OFFICE OF THE
SENIORS ADVOCATE
BRITISH COLUMBIA

Resident to Resident Aggression in B.C. Care Homes

June 2016

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The issue of seniors in residential care falling victim to violence at the hands of a fellow resident is an issue that is gaining increasing attention. The challenge has been to try and determine exactly when, where, and how much it is happening. Within the last two years, the province has required the reporting of data in such a way as to allow us to begin to understand the possible magnitude of this important issue.

In the Office of the Seniors Advocate (OSA) first *Monitoring Seniors' Services* report, released in early 2016, we were able to report on the first full year of data that captures the number of incidents of what has been termed resident to resident aggression (RRA) that resulted in physical harm to a senior in residential care. While the current reporting system is an improvement over what existed three years ago, it still has some challenges, which are detailed in this study. As a result of these challenges, for the monitoring report we were only able to estimate a range of between 425 and 550 incidents of RRA resulting in harm. After looking more closely at the data, this study identifies 422 incidents for the year 2014/15.

While 422 incidents is a significant number, it is very important to view these numbers in the full context of the number of residential clients and facilities in British Columbia. It is important that residents and their family members have confidence in the safety of our licensed residential care facilities. At any given time, there are over 27,000 residents living in B.C.'s licensed care facilities, and potentially up to 422 have been the victim of RRA resulting in harm. Of the 304 facilities examined in this report, 177 had no reported incidents. There are concerns expressed that incidents are under-reported. This may be correct and hopefully this report will serve as a catalyst to standardize reporting and to raise awareness of the need to report. It is also possible that as we examine factors that might contribute to incidents of resident to resident aggression and we mitigate those factors that lead to this behaviour, we will see the rate of incidents fall over time.

For the purposes of this report, with the data available to us, we were able to examine these incidents and look for patterns. The result of our examination has produced some evidence to support recommendations on: reporting; staffing levels; staff training and facility design and security systems.

It is important to recognize that this report is just the beginning of looking at resident to resident aggression as a systemic issue. While we were able to draw some high level conclusions, we have done this from imperfect data. Ensuring more standardized and systemic reporting and definitions will be the key first step to ensuring we make life in residential care in British Columbia as safe and enjoyable as possible. I want to thank Health Authorities, the Ministry of Health, and service providers for their support and co-operation in the development of this report.

Sincerely,

Isobel Mackenzie
Seniors Advocate
Province of British Columbia

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Introduction

Residential care is "home" for over 27,000 seniors in British Columbia. Facilities can vary widely in size and design, but they all provide 24-hour professional supervision and care in a secure environment for people who have complex care needs and can no longer be cared for in their own home or through assisted living. The safety of residents in care is paramount and, in the majority of cases, is well-protected. However, findings in the Office of the Seniors Advocate's *Monitoring Seniors' Services* report, issued in January 2016, have highlighted cases where the safety of residents has been compromised due to incidents of resident to resident aggression (RRA). The report estimated, in a one year period, there were 425 to 550 incidents that resulted in harm.

The intent of this report is to more closely examine resident to resident aggression, defined specifically as aggression that caused physical harm to an individual. This report examines the facilities where incidents occurred, as well as the circumstances of the incidents themselves. The Office of the Seniors Advocate (OSA) sought to determine where, or if, specific systemic patterns emerge when looking at RRA incidents. For the purposes of this report, further analysis of specific counts of resident to resident aggression was conducted, as well as comparative analysis of individual incident reports and characteristics of 304 residential care facilities.

British Columbia has two separate mandatory reporting frameworks to identify RRA. The *Hospital Act* covers 100 facilities, while the *Community Care and Assisted Living Act* covers 204 facilities. Reporting criteria differ between the Acts, which presents some challenge in providing comparisons. As such, it is the intent of this report to identify initial high-level findings at this time.

Background

Public awareness of the issue of resident to resident aggression has increased since 2015, when the issue made headlines following a high-profile case in British Columbia. An 84-year-old woman died on July 15, 2015, ten days after being pushed by a resident with dementia in a licensed care home in the Interior. Her death was one of nine deaths related to resident to resident aggression in residential care reported by the B.C. Coroner since 2012.

Resident to resident aggression is an emerging issue that has only garnered the attention of a handful of studies. Definitions of RRA in the literature vary, as does the nomenclature relating to those engaged in doing the harm—variously referred to as perpetrators, initiators, aggressors, offenders or exhibitors. In 2013, B.C., residential care facilities governed by the *Community Care and Assisted Living Act* began specific reporting of RRA and *Hospital Act* facilities were required to report "serious adverse events," which include incidents of resident to resident aggression.

Research identifies several triggers for resident to resident aggression, including: communication challenges between residents; residents not respecting each other's privacy, wandering into rooms or touching/taking another resident's possessions; the challenges of communal living (competition for a certain chair in the dining room or a particular television channel); racism or intolerance of religious, cultural or sexual orientation differences; loneliness and feelings of abandonment; and anxiety, boredom or chronic discomfort.

The living environment may also be a contributing factor in resident to resident aggression. Studies support specific environmental mitigations to create a calming atmosphere, such as: the provision of private rooms and bathrooms for residents; adequate space in common areas to reduce crowding and provide more personal space; adequate lighting that minimizes shadows and glare; flexible and sufficient seating arrangements to reduce competition; appropriate wayfinding cues and landmarks to help residents to find their rooms, washrooms and dining rooms; and lowered noise levels.

The Review

Residential Care Facilities Included in Review

For this review, residential care facilities were included if they had long term residential care beds as identified by the Health Authorities. The review excluded facilities whose beds were identified as only end-of-life, respite, or temporary, as well as small family group homes. Only facilities with residential care beds funded by a Health Authority were included in the review. Facilities that are exclusively private pay (with no publicly funded beds) were excluded.

In total, 304 residential care facilities were included in the review; of these, 110 sites are "owned and operated" by a Health Authority and 194 are private-for-profit (PFP) or private-not-for-profit (PNP) facilities. PFP/PNP facilities included in the review are privately operated and

some or all of their beds are funded by the Health Authority on a contract basis. The following is a breakdown of the facilities by Health Authority.

Table 1– Number of residential care facilities by Health Authority (as of September 2015)

Health Authority	Owned & Operated	PFP/PNP	Total Facilities
Interior Health	41	41	82
Fraser Health	12	66	78
Vancouver Coastal Health	16	44	60
Island Health	19	41	60
Northern Health	22	2	24
Total	110	194	304

Of the 304 sites, 204 are governed under the *Community Care and Assisted Living Act* and 100 are governed under the *Hospital Act*.

Table 2 – Number of residential care facilities by Act

Act	Owned & Operated	PFP/PNP	Total Facilities
CCALA Facilities	46	158	204
Hospital Act Facilities	64	36	100
Total	110	194	304

Definitions of Resident to Resident Aggression

Residential care facilities in B.C are governed by either the *Community Care and Assisted Living Act* (CCALA) or the *Hospital Act* and their respective regulations. As of December 1, 2013 the Residential Care Regulation under CCALA was amended to establish a new category of reportable incidents for aggression between persons in care (Regulations, Schedule D, Section 1). The *Hospital Act* was amended December 1, 2013 to include the duty to report "serious adverse events." While both Acts were changed to require residential care facilities to report RRA incidents, there are key differences in definitions and the overall process for reporting. The following describes what is considered a "reportable incident" under each Act.

CCALA

"aggression between persons in care" means aggressive behaviour by a person in care towards another person in care that causes an injury that requires

- first aid,
- emergency care by a medical practitioner or nurse practitioner, or
- transfer to a hospital

Hospital Act

"serious adverse event" means an incident that

- took place in a hospital or private hospital,
- was the likely cause of, or likely significantly contributed to, severe harm to or the death of a patient,
- was not expected or intended to occur, and
- was not caused by or related to an underlying medical condition of the patient

"severe harm" means any physical or psychological injury to a patient

- that, on a permanent or long-term basis, substantially interferes with a patient's functional abilities or quality of life, and
- that causes the patient to:
  - suffer pain or disfigurement,
  - require major medical or surgical treatment,
  - require emergency medical treatment to prevent death, or
  - have a shortened life expectancy

In addition, facilities that are owned and operated by a Health Authority (whether they fall under the CCALA or the *Hospital Act*) have the option of reporting incidents to the B.C. Patient Safety and Learning System (PSLS). The PSLS is a voluntary, web-based patient safety event reporting, learning and management tool used by care providers within B.C. Health Authorities (privately-owned residential care facilities do not have access to PSLS). While reporting to the PSLS is voluntary, care providers are encouraged to capture incidents so that events can be investigated and addressed. Incidents reported through PSLS are categorized as follows:

PSLS

Minor harm: An error or unexpected, undesired event directly associated with care or services reached the person causing temporary injury or mild harm, perhaps requiring minor intervention.

