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COUNCILMEMBER – DISTRICT ONE

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TO: Oakland City Council and Members of the Public

FROM: Councilmember Dan Kalb

SUBJECT: Staff Report on Fentanyl Detection - Defense Diagnostics, Inc.

DATE: November 25, 2024

RECOMMENDATION:

Adopt a **RESOLUTION AUTHORIZING THE CITY ADMINISTRATOR TO INITIATE A CONVERSATION WITH DEFENSE DIAGNOSTIC, INC. A CALIFORNIA-BASED PUBLIC HEALTH AND SAFETY BUSINESS INCLUDING (1) RECEIVING AN INFORMATIONAL REPORT ON THEIR CAPABILITIES, TECHNOLOGIES, AND POTENTIAL CONTRIBUTIONS TO ADDRESSING THE FENTANYL HEALTH CRISIS AND (2) EXPLORING THE POSSIBILITY OF SEEKING GRANTS AND IMPLEMENTING A FENTANYL DETECTION PILOT PROGRAM TO HELP ADDRESS THE FENTANYL HEALTH CRISIS IN OAKLAND**

EXECUTIVE SUMMARY

The City of Oakland is facing a severe fentanyl crisis, with overdose death rates far exceeding California's state average, threatening the safety and health of its diverse populations. This crisis impacts all demographics, including unhoused individuals, recreational drug users, blue-collar workers, and students, with certain districts, like Downtown and West Oakland, experiencing overdose rates as high as 129 per 100,000 residents.¹

Unhoused populations, African-Americans, men, and adults aged 25-44 are disproportionately affected, reflecting systemic inequities that exacerbate the crisis. Recreational use of fentanyl-laced substances by students and nightlife patrons further widens the at-risk groups.

¹ CALMatters <https://calmatters.org/explainers/california-opioid-crisis/#:~:text=Deaths%20related%20to%20fentanyl%20began,of%20all%20opioid%2Drelated%20deaths.>

This city-wide emergency demands an innovative response that addresses both immediate prevention and the underlying social determinants of health. Without decisive action, the devastating human and societal toll will continue to escalate.

This Resolution is one step in Oakland’s effort to reduce fentanyl related overdoses in our city.

BACKGROUND LEGISLATION

There is previous legislation in the form of a resolution introduced and authored by Councilmember Rebecca Kaplan’s office and Co-sponsored by Councilmember Noel Gallo and Councilmember Trevia Reid Adopting A Resolution Recognizing Fentanyl As A Public Health Crisis. Their report highlights that the fentanyl crisis in Oakland reflects a larger statewide issue in California. Recognizing the urgency, Governor Gavin Newsom announced a master plan in 2023 to combat the fentanyl epidemic, underscoring its magnitude and the need for proactive measures. Investigations in Oakland revealed that methamphetamine use is increasingly compounded by fentanyl, making drug use more lethal. Highland Hospital identified fentanyl and methamphetamine as the most harmful illicit drugs impacting the city.

California's Good Samaritan Law provides legal protection to individuals offering emergency assistance, including overdose interventions. Complementing this, free Narcan training and overdose rescue kits are available through the National Coalition Against Prescription Drug Abuse (NCAPDA), equipping residents with life-saving tools. These legislative and community efforts highlight a critical need for resources to address addiction, support recovery, and save lives.

Public concerns and advocacy have played a significant role in driving the creation of Oakland’s resolution recognizing fentanyl as a public health crisis, calling on state and federal governments to expand resources for prevention and recovery.

