxation purposes. Client independence, enthusiasm for bathing as a preferred activity, and privacy were all given as reasons for leaving clients, such as M.A., in the bathtub unattended.

IV. CORRECTIVE ACTIONS INITIATED BY SDC

Corrective actions taken by SDC include:

- Adverse personnel actions against staff who participated in and/or had knowledge of, yet failed to intervene in the practice of placing clients in bathtubs without supervision.
- Revision of bathing policies to ensure they address "all appropriate areas, including safety, hygiene, and dignity."
- Review and redesign of all clients' behavioral plans that use bathing as a reinforcer.
- Provision of training by Program 4 to its treatment teams on how to "better assess the needs of clients with compulsive and aggressive behaviors and to develop more appropriate and effective behavior plans for those identified needs."
- Requirement that every staff member again review relevant facility policies and acknowledge in writing that s/he completed the reviews and understands such policies.
- Ongoing monitoring by program management of bathing procedures on each residence.
- Development of quality assurance guidelines for "safe behavioral plans" for facility-wide use.
- Clients who are determined to be able to bathe independently are encouraged to take showers.

V. FINDINGS AND CONCLUSIONS

Failure by M.A.'s treatment team to design an appropriate and safe individualized behavioral plan led to the casual use of unsupervised bathtub play, which ultimately resulted in M.A.'s death.

Although bathtub play was discussed as M.A.'s preferred activity at his annual conference and at a special meeting, both held in the month preceding his death, Manzanita staff failed to develop and implement a safe and timely treatment plan regarding its use. As a result, staff continued to casually use bathtub play without any consistent procedures or parameters. Had such a plan been developed properly and in accordance with SDC policy, health and safety risks could have been addressed and preventive measures taken.

On the day of his death, the use of bathtub play was used incorrectly to reinforce maladaptive behaviors (screaming, charging, and grabbing at staff). It appears to have been used for staff convenience ("He was kept away from staff until calm enough to direct to bathing area where he was allowed a bath."). A clear, data-based behavioral plan that provided consistent and effective guidelines for staff when M.A. exhibited aggression, combined with staff training on how to implement such a plan, could have prevented the misuse of this behavioral reinforcer and would have saved M.A.'s life.

Failure by M.A.'s treatment team to provide adequate supervision while he was in a bathtub full of water was a clear departure from policy and exposed M.A. to a serious health and safety hazard which ultimately resulted in his death.

Staff exercised extremely poor judgment in failing to adequately supervise M.A. -- a person with an active seizure disorder -- in a bathtub full of water. This failure was, in reality, systematic neglect of M.A. that eventually led to his death. On the day of his death, M.A. was in the bathtub for two hours, and was left unsupervised for at least half an hour, during which time he drowned. Janitorial staff, not direct care staff, discovered M.A. submersed in the bathtub.

Despite clear policies prohibiting the practice of leaving clients unattended in the bathtub, staff continued to do so. Many interdisciplinary staff even claimed that this was a *common* practice, and cited other policies regarding client self-reliance, independence, and privacy as justification for leaving clients unattended.

(As noted earlier, the failure to provide adequate supervision to residents while they are bathing appears to be a health and safety hazard at other developmental centers as well. The Stockton Devel

opmental Center resident who died in the bathtub this past January reportedly was left unsupervised for approximately 40 minutes.)

Failure by M.A.'s treatment team to recognize his active seizure disorder as a significant risk factor when M.A. engaged in his preferred activity, bathtub play.

Even though SP #5 and the unit physician were aware of M.A.'s recent seizure in which M.A. completely lost consciousness, the seizure was reportedly never mentioned when they participated in M.A.'s annual conference and discussed M.A.'s bathtub play. M.A.'s seizure disorder should have received focused attention as a risk factor, especially considering the number of interdisciplinary staff who reported that unsupervised baths were a common practice on the unit.

Failure by M.A.'s treatment team to recognize the health and safety risk of his tendency to play under the water forcefully when M.A. engaged in his preferred activity, bathtub play, even after direct care staff had found him lying motionless under the water.

Even though several staff were aware of M.A.'s bathtub behaviors, there is no indication that this health and safety risk, combined with unsupervised baths, was ever discussed. This risk was further compounded by the failure to communicate adequately about and document a significant incident (when M.A. was discovered by direct care staff lying completely motionless and totally submerged under the water).

Failure to correct and properly maintain Manzanita's physical plant further increased the health and safety risks of leaving clients in bathtubs unattended.

Staff acknowledged that though there had been many attempts to fix the problem, the noise above the nurses' station and Room #409 persisted. Because the door to Room #409 was closed when M.A. engaged in unsupervised bathtub play, this noise, coupled with general noise on the unit, further endangered M.A.'s health and safety. It prevented staff from hearing any sounds of distress. Though only 15 feet away, direct care staff were in the nurses' station, which is an enclosed area. If M.A. made any sounds of distress, it was virtually impossible for staff to hear him through the closed door and nurses' station window, and above the din of the continuous rumbling noise emanating from the unmaintained ceiling system.

VI. RECOMMENDATIONS

DDS should ensure immediately that all developmental center residents, such as M.A., who may be at risk for drowning are identified and appropriate preventive measures taken to protect them.

Such health and safety risks should be assessed effectively for clients on an individualized basis, and appropriate plans developed, implemented, and monitored on a regular basis. The need for immediate action, combined with long-term comprehensive planning is underscored by the recent death at Stockton Developmental Center.

DDS should improve bathing policies and practices and provide more training and active supervision so that staff are able to make competent clinical decisions concerning patient care issues involving residents' rights of privacy, self-reliance, independence, and safety.

Even though policies were in place regarding these concepts, staff failed to analyze, synthesize, and implement them correctly so that M.A. could safely enjoy his favorite activity.

Once clear and comprehensive policies are developed, DDS/SDC should implement effective training for teaching staff how to assess and respond to health and safety risks on an ongoing dignified basis. Training should also emphasize how to create, implement, and monitor *individualized* programs for clients' daily activity skills that maximize self-reliance, independence, privacy and safety.

DDS should develop effective strategies for developing, implementing, and monitoring positive and individualized behavioral programming.

DDS should develop and implement effective data-based quality assurance mechanisms for protecting residents' rights to sound, professionally developed behavioral programs. All residents needing comprehensive behavioral treatment plans should have them developed and implemented in a timely manner. Each such behavioral program should contain these essential components: (1) assessment and specification of target behaviors, (2) modification of antecedent and consequent stimuli, and (3) evaluation of treatment efficacy.

DDS/SDC should research and develop state-of-the-art guidelines, techniques, and safety training for residents and staff to address the safety needs of developmental center residents who have seizure disorders.

For example, Budnick and Ross suggested education for caretakers and residents, and bathing instructions for persons with epilepsy including: taking showers instead of baths; using hand-held showering devices; maintaining a depth of no more than 7.5 centimeters; not showering alone; avoiding hot baths, which may lower the seizure threshold; and maintaining adequate blood concentrations of anticonvulsants. [Budnick and Ross, "Bathtub-Related Drownings in the United States, 1979-81" (June 1985), 75 American Journal of Public Health.]

DDS/SDC should develop effective protocols to ensure that all areas, especially residences, are maintained properly and reviewed on an ongoing basis so that potential health and safety hazards are identified and corrected.

Repairs and maintenance to assure residents' health and safety and prevent injuries should receive high priority. Monitoring for safety risks should be conducted continuously and be recognized as the responsibility of all staff. Clients should also receive training to identify and avoid safety risks in their own environment.