Moderate harm: An error or unexpected, undesired event directly associated with care or services reached the person and caused significant temporary or permanent harm, requiring intervention. The injury problem has the potential to:

- significantly alter hospital stay or treatment plan or
- result in admission to hospital from outpatient or to a higher level of care.

Severe harm: An event that was not expected or intended to occur and was not caused by or related to an underlying medical condition was likely the cause of, or likely significantly contributed to, severe harm to the person, defined as any physical or psychological injury that:

- on a permanent or long-term basis, substantially interferes with the person's functional abilities or quality of life, and
- causes the person to suffer pain or disfigurement, require major

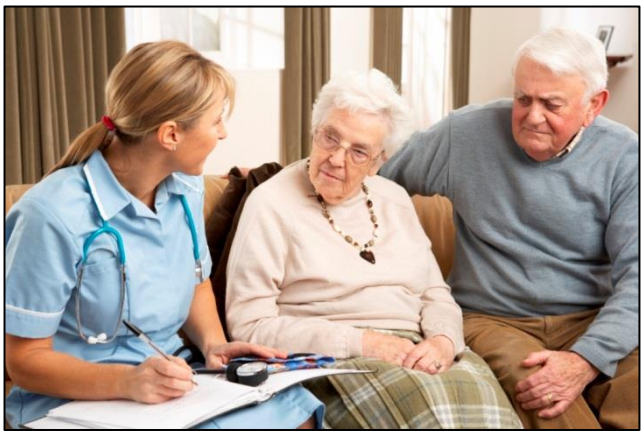
surgical or medical treatment, require emergency medical treatment to prevent death, or have a shortened life expectancy.

Death: An event that was not expected or intended to occur and was not caused by or related to an underlying medical condition was likely the cause of, or likely significantly contributed to, the immediate or eventual demise of the person.

Challenges with Definitions

The different definitions of a "reportable incident" create difficulties when trying to compare facilities across different types of sites. The narrowest of the definitions is that of the *Hospital Act* where an incident caused "severe" harm to the resident. For CCALA sites, the resident must have received some type of first aid in order for it to be a reportable incident – the injury may or may not have been serious or severe. Within the PSLS system, there is a much broader definition - the injury can range from very minor to severe, including death. As such, the type of facility in which the incident occurs will dictate whether or not the event is captured as a "reportable incident". For example, if an act of aggression occurs and does not require first aid (CCALA) or does not cause "serious harm" (*Hospital Act*), it would not be defined as a "reportable incident." Such an act may or may not be captured through PSLS. This raises concerns about the overall comprehensiveness and comparability of the data.

Reporting Processes



Not only are the definitions of a "reportable incident" different depending on which Act the facility falls under, capturing incidents of resident to resident aggression is further complicated by the fact that there are three different ways incidents can be reported.

1. For CCALA sites, facilities are required to report incidents to the Medical Health Officer (MHO) within the Health Authority. The MHO has the duty to inspect licensed facilities and investigate reported incidents or complaints through Licensing staff. In some Health Authorities, incident reports received from their facilities are stored in a central location and entered into a separate information system. In other Health Authorities, the reports are kept in the Licensing Offices in a decentralized manner.

2. For *Hospital Act* sites, the reporting process is different. Facilities are required to report incidents to the Minister of Health. The reporting processes for these incidents are not

consistent across the Health Authorities. In some Health Authorities, incident reports are submitted to the Health Authority staff responsible for residential care services, who investigate accordingly. In other Health Authorities, the *Hospital Act* facilities report to the same Licensing Office as the CCALA sites. The B.C. Ombudsperson in her report, *The Best of Care, Volume 2,* previously recommended that the Ministry of Health take the necessary steps to require operators of residential care facilities governed under the *Hospital Act* to report reportable incidents in the same manner as facilities licensed under the *Community Care and Assisted Living Act.*

3. Sites that are owned and operated by the Health Authority (whether CCALA or *Hospital Act*) may also report voluntarily to the PSLS.

The Analysis

The analysis for this review was separated into the following three categories or phases of analysis.

A. An examination of facility profile and resident population characteristics by number of incidents

- CCALA or *Hospital Act*
- Bed numbers
- Room configuration (private, semi-private and multi-bed rooms)
- Direct care hours
- Resident demographics
- Resident behaviours
- Resident clinical characteristics

B. An analysis of residential care survey data

- Availability of secure units
- Staffing configurations in secure units
- Facility features to address wandering
- Facility features to address escalating aggressive behaviour
- Education and training to reduce and better manage aggressive behaviour

C. An analysis of individual RRA incidents

- Time of day of incident
- Day of week
- Age and gender of victims
- Location of incident
- Nature of incident including injury

Sources of Information

In order to achieve the most robust analysis, the OSA requested the following information from the Health Authorities.

- Number of incidents reported by facilities
- Copies of incident reports, redacted to protect privacy of individual residents
- Results of residential care facility questionnaire – questions regarding a range of information including staffing ratios, dementia training and facility design.
- Profiles of resident populations within facilities including percentage of residents with a diagnosis of dementia, percentage taking antipsychotics, percentage of residents receiving recreational therapy, as well as a range of additional indicators.

Note that the numbers of facilities and incidents included in each phase of analysis differ because data was not available for all facilities for all aspects of the analysis.

