

NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**
Division of Public Health

Environmental Health Section

2023-24 ANNUAL REPORT



Mission Statement

The mission of the Environmental Health Section is to protect people by promoting a safe and healthy environment in partnership with private businesses and public agencies through consistent application of education, best practices and compliance monitoring.

The Environmental Health Section is comprised of the Food Protection and Facilities Branch, Children’s Environmental Health Branch, Onsite Water Protection Branch, and the Centralized Intern Training and Authorization Program.

Executive Summary

Overall, the 2023-24 state fiscal year metrics revealed growth in regulated establishments and local health departments across North Carolina. The number of food establishments, swimming pools, lead certifications and lead renovators continued to increase over the last fiscal year. Increases in the number of students trained in Centralized Intern Training in the general modules and in food and lodging modules indicate growth in local health department environmental health programs. The Environmental Health Section is also increasing staff with the introduction of the Specialty Wastewater Improvement & Field Training (SWIFT) Team. The fiscal year metrics revealed a decline in food establishment inspections and in asbestos permits from the previous year. The Environmental Health Section uses analysis of data collected to measure successes within program areas and to determine priorities for upcoming projects.

FOOD PROTECTION AND FACILITIES BRANCH

Food Establishment Inspections

In the 2023-24 fiscal year, there were a total of 48,302 permitted food establishments. While this is the largest number of establishments that have been permitted in North Carolina, it does represent slightly slower growth than the previous few years, with only a 2.1 percent increase compared to a 2.4-2.5 percent increase from the previous two years. Although there was an increase in the number of food establishments, the total number of inspections declined by 7.6 percent. This is very different from previous years where the number of inspections were

| | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 |
|--------------------------|--------|--------|--------|--------|--------|--------|
| Establishments | 44,264 | 44,689 | 45,038 | 46,124 | 47,303 | 48,302 |
| Inspections | 87,759 | 67,675 | 71,126 | 79,763 | 90,763 | 83,871 |
| Reinspections | 732 | 602 | 429 | 537 | 667 | 655 |
| Intent to Suspend Permit | 1069 | 992 | 827 | 715 | 1275 | 1526 |
| Permit Suspensions | 746 | 588 | 556 | 577 | 1008 | 1197 |
| Plans Reviewed | 774 | 673 | 1040 | 844 | 811 | 927 |

increasing steadily. This change could be due to Session Law 2023-137, which changed how Category IV facilities are defined in 10A NCAC 46 .0213, by moving the required inspection frequency from once every three months to

once every four months with an educational visit completed in place of the other inspection. Since the law change, there have been 10,643 educational visits completed across the state.

The number of “intent to suspend permits” and “permit suspensions” are continuing to show an increasing trend, although the rate of increase for the 2023-24 fiscal year was significantly less than the previous year. The 1,526 “intent to suspend permits” issued for food establishments this fiscal year represented a 19 percent increase from the previous fiscal year, compared to a 78 percent increase between FY22 and FY23. The number of permit suspensions increased by a similar rate, increasing 18 percent from 1,008 to 1,197. The previous year saw nearly a 50 percent increase. These trends can be monitored to assess long-term compliance in establishments or conditions in establishments where imminent health hazards exist.

In the 2023-24 fiscal year, there were permits issued for 9,049 swimming pools, 1,142 wading pools and 957 spas in North Carolina, a 3.7 percent increase in swimming pools from the

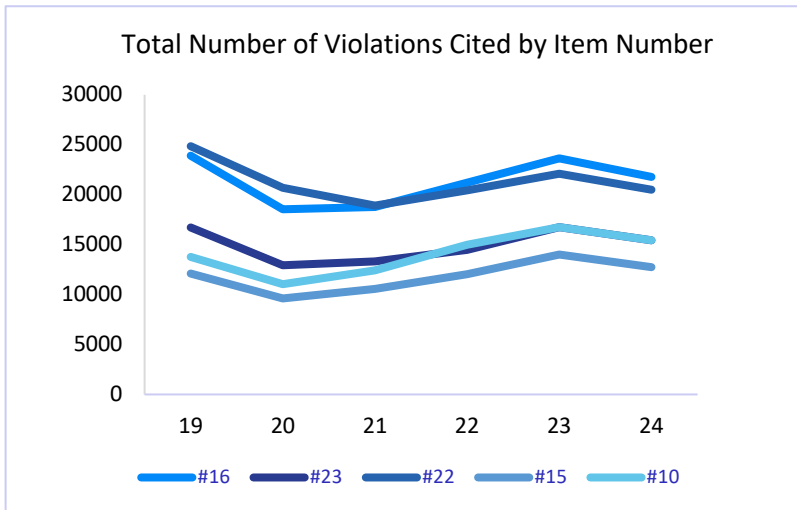
| | Swimming Pool | Wading Pool | Spa |
|--------------------------|---------------|-------------|-----|
| Total Establishments | 9049 | 1142 | 957 |
| Inspections | 8383 | 760 | 723 |
| Reinspections | 374 | 31 | 36 |
| Intent to Suspend Permit | 754 | 23 | 88 |
| Permit Suspensions | 1075 | 29 | 125 |