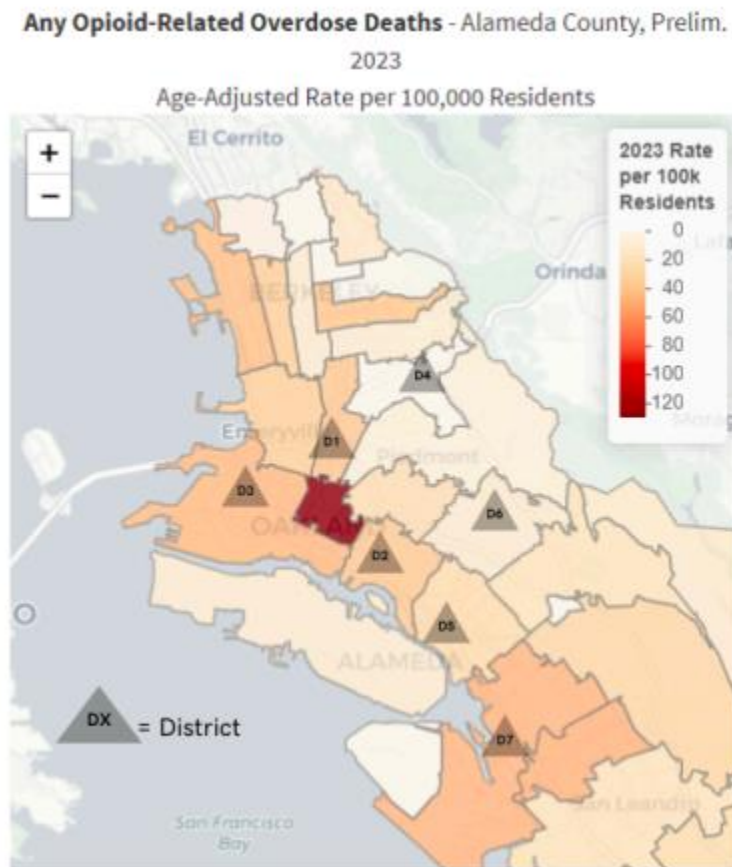
ANALYSIS

Defense Diagnostics, Inc. offers a revolutionary approach to fentanyl detection, providing a user-friendly, reliable solution aimed at protecting a wide range of at-risk individuals, including youth, socially active people, the unhoused community, and others who may be vulnerable to unintentional fentanyl exposure. In the following sections, we will explore Defense Diagnostics, Inc. essential features, its advantages over traditional testing methods, and how it addresses Oakland's diverse populations' unique needs. We'll also discuss our multi-faceted distribution strategy and the potential impact of implementing Defense Diagnostics, Inc. across the city. Fentanyl - A Cross-District Issue in Oakland, CA Recent data on opioid overdose deaths in Oakland reveals a crisis that spans across multiple districts, affecting various communities throughout the city. The 2023 opioid overdose death rates per 100k residents in Oakland show a critical need for intervention across various districts: ²

² California Department of Public Health Dashboard

1. District 3 is severely impacted, with 94612 showing the highest rate at 129 deaths per 100k and 94607 at 49 deaths per 100k.
2. District 7 also faces a significant crisis, with 94603 at 52 deaths and 94621 at 51 deaths per 100k.
3. District 1 and District 4 shows varying impact, with 94609 at 41 deaths per 100k, while 94611 (which includes Piedmont/Montclair/Hills) has a lower rate of 8 deaths per 100k.
4. District 2 is also affected, with rates of 40 deaths per 100k in 94606 and 25 deaths per 100k in 94610.
5. District 6 at 30 deaths per 100k, and
6. District 5 at 27 deaths per 100k.

This data demonstrates that the opioid crisis is a city-wide issue, affecting multiple districts. with varying intensity. The crisis is particularly severe in Districts 3 and 7, but no district is untouched. Notably, many of Oakland's zip codes show death rates significantly higher than the California state average of 17.96 per 100k, underscoring the urgency of the situation in Oakland.



The fentanyl epidemic in Oakland greatly affects adults aged 25-44, with alarmingly high death rates in 2023. This crisis is part of a larger statewide epidemic, as evidenced by the unprecedented increase in fentanyl seizures across California.