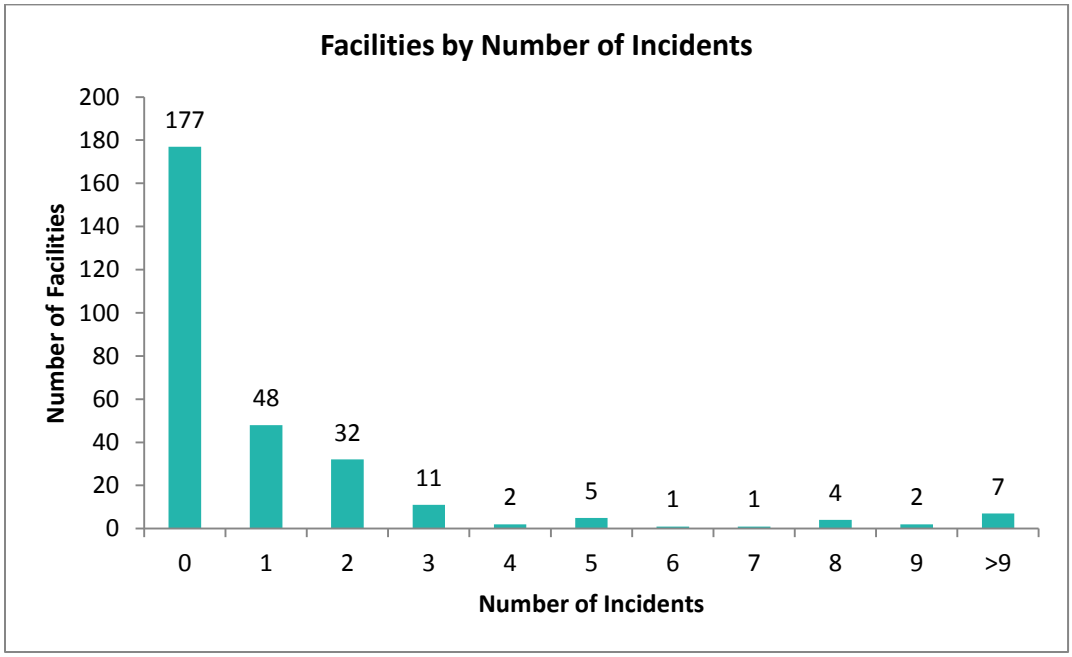
Review Findings

A. Facility profile and resident characteristics by number of incidents

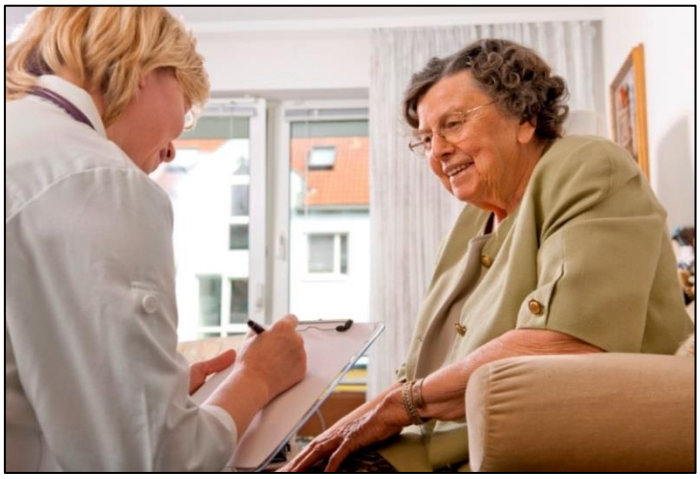
In the first phase of the review, residential care facilities and Health Authorities were asked to send the number of resident to resident aggression incidents for each of their facilities from their Licensing systems or other Health Authority systems. Because the data provided was count data and not detailed incident information, there was no way to cross-reference PSLS data with data from the Licensing Office or the Health Authority system. As such, PSLS data was specifically excluded from this part of the analysis in order to reduce the chance of duplication (i.e., the same incident reported to two different systems). There were 14 facilities where no incident count data was provided and thus excluded from subsequent analysis. Examples of excluded facilities include facilities treating exclusively residents with acquired brain injuries, as well as special units counted as separate facilities but with no incident count data.

Excluding PSLS incidents, in total, there were 331 incidents from 290 facilities (304 facilities minus 14 facilities with no incident count data). According to the reporting, the majority of facilities (58%) reported 0 incidents. The highest number of reported incidents by a facility was 20. The following graph provides a breakdown of the incidents.

Graph 1 – Facilities by number of incidents.



In this first phase of the analysis, the intent was to examine facility characteristics that may or may not be associated with the occurrence of incidents. For example, do facilities with more dementia residents have more incidents of resident to resident aggression?



In order to look at these patterns, additional facility information was obtained from two different sources – the OSA *Monitoring Seniors' Services* report and the Ministry of Health RAI-MDS 2.0 dataset. The Monitoring Report contained facility information such as bed numbers, room configuration and direct care hours. Information about the resident characteristics pulled from the Ministry of Health RAI-MDS 2.0 dataset included the residents' health status, ability to be independent, medical conditions, medications, supports, cognition, psychological state, physical ability and ability to perform various daily tasks. The RAI data is based on standardized assessments of residents conducted at intake and at least annually thereafter.

In the analysis, facility profile data and the resident RAI data was matched with the incident count data provided by each facility. Where a facility did not have data for all of the variables in the analysis, the facility was excluded. This resulted in 271 facilities (298 incidents) with a complete set of data to be included in the analysis.

The analysis looked at two groups—those with no reported RRA incidents (176 facilities), and those with at least one reported RRA incident (95 facilities). The comparisons presented below do not necessarily imply causes of resident aggression incidents, but instead simply present characteristics of facilities (and of residents within those facilities) with and without reported incidents of resident to resident aggression.

Facility-level findings

- **Incident-reporting facilities tend to be larger, with an average of 103 beds compared to 89 beds for non-incident-reporting facilities.**
- **Facilities reporting incidents also tend to have a much higher proportion of private (single occupant) rooms and, conversely, a lower proportion of their rooms configured as multi-bed rooms.**
- **Direct care hours are slightly lower for incident-reporting facilities.**

For total direct care hours, we found that facilities with aggression incidents have slightly fewer direct care hours (3.08) than those with no incidents (3.13). While this is equivalent to only three minutes per resident per day, in an 80 bed facility, this represents a deficit of four hours of direct care; put another way, this is 182 fewer eight hour shifts per year. We also found that facilities with incidents tend to have more residents with complex care needs. That these facilities do not have more direct care hours may suggest that facilities where residents have more complex care needs (and more incidents) are not getting enough care hours to adequately handle the complexity of their residents.

Resident-level findings

For the resident-level analysis using the RAI health assessment data, the facilities were again separated into two groups—those with no reported RRA incidents (19,110 residents across 176 facilities), and those with at least one reported RRA incident (11,500 residents across 95 facilities).

- **Residents in incident-reporting facilities tend to be slightly younger (83.9) than the average age of 84.2 in non-incident-reporting facilities and slightly more likely to be male (35.0% male vs. 33.6% male for non-incident-reporting facilities).**
- **Overwhelmingly, residents in facilities reporting at least one incident tend to have more diagnosed aggression problems, instances of physical and verbal abuse, difficult behaviours (wandering, social inappropriateness, resisting care), psychiatric diagnoses, and higher rates of antipsychotic drug use.**
- **Residents in incident-reporting facilities tend to also be more mobile, with a lower use of wheelchairs (52% versus 57%) and higher rates of independent walking (30% versus 24%).**
- **Also important are the areas where there are no differences—neither group of facilities is more likely to have residents with poor Cognitive Performance Scale scores, and the daily use of physical restraints is also uniform.**

It is not surprising that facilities with incidents of RRA also have resident populations with more psychiatric diagnoses and associated behavioural challenges and that are more mobile and independent. The higher rate of antipsychotic drug use raises the question about the role of antipsychotics in the management of aggression. Recent work by the Canadian Foundation for Health Improvement found that, during a controlled study in 56 Canadian long term care facilities, decreasing the use of antipsychotics not only did not lead to more incidents of

aggressive behaviour, but in fact led to *less* incidents of aggressive behaviour. Findings such as this once again call into question the role of antipsychotics in treating aggressive behaviours. Our analysis did not find any relationship between use of restraints and occurrence of incidents.

It is important to note that the overall rate of aggression incidents is low, with only 35% of facilities where RAI data exists reporting any incidents.

Analysis of High Incident Facilities

Further analysis was undertaken for facilities with four or more reported incidents; this threshold was chosen to select the 20 facilities with the highest incident counts. These facilities were compared with 20 similarly-sized (in terms of beds) facilities with fewer than four reported incidents.

- **Findings are broadly similar to the full sample, with "high incident" facilities tending to have a greater proportion of private rooms, although no difference is seen in the proportion of multi-bed rooms.**
- **Residents in "high incident" facilities have more clinically-assessed behavioural problems and higher incidences of psychiatric disorders.**
- **In contrast to the full sample, a greater proportion of residents in the "high incident" facilities have poor Cognitive Performance Scale scores.**
- **Despite the greater complexity of the residents in the facilities reporting a high number of incidents, these facilities had slightly fewer care hours than comparatively-sized facilities with fewer incidents.**
- **Consistent with the full sample, residents in "high incident" facilities tend to be more independently mobile and rely less on wheelchairs.**

Our overall findings suggest that facilities with a higher number of incidents tend to have residents with more complex needs and the presence of behavioural issues. This could indicate that facilities with the capability of handling these complex residents are receiving a greater-than-average proportion of potential aggressors, leading to an increased number of reported RRA incidents. All reported differences are statistically significant at a 5% significance level.

B. An analysis of residential care survey data

For this part of the analysis, a separate questionnaire was sent to residential care facilities to obtain further information about how facilities try to mitigate behavioural and psychological signs of dementia (BPSD) or signs of aggression through physical structures, staffing, special facility features or education and training of staff. The OSA received responses to the questionnaire from 228 facilities representing 261 incidents. Facilities were queried about the presence of secure units, staffing within those units, facility-wide mechanisms to reduce wandering and manage escalating behaviours, and provision of continuing training for staff.