previous year. There were 1,075 permit suspensions issued for swimming pools, which represents 11.8 percent of permits, an increase from 10.8 percent in the 2022-23 fiscal year. The 754 intent to suspend permits represents an

increase of 13 percent over the previous fiscal year.

Inspection Compliance

The Environmental Health Section monitors trends in the top five cited critical violations to help determine if the primary risk factors for foodborne illness are being controlled. It is significant to note that in the 2023-24 fiscal year, one of the top five cited violations changed from previous years. The “presence of a person in charge” (PIC) violation (#1) has fallen significantly, and therefore is no longer one of the top cited violations. “Food separated and protected” (#15) is now the fifth most cited violation overall. There was a decrease in the number of violations for all of the top five violations in the 2023-24 fiscal year,

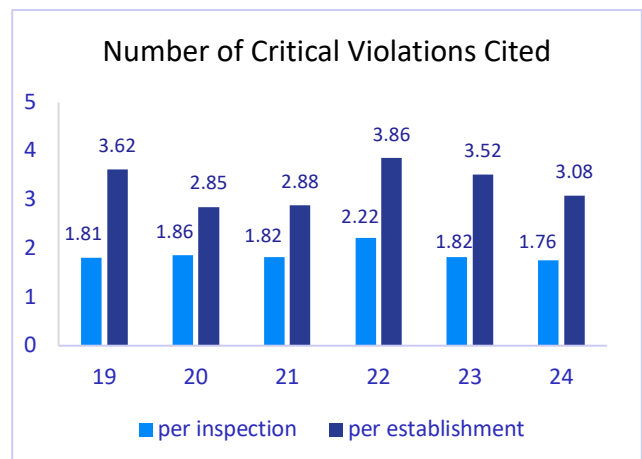


and all violations seem to be following similar patterns in terms of number of citations and percent decrease. There was a 7 to 9 percent decrease in the number of violations cited for all top five critical violations from FY 23 to FY 24. When looking over the last five fiscal years, there has been an overall slight increase in the total number of violations for “handwashing sinks supplied” (#10) at 11 percent and “food separated and protected” (#15) at 5 percent. Cold holding violations (#22) have declined by 17 percent over the last five years.

The Environmental Health Section continues to work toward the goal of reducing the number of critical violations per inspection and per establishment. There continues to be a decrease in the number of violations cited, with 3.08 violations per establishment and 1.76 violations per inspection in the 2023-24 fiscal year. With the changes to the Session Law that decreased the number of inspections per establishment, the Section will be closely monitoring this trend to ensure that less frequent inspections do not lead to an increase in non-compliance. The EH Section is dedicated to working with both local health departments and the food industry to ensure that the number of critical violations occurring in food establishments continues to decline.

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Intern Training

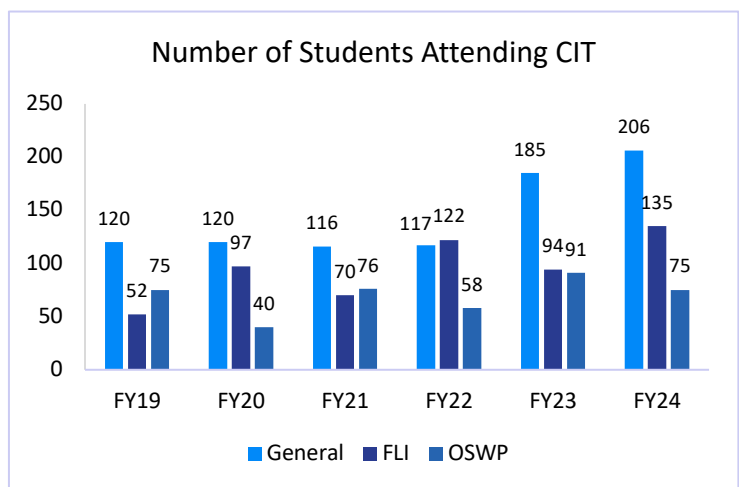
Centralized Intern Training (CIT) is the program the Environmental Health Section provides for initial training for Environmental Health Specialist Interns across North Carolina. The Environmental Health Section also facilitates the authorizations for Environmental Health Specialists in North Carolina from this program. The 2023-24 fiscal year had a significant increase in the number of child care and school authorizations issued. The 71 authorizations