- CalGuard-supported operations seized a record 62,224 pounds of fentanyl in 2023 — a staggering 1066% increase since 2021. This amount is enough to kill nearly twice the global population.
- The Alameda County Health Care Services Agency has identified harm reduction through fentanyl testing as a critical remediation goal for opioid overdose prevention.
- The crisis disproportionately impacts specific groups:
 - Men are significantly more affected than women.
 - African-American individuals face higher risks of overdose.
 - Unhoused people account for 30% of overdoses in Alameda County in 2022.³
- While the City of Oakland has allocated opioid settlement funds towards unhoused recovery, there appears to be a gap in addressing other vulnerable populations through remediation efforts like fentanyl testing. This crisis affects a wide range of individuals, including blue-collar workers, restaurant staff, high school and college students, and adults recreationally using drugs while enjoying nightlife.
 - The tragic, high-profile death of young actor Angus Cloud in Oakland from an overdose exemplifies the risk to young adults using recreationally. However, it's crucial to recognize that similar tragedies occur daily across various demographics without the same public attention, underscoring this crisis's widespread and often unseen impact on our community.

Our City of Oakland campaign aims to bridge the gap in fentanyl awareness and prevention by targeting the most affected demographics, particularly adults aged 25-44 while ensuring accessibility for all residents. We'll implement a comprehensive strategy that combines targeted digital marketing with physical outreach initiatives tailored to these high-risk age groups and populations. By focusing on identified high-risk zip codes, we'll conduct more focused and practical outreach in these areas. Our approach is designed to be inclusive, ensuring that resources reach both unhoused and housed individuals, thereby addressing the full spectrum of at-risk people in Oakland. Through this multi-faceted campaign, we strive to create a more informed and resilient Oakland in the face of the fentanyl crisis.

Strain on Public Resources: Emergency Services Impact The fentanyl crisis in Oakland not only claims lives but also places a significant burden on the city's public services and resources. While specific data for Oakland's emergency responses to opioid-related incidents is not readily available, estimates can be made based on data from comparable metro areas. While specific studies for Oakland are not readily available, we can draw insights from extensive data collected in Chicago, a city facing similar challenges. In 2019, Chicago's Fire Department Emergency Medical Services (EMS) responded to approximately 29 opioid-related overdoses daily,

³ Alameda County Public Health Department Update on fentanyl overdose and the opioid settlements. (2022). http://www.acgov.org/board/bos_calendar/documents/DocsAgendaReg_3_27_23/HEALTH%20CARE%20SERVICES/Regular%20Calendar/Item_2_Fentanyl_Opioid_pres_3_27_23.pdf

translating to 3,023 opioid overdose responses per 100,000 EMS calls.⁴ Each response cost taxpayers an estimated \$1,200, excluding additional police department expenses.

Applying a proportional analysis to Oakland, considering the population difference:

- Chicago population (2019): ~2.71 million
- Oakland population (2021): ~440,000
- Ratio: Oakland is approximately 16.2% the size of Chicago Based on this proportion, estimates for Oakland suggest:
- Approximately five opioid-related EMS responses daily (16.2% of Chicago's 29 daily responses)
- An estimated 1,825 opioid-related emergency responses annually Using the same cost estimate of \$1,200 per response, this could mean:
- An estimated annual cost of approximately \$2,190,000 for opioid-related emergency responses in Oakland

Addressing the opioid crisis in Oakland could have far-reaching implications for both public health and resource allocation. By reducing opioid-related emergencies, we could significantly free up resources for emergency services, allowing first responders to focus on other pressing community needs. This reallocation of resources can improve the overall efficiency of emergency services and potentially lead to faster response times for various types of emergencies. In essence, tackling the opioid crisis is not just a matter of public health but also one of effective resource management. The potential benefits extend beyond saving lives and reducing addiction rates; they include optimizing city resources, improving emergency response capabilities, and creating a safer, healthier community for all Oakland residents.