Table 3 – Facilities that responded to questionnaire by Health Authority

Health Authority	# facilities responded	% facilities responded
Interior Health	56	68%
Fraser Health	56	72%
Vancouver Coastal Health	53	88%
Island Health	49	82%
Northern Health	14	58%
Total	228	75%

Table 4 – Facility characteristics – Anti-wandering Mechanisms

Anti-wandering Mechanisms	Yes	No
Secured and/or alarmed main entrance	92%	8%
Secured and/or alarmed internal doors	68%	32%
Secured and/or alarmed stairwells	75%	25%
Secured and/or alarmed elevators	45%	55%
Individual wander guard bracelets	48%	52%
Fall mats or laser system to alert staff to movements	68%	32%

Table 5 – Facility characteristics – Avenues for redirecting residents with escalating behaviour

Avenues for Redirecting Residents with Escalating Behaviour	Yes	No
Low stimulant spaces/rooms	49%	51%
Snoezelen room/cart	31%	69%
Indoor walking circuits with minimal dead ends	50%	50%
Outdoor walking circuits with minimal dead ends	48%	52%
Secured outdoor spaces	86%	15%

Table 6 – Facility characteristics – Training provided to direct care staff during 2014/15

Training Provided to Direct Care Staff - 2014/15	Yes	No
P.I.E.C.E.S	64%	36%
Gentle Persuasion Approach (GPA)	30%	70%
Other	54%	47%

Table 7 – Secure unit characteristics

Secure Unit Characteristics	Yes	No
Facilities with secure units	58%	42%
Residents eat in a dining room within secure unit	98%	2%
Residents have recreational therapy within secure unit	87%	13%
Residents have recreational activities within secure unit	96%	4%
Registered Nurse (RN) available to secure unit 24 hours a day[1]	20%	80%

The majority of facilities have taken steps to reduce wandering behaviour, including installing alarms on main entrances (98.5% of facilities), securing internal doors (68%), and using fall mats or laser systems to monitor resident movement (68%). Approximately half of facilities (48%) have provisioned residents with wander guard bracelets. Wander guard bracelets are a potential avenue of addressing problems with residents wandering into other residents' rooms.

Aggressive behaviours have myriad triggers, and a number of redirection activities or spaces may be useful in managing a resident's escalating behaviour. Secured outdoor areas are available in 86% of facilities, while approximately half of facilities have indoor and/or outdoor walking circuits with minimal dead ends. When separating survey responses into groups of facilities with incidents and those without, we found that facilities with reported RRA incidents were more likely to provision residents with wander guard bracelets, and more likely to provide outdoor walking circuits. This suggests that facilities that may have residents with "aggressive" profiles are taking steps to mitigate and manage aggressive behaviour.

Low stimulant rooms are made available to residents in 49% of facilities, and 31% of facilities have either a dedicated room or mobile cart to facilitate Snoezelen therapy. Snoezelen therapy provides users with gentle sensory engagement (lights, sounds, texture), and is widely used as a therapy in populations with sensory processing deficits, such as dementia or autism patients.

[1] Majority of facility's secure units, 0.33 FTE

Ongoing workplace training is critical to educating care staff about identifying and managing aggressive behaviour in long-term care residents. During the surveyed period, 64% of facilities participated in P.I.E.C.E.S. training, "which provides an approach to understanding and enhancing care for individuals with complex physical and cognitive/mental health needs and behavioural changes"[2]. Staff at 30% of facilities attended Gentle Persuasion Approach (GPA) training, while 54% of facilities sent staff to other types of courses centered on aggression and/or BPSD; these courses included workplace violence prevention programs mandated by some Health Authorities, talks by dementia researchers, and management of residents with aggressive behaviours (e.g., Code White).

Access to training is often dependent on individual Health Authority scheduling. Many facilities indicated a desire to access training, but were unable to do so. Many more facilities indicated that their staff had undergone either P.I.E.C.E.S. or GPA training prior to the survey period, or that their staff would be undergoing the training in the near future. For this reason, we do not think it is appropriate to make inferences from responses to the training portion of the survey, and instead recommend that facilities ensure they work with their respective Health Authorities to ensure all staff are provided access to training programs.

Specialized (secure) units are in place at 58% of facilities. These units may be used to accommodate patients with advanced dementia, behavioural challenges, or with otherwise specialized care needs. Most facilities with a secure unit have a single unit, although this ranges as high as ten secure units across a single complex. Beds within a single secure unit range from 7 to 74, suggesting a wide array of ways in which secure units are utilized by facilities. The average number of beds is 21, with a total of 5049 beds across 237 secure units in 132 facilities. The vast majority of secure units allow residents access to dining and recreational programming within the secure environment. Roughly 20% of secure units have an RN available at least part-time (0.33 FTE) around-the-clock (i.e., day, evening, and night shifts). No association was found between the presence of a secure wing and the number of reported RRA incidents.

[2] About P.I.E.C.E.S. (n.d.). Retrieved March 24, 2016, from http://www.piecescanada.com/index.php?option=com_content

C. An analysis of individual incident reports

For this part of the analysis, Health Authorities were asked to provide copies of individual incident reports for all incidents reported via Licensing, other Health Authority systems, and the Patient Safety and Learning System (PSLS). We requested only the incidents that occurred between April 1, 2014 and March 31, 2015. To protect the privacy of individuals, Health Authorities redacted information that could potentially result in the re-identification of residents. Because some of the facilities have small bed numbers and small numbers of incidents, it was decided that facility names for individual incidents would not be made available; as a result, it is not possible to match the individual incident reports to the previous phases of analysis, which looked at facility and resident population characteristics.

The total number of incident reports submitted to the OSA was 451. However, 29 of these reports were for incidents that occurred before April 1, 2014 or after March 31, 2015. This brings the number of incidents from April 1, 2014 to March 31, 2015 to 422 incidents. This number is higher than the 331 incidents previously reported because, in the first phase of analysis, PSLS data was excluded to avoid duplicate incidents. In this phase of the analysis, duplicate reports between Licensing and PSLS reporting were identified and removed from the analysis. As such, 422 incidents could be considered the "true" count of incidents for 2014/15.

For the purposes of this analysis, where the intent is to look at patterns, all incident reports submitted (451) are included. This allows a larger dataset from which to pull information. Information available from the incident forms included:

- Time and day of week
- Location of incident within the facility
- Age and gender of victim and sometimes instigator
- Nature of incident including types of aggression and types of injury

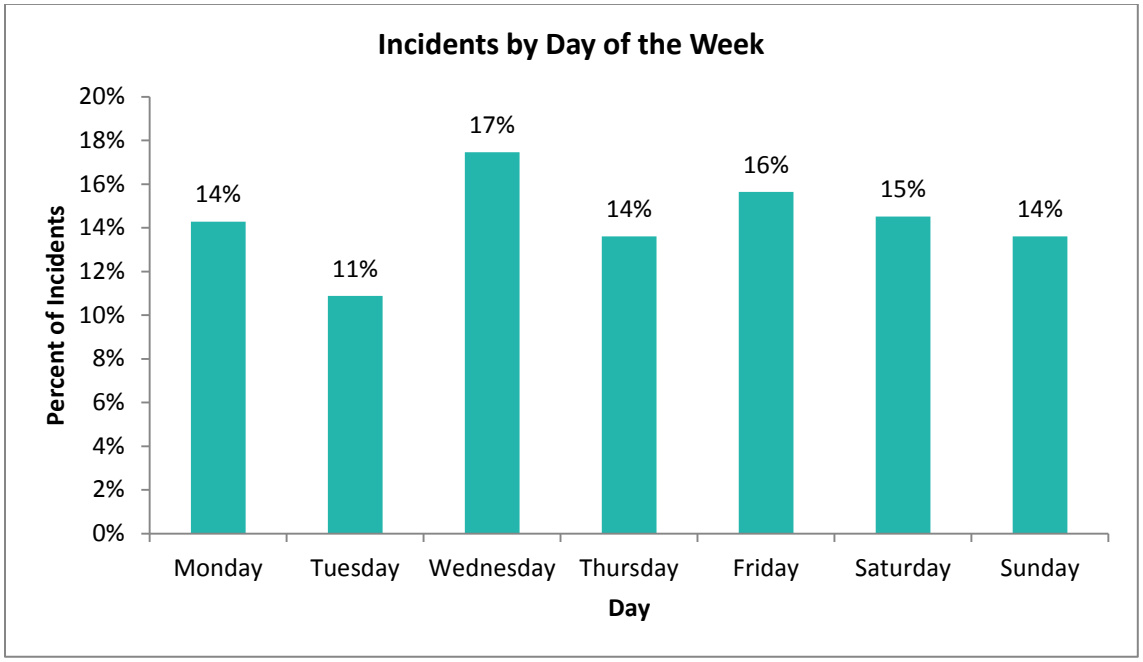
Note that not all information for the above variables was available for all incidents.