| | FY20 | FY21 | FY22 | FY23 | FY24 |
|-----------------------------------|------|------|------|------|------|
| Child Care and Schools | 72 | 45 | 52 | 43 | 71 |
| Childhood Lead Prevention | 40 | 18 | 37 | 32 | 35 |
| Food Lodging & Institutions (FLI) | 117 | 78 | 62 | 80 | 109 |
| Onsite Wastewater (OSW) | 80 | 61 | 62 | 77 | 80 |
| Public Swimming Pools | 118 | 60 | 50 | 79 | 108 |
| Tattoo | 78 | 37 | 93 | 70 | 89 |
| Private Well | 55 | 44 | 111 | 71 | 73 |

issued represented a 65 percent increase from FY23. The number of authorizations in the Food, Lodging & Institution programs and the Public Swimming Pool programs issued in fiscal year 2023-24 increased by almost 40

percent. This was a significant increase in growth in food and lodging authorizations than what was seen in the previous fiscal year. The number of Private Well program and Onsite Wastewater program authorizations performed remained almost unchanged from the 2022-23 fiscal year. While the average length of authorization was 29 days in FY23, the average length of authorization for FY24 decreased to 23 days.

CIT is required for all new environmental health specialists in North Carolina. The General Module of CIT had 206 interns in FY24, which was an increase from the previous year and nearly double FY22. The Food, Lodging & Institution module had increased attendance in the 2023-2024 fiscal year after a decrease in the previous year, while the Onsite Wastewater module saw a slight decrease. Periodic fluctuation is expected in the attendance between Food, Lodging & Institution modules and Onsite Wastewater modules depending on the hiring needs of the local health departments, but overall, local health departments continue to follow the trend of increased hiring of environmental health specialists.



*Onsite Water Protection Branch reports data based on calendar year instead of fiscal year. The following report has been prepared with the most recent available data and relies on manually reported numbers from local health departments.

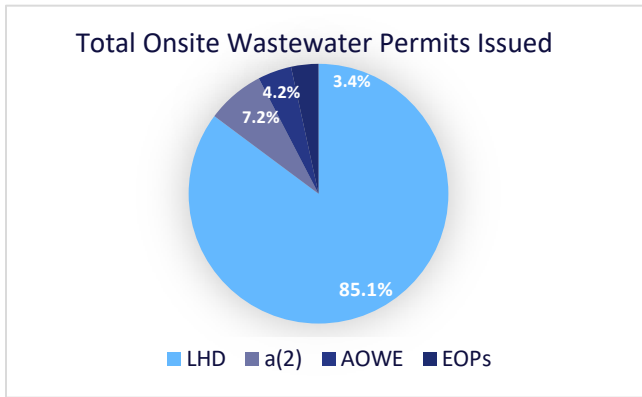
Onsite Wastewater Protection

The Onsite Water Protection Branch uses the monthly activity reports submitted by the Local Health Departments (LHDs) to track onsite water system data across the state. Challenges continue with this reporting system, and submissions by LHDs remain very low. The Consolidated Agreement with the LHDs requires data reporting, but the number of monthly activity reports continues to decrease. While the 2022 calendar year saw 50 percent of the required reports submitted, the 2023 calendar year saw only 38 percent of the required reports submitted, or a total of 454 monthly activity reports for the state. This is a 40 percent decrease in report submissions. There are only 13 LHDs that submitted all 12 reports for the 2023 calendar year, compared to 30 in the previous year. There were 29 LHDs that submitted at least 80% of the reports, and 43 LHDs that submitted 50% of the reports. The Branch continues to see this issue with the data as a significant concern and will continue to look for ways to increase compliance in the coming year.