Defent: A Revolutionary Approach to Fentanyl Detection



⁴ Chicago Public Health Department *Chicago Department of Public Health reports a decrease in opioid-related deaths in the city in the first half of 2021.* City of Chicago :: Chicago Department of Public Health reports a decrease in opioid-related deaths in the city in the first half of 2021. (n.d.). https://www.chicago.gov/city/en/depts/cdph/provdrs/healthy_living/news/2021/august/chicago-department-of-public-health-reports-a-decrease-in-opioid.html

Defent's patented, sleek design makes fentanyl detection simple and intuitive. With just these few steps, users can quickly and reliably test for the presence of fentanyl, enhancing safety and informed decision-making:

1. **Sample Collection:** Use the integrated scoop to place a small amount of the substance into the device's cap.
2. **Secure and Mix:** Close the cap securely. Shake the device for 10 seconds to ensure thorough mixing.
3. **Activate Test:** Twist the bottom handle clockwise to release the liquid mixture onto the internal test strip.
4. **Wait Briefly:** Allow the test to develop for 3-5 minutes. Preliminary Draft Document for Discussion - 9/26 4 5.
5. **Read Results:** Check the test window for clear, easy-to-interpret results

Additionally, Defent offers a revolutionary approach to fentanyl detection, addressing the limitations of traditional fentanyl test strips (FTS) and providing a more user-friendly, reliable solution:

- **All-in-One Design:** Combines all necessary components for simplified testing.
- **High Sensitivity:** Detects fentanyl at 15 ng/mL, ensuring superior accuracy.
- **User-Friendly:** Durable design reduces errors; 91% of users report error-free preparation.
- **Ease of Use:** Intuitive design suits various settings and skill levels.
- **Broad Coverage:** Detects over 100 fentanyl analogs, including carfentanil.
- **Low False Positives:** Ensures reliable results by minimizing errors from non-fentanyl substances.
- **Public Health Data:** Includes QR code for anonymous reporting, aiding hotspot identification and intervention strategies.

Traditional fentanyl test strips (FTS) face key limitations:

- **Complex Use:** Require multiple materials, increasing barriers and errors.
- **Low Utilization:** Only 10-20% of strips are used, making them cost-inefficient.
- **Fragility:** Poor portability restricts use to controlled environments.
- **Interpretation Issues:** Faint results cause confusion, unlike Defent's clear indicators.

Defent's all-in-one design improves fentanyl testing accessibility and reliability, reducing user errors and enhancing ease of use. A 2024 San Francisco study showed 100% of participants preferred Defent over traditional strips. For Oakland, Defent offers an effective, user-friendly tool to support harm reduction and address the city's diverse needs in combating the fentanyl crisis.

FISCAL IMPACT

Given the City's difficult financial circumstances, we have added that seeking grants and collaborative efforts with other governmental agencies would be the best way to proceed. Below is a chart of the proposed cost of implementation of a pilot program. Defent recommends that

Oakland acquire and distribute approximately 34 tests per 1,000 residents, translating to approximately 15,000 devices annually. This quantity accounts for direct distribution to residents and additional devices needed for educator use and promotional purposes.

Contract Years	Devices / 1k Population	Annual Units Supplied In-Person	Annual Units Supplied Online	Annual Cost (Range)	Total Cost (Range)	Total Units Purchased
3	34	12,000	3,000	\$125,000 - \$200,000	\$375,000 - \$600,000	45,000

Distribution Method	Units	Recommended % of Total Devices	Description
Centralized Pickup Locations	7,500	50	DDI will stock and replenish devices for pickup at public and private centralized sites across the city of Oakland
Direct Street Distribution	4,500	30	DDI will distribute devices directly to the unhoused populations in Oakland
Online Ordering with USPS Mail Delivery	3,000	20	DDI will offer a website for ordering devices to be delivered, inclusive of shipping and handling costs

The unit costs noted above include the following:

1. One Defent device
2. Multifaceted awareness plan:
 - Paid social media marketing campaigns
 - Digital awareness initiatives
 - Targeted outreach programs
3. General project expenses, covering:
 - Program management
 - Transportation and distribution costs
 - Insurance, workers compensation, etc.
4. Educational materials and resources

These multifaceted services encompass everything from coordinating with local stakeholders and running awareness campaigns to operating the anonymous online ordering platform and developing multilingual educational resources, ensuring a holistic approach to addressing the fentanyl crisis in Oakland. This structure ensures wide accessibility while accommodating those who prefer the privacy of home delivery, balancing cost-effectiveness with multifaceted coverage. It also prioritizes reaching the most vulnerable populations through targeted

distribution to unhoused communities, while the integrated awareness plan aims to maximize the program's impact and utilization across all segments of Oakland's population.

Distribution and Awareness Plan

The costs outlined above will support Defent in promoting the device, conducting awareness campaigns, managing logistics for city-wide delivery, and providing educational materials and training to prepare people for proper device usage.

Awareness Plan:

To drive adoption of Defent devices, we will implement a multi-faceted strategy:

- **Geotargeted Marketing:** Run targeted digital ads in high-risk Oakland zip codes on platforms like Instagram, Facebook, and TikTok.
- **Influencer Collaboration:** Partner with local influencers and community leaders to promote the device and fentanyl awareness.
- **Community Events:** Host demonstrations and sessions at health fairs and gatherings.
- **Transit Ads:** Place targeted ads in BART stations and buses serving high-risk areas.
- **Business Partnerships:** Distribute materials through local bars, clubs, and venues.
- **Pharmacies and Clinics:** Partner with local pharmacies and health clinics to provide educational initiatives.
- **Youth Education:** Create age-appropriate awareness campaigns for high schools and colleges, collaborating with student organizations to reach younger audiences.

Distribution Channels:

We will use a multi-faceted approach to maximize accessibility and impact across Oakland, targeting high-risk areas and vulnerable populations.

- **In-Person Distribution:**
 - **Unhoused Communities:** Allocate 30% of devices to unhoused populations in overdose hotspots.
 - **Centralized Pick-up Locations:** Distribute at health buildings, community centers, and BART stations in high-risk zip codes (e.g., 94612, 94603).
 - **Partnerships:** Collaborate with harm reduction organizations and shelters to distribute devices and educational materials.
- **Online Access:**
 - Launch a secure Oakland-specific platform for anonymous home delivery (20% of devices).
 - Features include delivery verification, anonymous reporting tools, equitable distribution caps, and multi-language support.
 - Provide educational content, instructional videos, FAQs, and links to local addiction resources.

This strategy aligns with Alameda County's harm reduction goals, complementing city efforts for unhoused recovery while addressing housed populations' needs. By offering confidential access and reducing stigma, this scalable model aims to significantly reduce fentanyl overdoses and deaths.

PUBLIC OUTREACH/INTEREST

The fentanyl crisis has been a consistent subject of public comment and vocalization in Oakland, reflecting widespread concern across the community. Research corroborates the significance of this issue, underscoring the urgent need for intervention. These findings have catalyzed efforts to initiate collaborative conversations with key stakeholders, including the Alameda County Public Health Department and Alameda County Behavioral Health Department.

Through these discussions, Oakland aims to align its strategies with county-wide harm reduction goals, leveraging shared resources and expertise to address the crisis comprehensively. Public interest and stakeholder engagement are driving the development of innovative solutions to combat fentanyl-related overdoses and save lives in the city.

COORDINATION

Our office worked with the Oakland City Attorney's Office to create this legislation, as well as Defense Diagnostc. Inc. For questions, please contact Ashlee Jemmott, Community Liaison to Councilmember Dan Kalb, (510) 238-7013, ajemmott@oaklandca.gov.

Sincerely,



Oakland Councilmember Dan Kalb