Time and Day of the Week Findings

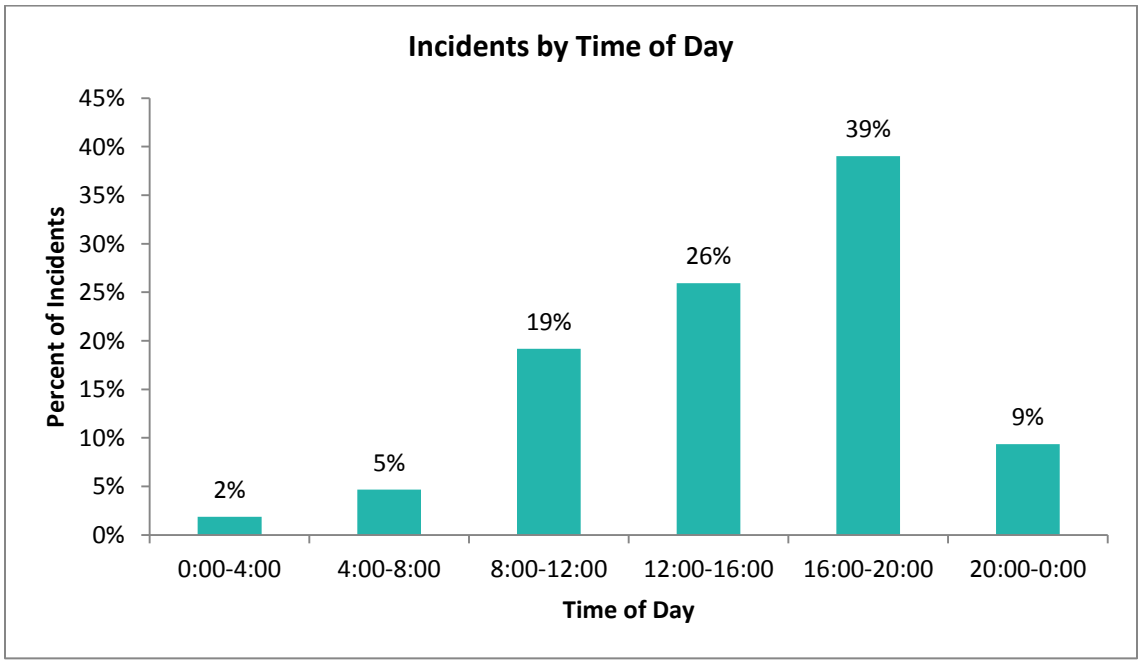
Most Health Authorities reported the day of the week (98%) and the time of day (95%) of the incidents. An equal number of incidents occurred most days, with slightly more on Wednesdays and slightly fewer on Tuesdays. The analysis shows that 39% of incidents occurred between 4 pm and 8 pm (16:00-20:00). This is a busy time for staff, who may be distributing dinner time or bedtime medications, or assisting residents to and from the dining room. It can

also be a time when there are fewer activities for residents and boredom may occur before or after dinner time. It may also be a time when there are fewer staff working, as well as when day time shifts end and evening shifts begin. The next most frequent time of incidents was between 12 pm and 4 pm (12:00 to 16:00), when 26% of all incidents occurred.

Graph 2 – Day of week



Graph 3 – Time of day

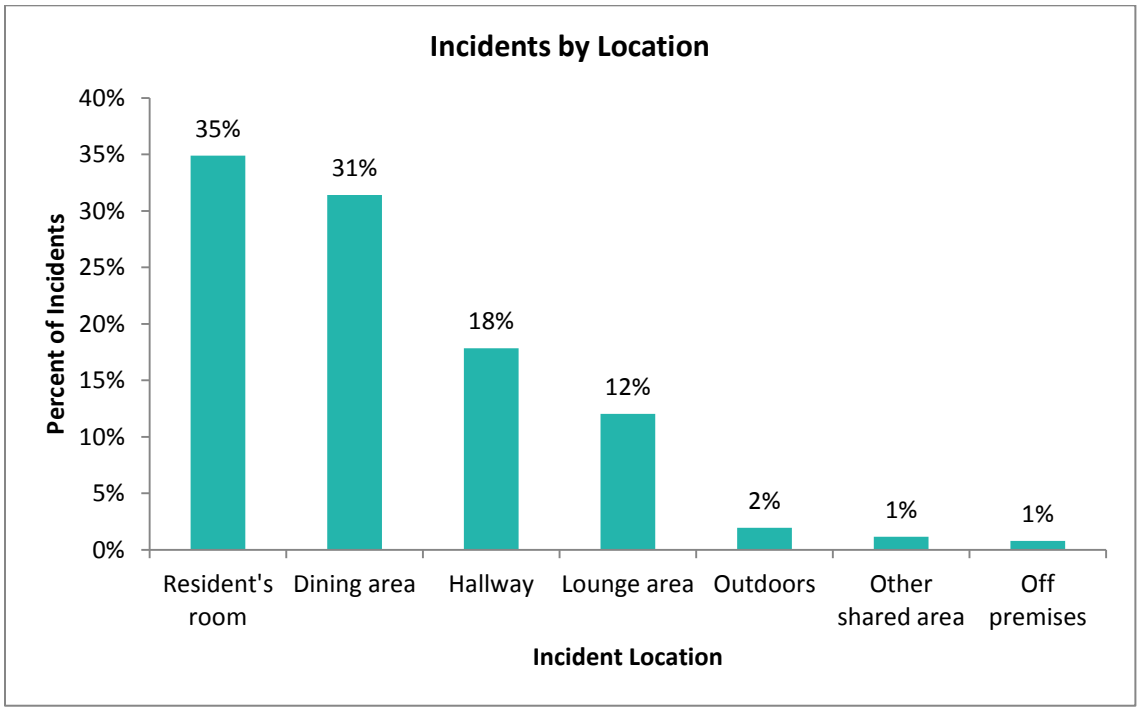


Location findings

The location of the incident was reported for 258 (57%) of the incidents. Over one third (35%) of these incidents occurred in the residents' bedrooms, while the majority – 62% – occurred in shared areas (dining area, hallway, lounge, and other shared areas). An additional 2% occurred outdoors and 1% occurred off the premises.

Incidents occurring between roommates were recorded 11 times, while there were 72 incidents which occurred when a resident wandered into another resident's room. These types of incidents involve a resident touching or taking another resident's belongings, and/or where a resident is confused over the ownership of the room, sometimes using the other resident's bathroom or getting into their bed. In 23 (32%) instances, the resident who lived in the room responded to the wanderer with aggressive behaviour, and in 38 (53%) instances, the wanderer initiated the aggressive behaviour. In 11 (15%) instances, the residents engaged in a dispute resulting in both exhibiting aggression with no one observing how the incident started.

Graph 4 – Location of incident



Age range findings

The average age of residents in residential care is 85, with 60% being 85 or older. Overall, the age or age range was reported 334 times, and seniors involved in RRA were found to be much younger than the average residential care resident.

The age range of the aggressor was reported in 196 incidents and of the victim was reported in 138 incidents. The following table provides a breakdown of the ages of the aggressors and victims

Table 8– Age range of aggressors

Age range	Percentage of incidents
65 to 74	13%
75 to 84	46%
85 and older	41%

Table 9– Age range of victims

Age range	Percentage of incidents
65 to 74	12%
75 to 84	35%
85 and older	53%

Gender findings

Health Authorities reported the gender of one member of the pair involved in the aggression in 386 incidents (86% of incidents) and of both residents involved in 257 incidents (57% of incidents). Overall, 49% of incidents involved a male, and 51% involved a female. This is a disproportionate number of males, since only 35% of residents in residential care are male. Where the genders of both residents involved were reported, 44% of incidents involved a male and a female and 29% involved two males. Two females were involved in 27% of the incidents.

When further analysis was done to identify the aggressor of the incidents, 39% of incidents involved a female aggressor, and 61% involved a male aggressor. Where the victim was identified, 69% of incidents involved a female victim, and 31% involved a male victim. Women were recorded as victims more than twice as often as men. Men were deemed to be the aggressors significantly more frequently than women.

Aggressor/victim age and gender findings

Where the age range and gender of aggressors and victims were provided, we can make some correlations.