| | CY2019 | CY2020 | CY2021 | CY2022 | CY2023 |
|--|-----------|------------|-------------|--------|--------|
| Total IP Permits Issued (excluding a2's) | 19,895 | 25,417 | 24,084 | 13,192 | 9,586 |
| Total CA Permits Issued (excluding a2's) | 25,262 | 30,918 | 29,343 | 15,598 | 12,355 |
| Total EOPs - NOIs | 551 | 740 | 1275 | 650 | 386 |
| Total EOPs - ATOs | | | | 517 | 481 |
| Total COVID-19 Permits | N/A | 521 | 971 | unsure | unsure |
| Total AOWE Permits - NOIs | N/A | N/A | N/A | 721 | 606 |
| Total AOWE Permits - ATOs | | | | 180 | 499 |
| Total GS130-335(a2) IPs | 3 (\$40)^ | 49 (\$40)^ | 1801 (\$40) | 1266 | 1110 |
| Total GS130-335(a2) CAs | 3 (\$41)^ | 29 (\$41)^ | 1639 (\$41) | 1152 | 740 |

^Most monthly activity reports in CY 2019 and CY 2020 used an old template and did not track these permits.

When looking at the number of Onsite Wastewater Permits issued in North Carolina, LHD permits accounted for 85.1 percent of the permits. This number is slightly higher than the previous year of 83 percent. If this number is accurate, it is significant because the percent of LHD permits has been decreasing for several years in favor of private/hybrid permitting options. It is unclear whether this change is due to a change in permitting habits, or if it is a consequence of the incomplete data. It is important to be able to monitor this trend to track efficiency of LHD permitting and work to make sure all permitting options are viable.



Onsite Water Protection

The Onsite Water Protection Branch (OSWP) is excited to announce the development of our new training initiative, known as the SWIFT team: Specialty Wastewater Improvement & Field Training team. This team was created to enhance how training is conducted within the Branch, bringing it directly to the counties and focusing on reducing the time from hire to authorization for LHD staff. With the approval of three new positions in last year's state budget, this vision is becoming reality.

SWIFT Team Responsibilities:

- Intern Training: The SWIFT team will take the lead in training new interns in onsite wastewater and private water supply wells, providing them with the foundational skills needed for success.
- Private Well Authorizations: The team will be responsible for completing private well authorizations, ensuring all necessary procedures are followed and standards met.
- Program Reviews for Accreditation: In addition to training, the SWIFT team will conduct program reviews for accreditation, helping to maintain the high standards of our branch.
- Mid-Career Training: The SWIFT team will provide much needed training to authorized agents as they advance in their careers. This mid-career training will help keep OSWP skills sharp for our agents.
- QA/QC Support for Counties: Finally, SWIFT will assist counties with quality assurance and quality control, providing guidance and support to ensure consistent and accurate practices across the state.

The Vision Moving Forward:

Led by the new SWIFT team leader, Andy Blethen, the team will focus on both new and experienced professionals. The goal is to provide foundational training, advanced instruction and development, ensuring staff are well-prepared to meet the challenges of their roles. The EH Section is in the final stages of onboarding three additional training team members who together bring over 70 years of experience in environmental health. With the collective experience of our existing staff and the fresh perspectives of our new team members, the OSWP is poised to make significant strides in improving our training program.

Why This Matters:

The SWIFT team is more than just a new training initiative; it's a strategic move to elevate the Branch's impact on environmental health across North Carolina. By increasing the knowledge base within the profession, reducing authorization times and improving the quality of work, the EH Section will continue to protect public health and the environment effectively.

Lead and Asbestos Hazard Management Programs

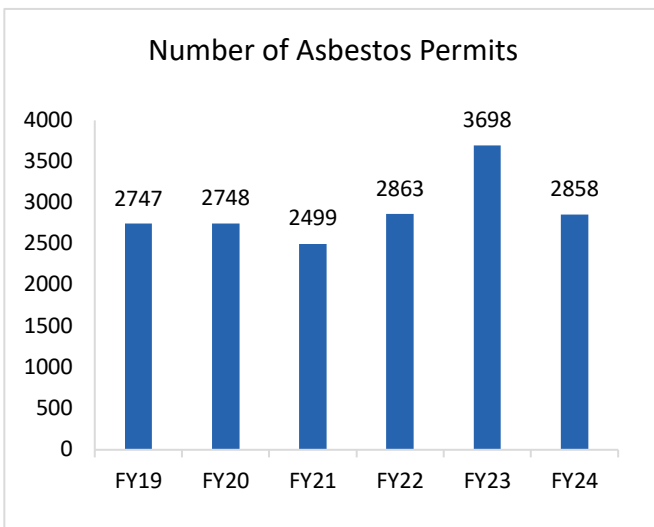
The Health Hazards Control Unit (HHCU) is responsible for the administration and enforcement of asbestos removal and demolitions as well as lead-based paint abatement and renovation projects throughout North Carolina. Although asbestos and lead-based paint products are no longer used in new construction, there are still thousands of private homes, public and commercial buildings in North Carolina that contain asbestos and lead-based paint. The HHCU

permitted the removal of over 4.2 million square feet of asbestos in the 2023-24 fiscal year by accredited asbestos professionals. Many lead-based paint hazards still exist in older homes even though it has been banned since

| | FY20 | FY21 | FY22 | FY23 | FY24 |
|----------------------|-------|-------|------|------|------|
| Lead Certifications | 185 | 159 | 202 | 270 | 343 |
| Lead Abatement Firms | 74 | 73 | 76 | 71 | 85 |
| Renovators | 592 | 468 | 459 | 513 | 571 |
| Renovation Firms | 1,108 | 1,058 | 992 | 947 | 949 |

1978. Homes (target housing) built prior to 1978 and child-occupied facilities that undergo applicable lead abatement, renovation or repair activities must be completed by North Carolina certified individuals and firms. Over the last five years, the number of lead abatement firms and lead renovation firms has remained consistent and, in some areas, increased, which is important as individuals in North Carolina need to be able to access trained and certified professionals to conduct lead abatement activities or renovation activities that disturb lead-

based paint.



In the 2023-24 fiscal year, there were 2,858 asbestos permits issued for abatement, repairs or renovations to structures containing asbestos. This was a decrease over the previous fiscal year's 3,698 permits. The 2023-24 fiscal year amount is consistent with the normal number of annually permitted jobs in the last five years. However, the increase in the previous year totals is attributed to projects that had been placed on hold during the COVID-19 pandemic. In the 2022-23 fiscal year, there were 625 asbestos inspections

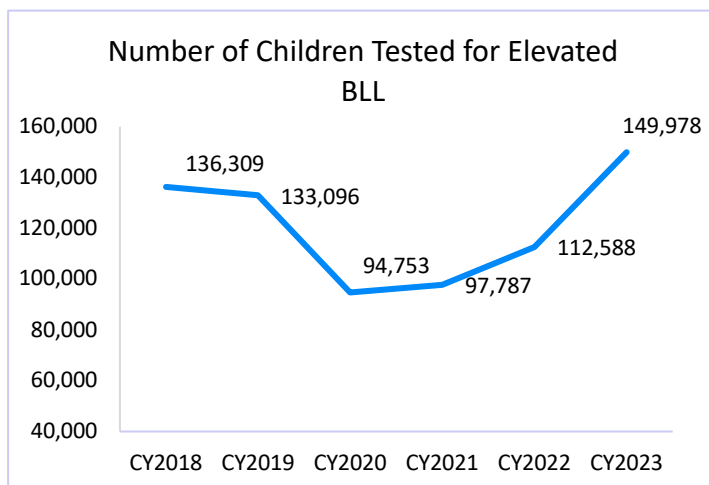
conducted, while 639 inspections were conducted in the 2023-24 fiscal year.

*Children's Environmental Health reports data based on calendar year instead of fiscal year. The following report has been prepared with the most recent available data.

Childhood Blood Lead Surveillance

Children in North Carolina are tested for potential elevated blood lead levels (BLL). Confirmation of elevated BLL is based on a child receiving two consecutive blood lead test results $\geq 5 \mu\text{g/dL}$ within a 12-month period. Confirmed lead levels are based on the confirmation date and are classified according to the highest level confirmed during the calendar year.

The overall number of children tested for elevated BLL increased during the 2023 calendar year. This continues the trend seen after the sharp decrease in 2020 attributed to the COVID-19 pandemic (and the reduced number of routine medical visits during this time) and a recall of point-of-care (i.e.,



LeadCare II) blood lead analyzer test kits used by health care providers to analyze blood lead specimens in-house. Distribution of test kits did not resume until the week of February 14 in 2022. In 2023, the number of children tested increased 58 percent from 2020 and 33% from 2022, surpassing the number of children tested pre-COVID-19. The percentage of children with an elevated BLL has remained consistent over the past three years.