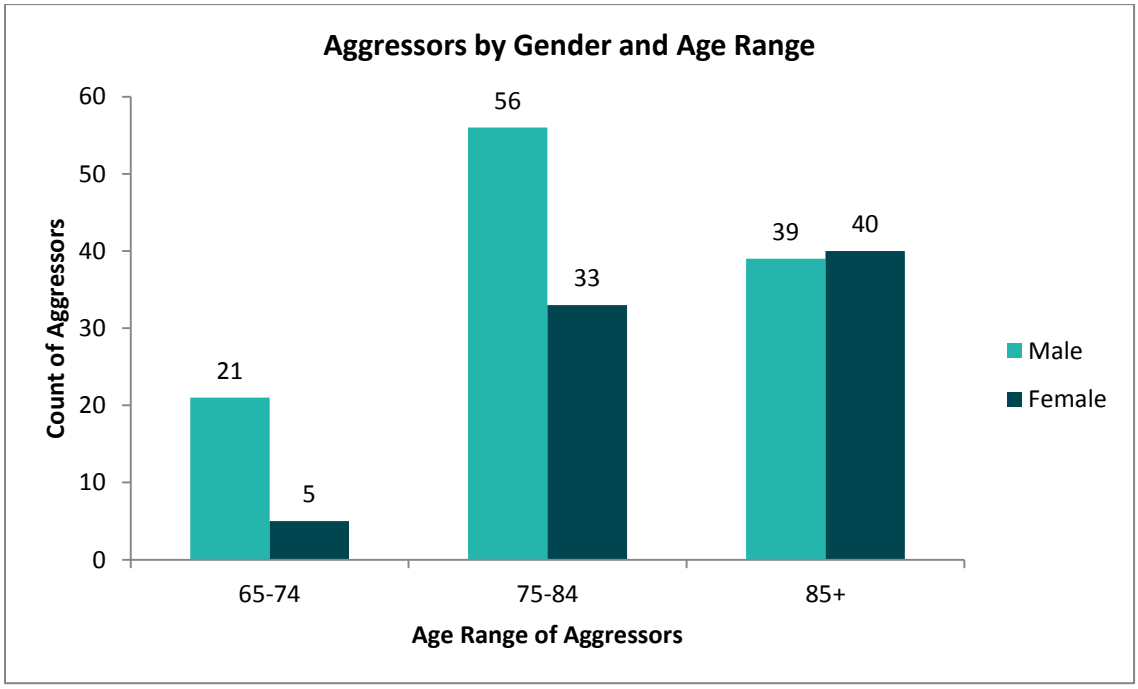
Aggressors:

- Overall, males were the aggressors 60% of the time. The largest age cohort of aggressors was males who were 75 to 84 years of age (29% of all aggressors). But in the 85+ age range, there were equal numbers of male and female aggressors.

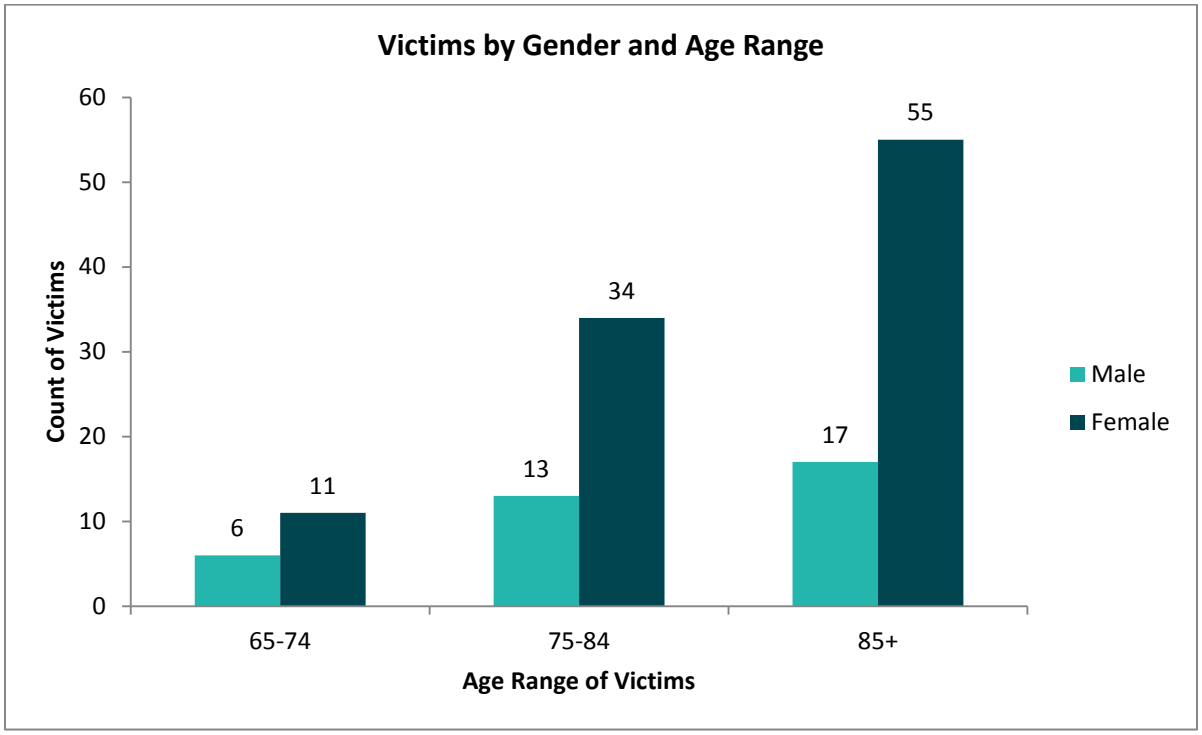
Victims:

- Overall, females were the victims 74% of the time. As the age of the women increased, the disparity between the number of men who were victims and the number of women who were victims increased significantly. In the 65-74 age range, women were victims twice as often as males. In the 75-84 age range, women were victims almost three times as often as men. And in the 85+ age range, women were victims more than three times as often as men.

Graph 5 – Aggressors by gender and age range



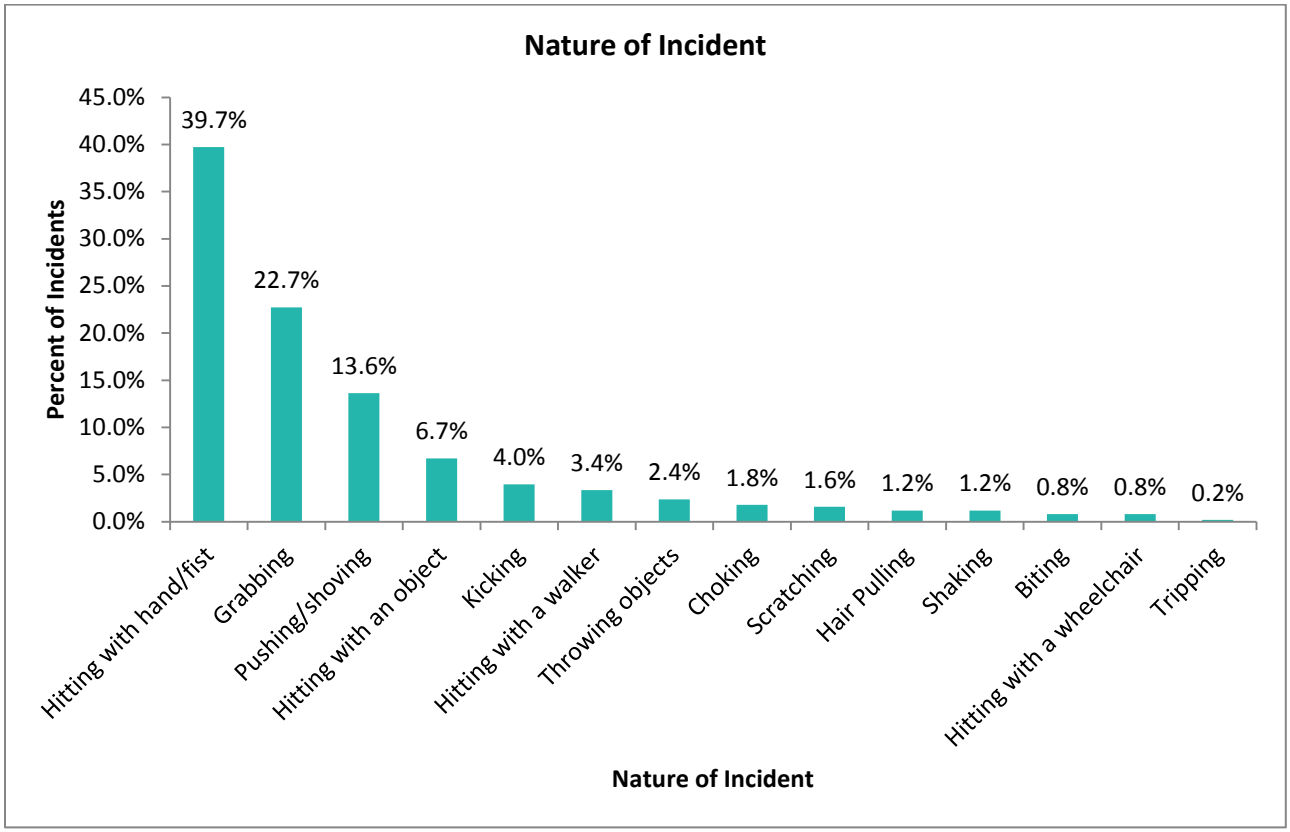
Graph 6– Victims by gender and age range



Types of Aggression findings

Some incidents involved more than one type of aggression. Overall, the most prevalent type of aggressive behaviour was hitting with a hand/fist (40%) followed by grabbing (23%), pushing and shoving (14%), hitting with an object—such as a cane or drinking glass—(7%), and hitting with a walker (3%). Other, less common, behaviours included kicking, throwing an object, choking, scratching, hair pulling, shaking, biting, wheelchair ramming, tripping, and sexual groping/touching.

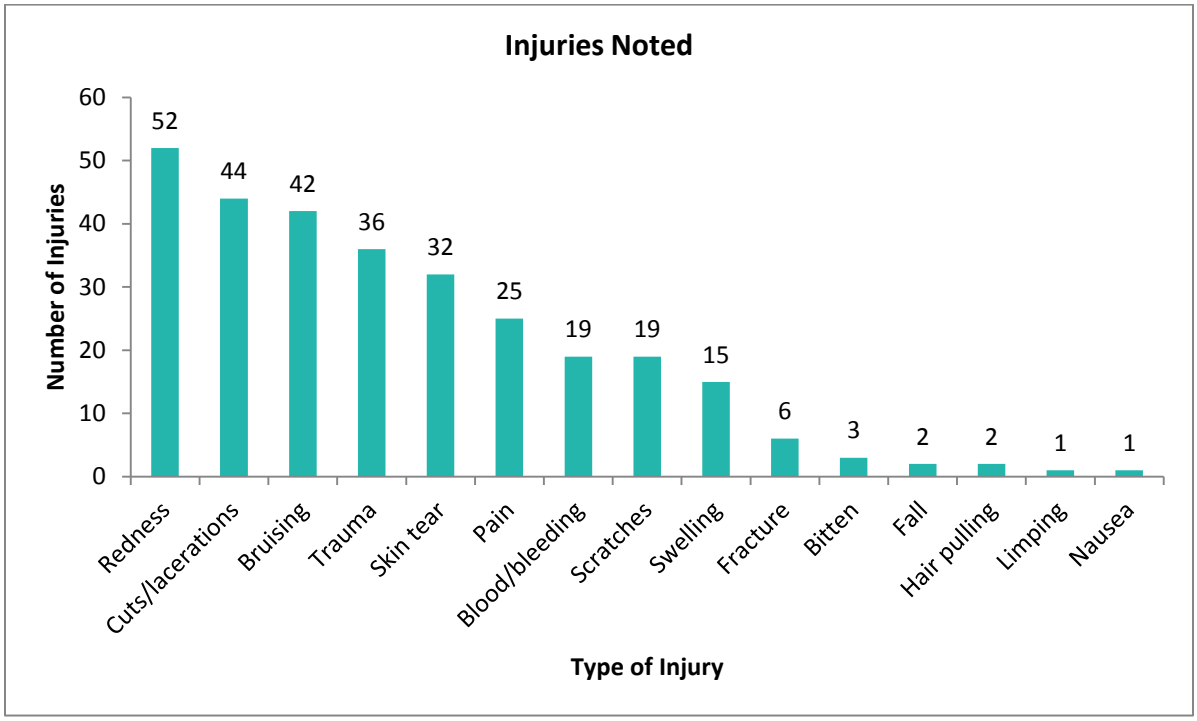
Graph 7 – Types of aggression



Types of injuries findings

Victims of RRA experienced a variety of different types of injuries, with some reports of more than one type of injury. Most often injuries were to the head, face, neck and extremities. One resident died as a result of their injuries. Other serious injuries included fractures (6), cuts, lacerations, abrasions, skin tears and bleeding. Victims often experienced pain, redness, swelling, scratches, bites by other residents, and other non-specific traumas. Emotional distress and fear were often reported in addition to the physical injuries. Academic literature on RRA finds that the fear associated with a RRA incident can lead to social isolation where a resident is afraid to leave their room, sleeplessness, and lack of appetite.

Graph 8 – Types of injuries reported



Follow up to incident findings

Minimal and inconsistent information was provided regarding the follow up to incidents of RRA. Medication was administered to a resident involved in an RRA incident on 42 occasions. This included medication to relieve pain for the recipient of the harm, as well as medication to calm agitated residents. On 25 occasions, an ambulance was called and the resident was transported to hospital. The police were called 12 times. On ten different occasions, residents were moved to another unit or facility and, in three instances, residents were admitted to a geriatric-psychiatric unit. Six residents were given a "purple dot," the colour coding system used in many B.C. facilities for noting which residents exhibit aggressive behaviour. Two residents were referred to a behaviour consultant. Two residents were moved to another room with a new roommate. One resident was moved to a single room. One resident received treatment for a urinary tract infection, suggesting infection may have been a trigger for the aggression; delirium can result from urinary tract infections, particularly in persons with dementia. Another resident was started on pain medication following an incident, and it was noted there were no further incidents of aggressive behaviour, suggesting that pain had been the trigger for the aggressive behaviour. In one RRA incident it was noted that staffing was increased.

History of previous incidents findings

The data noted that seven victims had been involved in previous RRA incidents and 19 aggressors had been involved in previous RRA incidents. One incident reported that the same two residents had been involved in three different incidents in the previous week. This information was not consistently recorded on the incident form so it is not possible to know the extent to which either the victim or the aggressor had been involved in multiple incidents.

Observed versus unobserved incidents findings

Staff in residential care facilities were not required to report who observed the RRA incidents.

- **In 169 incidents (37% of all incidents), the narrative describing the incident revealed the circumstances around how the incident came to the attention of staff.**
- **53 (31%) of these incidents were directly observed by staff, another 53 (31%) were partially witnessed by staff – usually they heard yelling or a loud noise and ran to investigate. They saw the incident in progress and intervened. In some cases, one resident was clearly the aggressor and the other a victim and in some instances both were aggressors fighting with each other.**
- **In 44 (26%) other incidents, staff found a resident on the floor, sometimes with no one around and sometimes with another resident nearby, but they did not directly witness the altercation. And in 16 instances (10%), the victim or the aggressor reported the incident to staff. In 3 (2%) other incidents, other residents witnessed the incident and called staff.**

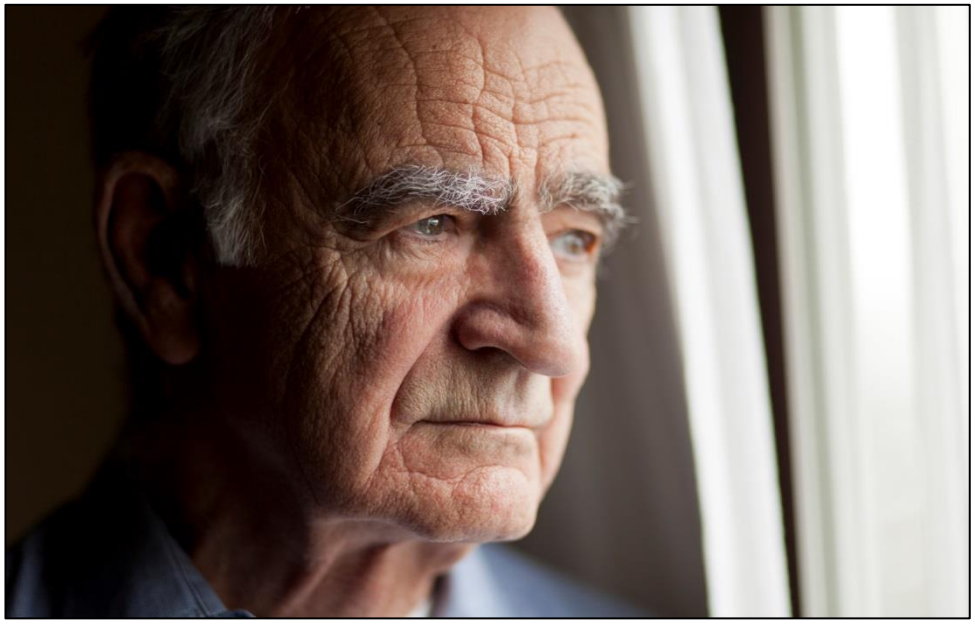
With so many incidents occurring in residents' bedrooms, staff were not always able to see the incident. Immediate or timely follow up with witnesses can be very useful in understanding the circumstances around the incident to determine triggers or contributing factors which could influence the development of an effective behavioural plan

Observations on Incident Reporting Forms

There is no single, standardized Incident Report (IR) form used for the reporting of incidents across Health Authorities and Acts, resulting in different information being captured for CCALA sites, PSLS reporting and *Hospital Act* sites. While many of the data fields are the same, there are some key areas where data capture is different.