| | CY2018 | CY2019 | CY2020 | CY2021 | CY2022 | CY2023 |
|--|---------|---------|--------|--------|---------|---------|
| Number of Children Tested | 136,309 | 133,096 | 94,753 | 97,787 | 112,588 | 149,978 |
| Number with BLL $\geq 5\mu\text{g/dL}$ | 1,649 | 1,234 | 1,049 | 1,060 | 1,242 | 1,636 |
| Percent BLL $\geq 5\mu\text{g/dL}$ | 1.20% | 0.93% | 1.10% | 1.08% | 1.10% | 1.09% |

The 2023 calendar year had a significant increase in testing, which may have been influenced by increased awareness of elevated BLLs in the media. In October 2023, a nationwide outbreak of lead poisoning among children and subsequent recall of applesauce products occurred from an investigation that originated in North Carolina. This resulted in several months of news articles, social media posts and other coverage that exposed the public to new and consistent information about blood lead testing. The Section will continue to monitor these testing numbers to track the impact of this recall and outbreak throughout North Carolina. To learn more, please read the MMWR article found [here](#).

Lead and Asbestos Mitigation in Schools and Child Care

In 2023, the NC Division of Public Health expanded the protection of young children from lead and asbestos hazards in public schools and licensed child care facilities following a legislative appropriation of \$150 million from federal infrastructure funding (American Rescue Plan Act (ARPA)). Since April 2023, NC DPH has contracted with RTI International to coordinate lead in water testing and mitigation, as well as coordinate lead-based paint and asbestos inspections. Information regarding the program, enrollment and current testing progress can be found [here](#). The ARPA reimbursement program addresses lead-based paint and asbestos hazard mitigation, renovation and capital improvements where lead-based paint and asbestos is present. The NC Health Hazards Control Unit launched this program in May 2023 and is responsible for reimbursing public schools and licensed child care facilities for qualified expenses. NC public schools can qualify for two-thirds reimbursement and licensed child care facilities can qualify for full reimbursement. Information on the program can be found on the [DHHS ARPA reimbursement page](#). NC public schools and licensed child care facilities seeking reimbursement must submit required documents while funding is still available and before December 31, 2026. Questions regarding reimbursement can be submitted to ARPA-Reimbursement@dhhs.nc.gov.

At the end of the first 15 months of the program (May 2023-August 2024), over 2,100 licensed child care facilities had been tested for lead in water and testing is in progress for an additional 300 centers. For the lead-based paint program, 2,255 child care facilities have been enrolled with 56 percent (1,262) having completed that program. For the asbestos program, 2,136 child care facilities have been enrolled with 63 percent (1,335) having completed that program. During the same 15-month period, over 2,600 public schools have enrolled in one of the three programs and over 1,200 have completed testing and/or inspection to identify hazards.

Conclusion

The Environmental Health Section continues to be encouraged by the tremendous work being accomplished by Environmental Health Specialists across the state that is reflected in the data collected over the fiscal year. Environmental Health programs are continuing to thrive and grow in the years since the pandemic. Overall, there has been an increase in the number of Environmental Health Specialist Interns attending CIT as well as increases in authorizations issued across all programs during the past fiscal year. The Environmental Health Section is also expanding by creating the new SWIFT Team, which will provide progress towards more statewide consistency and enhanced training in the Onsite Water Protection Program. The Section is interested in your feedback as this new approach may serve as a model for training in other environmental health programs.

Environmental Health Specialists continue to work toward assisting regulated establishments overcome compliance issues as the metrics reveal areas that need focus. The number of permit suspensions and intent to suspend permits increased in both food establishments and swimming pools in the fiscal year. These enforcement strategies are used for imminent health hazards or continued critical violations; therefore, the Section will work on strategies to assist local health departments and the food industry in achieving compliance. The goal is to see reduction in these compliance issues through educational efforts, new inspection strategies or other methods.

The Section would like to close by taking this opportunity to thank you for the work you do every day. What we do often goes unnoticed, but the world would turn upside down without you and those who support environmental health. Our environmental health workforce in North Carolina continues to be exemplary and the metrics in this document only represent a fraction of what we do. However, numbers are a useful tool, and our Section will use the data to set goals and work on projects for the upcoming fiscal year.

Environmental Health Section Leadership

Larry Michael, State Environmental Health Director

Jon Fowlkes, Deputy Environmental Health Director

Shane Smith, Food Protection and Facilities Branch Head

Ed Norman, Children's Environmental Health Branch Head

Wilson Mize, Onsite Water Protection Branch Head