- Although **Date** and **Time of incident** is requested on all forms, for some forms the Date and Time are entered into one box. Often, this led to the date being entered but the time being excluded. Incident reports that have separate Date and Time boxes have better data capture of Time.

- **Location of incident** is usually shown in its own separate box, but only 2 sites include a drop down box of different types of locations. Providing specific locations in a drop box improves the clarity, consistency and ease of reporting.
- In resident to resident aggression, there are at least two residents involved. Not all IRs provide room for **name, gender and date of birth for multiple persons in care (PIC)**. Some IRs provide space to report details of three PICs
- Most IRs do not provide a separate space to record the **name and status of persons observing/witnessing** the incident. This is important information to gather at the time of the incident and providing a space for this prompts the gathering of this information.
- Most IRs do not provide a separate space for **Contributing Factors**. Triggers and other contributing factors can provide important information in the development of a Behaviour Plan and for looking for trends and patterns.
- **Resident to Resident Aggression** is included as a separate **type of incident** in the CCALA IRs but not consistently elsewhere.
- **Facility Follow Up** is addressed in different ways – in its own separate space, as part of the narrative of the incident, or as a drop down box plus room for narrative. The drop down box reminds the reporter to be more inclusive in reporting and ensures more consistency of reporting. There also needs to be room for narrative and additional information.



Conclusions

This report provides an initial analysis of a critically important issue in residential care in British Columbia. With this first review of data, the OSA was able to gather some important information; however, no "major fix" appeared. Indeed, one observation from this study is the need to develop standardized reporting to provide more robust data.

Notwithstanding data limitations, the OSA did have over 400 incidents to examine and this has resulted in some initial findings. We found that resident to resident aggression incidents tend to be associated with facilities that have a greater proportion of residents with complex care needs. Residents assessed as having aggressive behaviour, cognitive deficits, and psychiatric symptoms tend to make up a greater share of the resident population at facilities that have reported incidents. Given that these facilities have slightly less direct care hours than facilities with no incidents (and, likely, less complex resident care needs), further study of facility funding with regard to care hours and resident profiles is warranted.

We also found that facilities with resident to resident aggression incidents are taking steps to mitigate potential triggers of aggressive behaviour by implementing a range of strategies, such as outdoor walking circuits and wander guard bracelet systems. Many facilities also expressed an interest in attending Health Authority-funded training, but sometimes encountered difficulty accessing this training. We are encouraged that facilities are taking the initiative to address aggressive behaviours and engage with training opportunities. We recommend that facilities continue to work with Health Authorities to access training, and that Health Authorities continue to extend training opportunities to facilities.

The Office of the Seniors Advocate will continue to monitor the issue of resident to resident aggression, as well as the appropriate application of mitigation strategies. It is our recommendation that the reporting and regulatory environment surrounding the factors of aggression be improved. The safety of seniors in residential care is paramount, and it is the goal of the OSA that we will see a drop in the number of incidents over time, and a greater assurance to seniors and their loved ones that residential care is a comfortable and safe living environment.

Recommendations

1. Standardize Reporting

One of the largest limitations in this report and the ability to track and understand RRA was the quality of data.

a. Given the current three definitions of RRA, the OSA recommends a consistent definition be created and implemented across the province to be used to capture RRA incidents.
b. The OSA recommends establishing province-wide processes to track both RRA incidents and their follow up. This would encompass standardized terminology, data capture systems and reporting processes to ensure that information collected in Incident Reports is consistent across all Health Authorities and support reporting and tracking at a provincial level.

2. Staffing

When compiling this report, the OSA found that facilities with higher numbers of incidents tended to have more complex residents. However, these facilities, on average, did not have higher levels of funded direct care hours than facilities with less complex residents. The OSA recommends a review of the adequacy of staffing for residents with more complex needs specifically during busy times like dinner hours.

3. Education/Training

Given the recent policy change to report these incidents, more education could prove beneficial for staff, management and residents. There is currently no comprehensive education plan on how to deal with these incidents. Education on how these incidents could be mitigated, how to deal with in-progress incidents, and appropriate follow-up protocol (including around reporting) would improve awareness of these incidents.

4. Facility Design/Behaviour Management Resources

Although this report recognizes that many facilities have put in features such as outdoor spaces and anti-wandering interventions, the OSA recommends that all facilities adopt strategies and design features that are known to be effective in mitigating aggressive behaviours including exploring the use of locking systems for private rooms to mitigate wandering behaviours.

References

Benbow, W. (2016) Resident-to-resident aggression: Evidence based environmental interventions. *Canadian Nursing Home, 27*(2), 4-11.

Ellis, J. M., et al. (2014). Managing resident-to-resident elder mistreatment in nursing homes: The SEARCH approach. *The Journal of Continuing Education in Nursing*, *45*(3), 112-121.

Ferrah, N., et al. (2015). Resident-to-resident physical aggression leading to injury in nursing homes: a systematic review. *Age and ageing*, *44*(3), 356-364.

Malone, M. L., Thompson, L., & Goodwin, J. S. (1993). Aggressive behaviors among the institutionalized elderly. *Journal of the American Geriatrics Society*, *41*(8), 853-856.

McDonald, L., et al. (2015). Developing a research agenda on resident-to-resident aggression: Recommendations from a consensus conference. *Journal of elder abuse & neglect*, *27*(2), 146-167.

Office of the Chief Coroner for Ontario (2015). *Geriatric and long-term care review committee 2013-14 annual report*. Retrieved from http://www.mcscs.jus.gov.on.ca/english/DeathInvestigations/office_coroner/PublicationsandReports/GLTC/2013-14Report/GLTCRC_201314.html

Ontario Long Term Care Association (2015). *This is long-term care 2015*. Retrieved from http://bluetoad.com/publication/?i=281415

Pillemer, K., et al. (2012). Resident-to-resident aggression in nursing homes: Results from a qualitative event reconstruction study. *The Gerontologist*, *52*(1), 24-33.

Rosen, T., Pillemer, K., Lachs, M. (2008). Resident- to- resident aggression in long-term care facilities: An understudied problem. *Aggressive and Violent Behaviours*, *13*(2),77-87.

Rosenberg, M.L., et al. Interpersonal Violence. In: Jamison, D., Breman, J., Measham, A., eds. *Disease Control priorities in Developing Countries*, 2nd edition. Washington, DC: World Bank, 2006.

Shinoda-Tagawa, T., Leonard, R., Pontikas, J., McDonough, J. E., Allen, D., & Dreyer, P. I. (2004). Resident-to-resident violent incidents in nursing homes. *JAMA*, *291*(5), 591-598.

Sifford-Snellgrove, K. S., Beck, C., Green, A., & McSweeney, J. C. (2012). Victim or initiator?: Certified nursing assistants' perceptions of resident characteristics that contribute to resident-to-resident violence in nursing homes. *Research in Gerontological Nursing*, *5*(1), 55-63.

Snellgrove, S., Beck, C., Green, A., & McSweeney, J. C. (2013). Resident-to-resident violence triggers in nursing homes. *Clinical Nursing Research*, *22*(4), 461-474.

Soreff, S. (2012). Violence in the nursing homes: Understandings, management, documentation and impact of resident to resident aggression. In V. Olisah (Ed.), *Essential Notes in Psychiatry.*