Meeting Called to Order.
President Thomas called the meeting to order at 5:32 p.m. and asked all participants to identify themselves for the record (see above). He declared that a quorum was present, that notice of the meeting was posted on the Board of Health website, and that call-in information was included to allow for public participation. Due to COVID-19, the need for social distancing, and the current public health order, President Thomas said the meeting was being conducted online and telephonically.

ITEM 1. Public Comments (on unscheduled agenda items).
Members of the public expressed concern about varying guidance on quarantining in schools; and not being able to communicate directly with the Board on masking mandates.

ITEM 2. Approval of December 13, 2021, Regular Board of Health Meeting Minutes.
Vice President McMillan made a motion, which was seconded by Board Member Fagan, to approve the December 13, 2021, Regular Board of Health minutes. With all Board Members present voting in favor of the motion, President Thomas declared the motion unanimously carried. Absent: Board Member Brooke Harrison, Ph.D.

ITEM 3. Staffing Announcement
Executive Director Camille Rodriguez introduced the new Strategic Initiatives Branch (SIB) Director Kelli Hintch who after an extensive search both internally and externally was selected to lead the SIB Branch. Immediately prior to this role, Ms. Hintch served as the Interim SIB Director for the last year. Director Rodriguez noted Ms. Hintch’s over 25 years of global health experience working in multiple countries. She
added that Ms. Hintch’s breadth of health planning experience will continue to serve the community and BCPH well as the agency once again embarks on the community health needs assessment and public health improvement plan. Ms. Hintch thanked Director Rodriguez and Deputy Director Dr. Lexi Nolen for their support during the last year and the SIB team for their hard work and dedication. She is looking forward to continuing the important work ahead.

ITEM 4. Marshall and Middlefork Fires Situational Awareness and BCPH Response

Emergency Management Coordinator Chris Campbell began the presentation by acknowledging the tragedy of the fires and the many people who were impacted by the fires. He then gave a high level briefing of the role that BCPH had in the fire response. He explained that BCPH’s role was to aid in the public health core areas of helping to preserve life, safety, health, wellbeing, the medical infrastructure; environmental health; and providing critical information to the public through various communication channels.

Mr. Campbell thanked the over 40 BCPH staff from across the agency who provided critical aid during the fire response. He described the many efforts which included supporting a full evacuation of Avista Hospital’s patients and staff; assessing medical needs at emergency shelters and evacuation points; providing personal protective equipment (PPE) to impacted community members; and continuing to provide COVID-19, flu, and Tetanus vaccines at the Disaster Assistance Center (DAC). Mr. Campbell noted that a dedicated team worked with nine long-term care and assisted living facilities that were affected by the fires. The team kept in close daily contact with the facilities; and collaborated with Colorado Department of Public Health and Environment (CDPHE) to create a process for impacted individuals for supportive care referrals. The Data team assessed and monitored daily hospital bed counts to determine hospital capacity and worked with partners across the metro region to assure supports were in place for acuity care when needed. Finally, the Communications Team provided clear and concise information to the public throughout the entire response.

- Vice President McMillan asked if mental health services for families with young children are being offered. Mr. Campbell said that he will need to verify the supports that are being offered to families, but he said that the DAC provides many levels of support through victim advocates and the Mental Health Partners organization. Deputy Director Dr. Lexi Nolen added that BCPH is also working closely with early child education centers and schools to provide environmental health direction and support to ensure safe environments for children in particular. The Communications Team is working on messaging to the community about these efforts.

Environmental Health (EH) Division Manager Joe Malinowski addressed the longer term environmental health recovery support after the initial emergency response has completed. His team is helping to support 120 restaurants, that lost electricity and were evacuated, with reopening efforts such as clean up and food safety. For the community at large, the EH Team has worked with CDPHE on water quality with boil water orders and ensuring safety of onsite wastewater treatment systems (OWTS). Because air quality is another area of concern, the team continues to monitor outside air for smoke and is working to ensure safety around ash, asbestos, lead, and mold. Community messaging on cleanup efforts, especially concerning ash, is ongoing. Longer-term, EH will be supporting the impacted community as they rebuild and move back to their neighborhoods as well as address concerns about environmental hazards. Mr. Malinowski noted that additional messaging will be put forth about clean up safety and how to find reputable mitigation professionals, so people are not taken advantage of by unscrupulous companies. Other efforts in the next two to three years will include site plan reviews for the impacted homes and OWTS permitting.

- President Thomas asked about data on when the impacted homes were built. EH Division Manager Malinowski said that he has not yet seen the data on this but will follow up.
- Vice President McMillan remarked about the OWTS permitting process and how to best streamline the process to make it easier for community members. Mr. Malinowski assured that most homes
did not have damaged septic systems so they may only need to be reconnected to the system and not have to go through the permitting process.

- Board Member Hinman asked if the radius of debris contamination is known. Air Quality Program Coordinator Bill Hayes said that online resource AirNow.gov provides air quality index data but from monitors many miles north of the burn area. Traditional resources that are often used to identify air quality would not provide the specific details for impacted neighborhoods. Mr. Hayes noted that particulate monitors were installed at Monarch High School in Louisville, CO and two areas in Superior, CO. Due to the recent snow fall, the particulate level is currently very low. He is concerned, however, about the VOCs (volatile organic compounds) from the synthetic materials that burned in the fires. Mr. Hayes and his team are working closely with CDPHE and NOAA (National Oceanic and Atmospheric Administration) to install equipment to monitor these types of pollutants. The data from this monitoring will be shared with the public as they become available.

- President Thomas asked how CDPHE will consider debris removal from each household if asbestos/lead/hazardous materials are present. Mr. Malinowski explained that if a home is completely burned, CDPHE will require proper removal and disposal, and since FEMA is helping with the effort, homeowners can seek assistance from them. Mr. Malinowski also said that homeowners can remove debris on their own, but they must meet all of the permitting requirements for hazardous material removal. Dr. Nolen added that BCPH has been working closely with the schools to assure air quality; and the good news is that the mitigation steps that were taken earlier against COVID-19 will continue to help in the current scenario by protecting the air quality within the schools.

**ITEM 5. Boulder County Board of Health Public Health Advisory Regarding Structural Fire Debris**

Executive Director Rodriguez explained that BCPH is seeking the Board’s approval of this Public Health Advisory Regarding Structural Fire Debris to urge local governments, property owners, and other responsible persons to take all of steps necessary to remove their debris. The advisory also strongly recommends community members work with specially trained professionals with the experience and knowledge to handle this type of debris materials removal. This document will serve as a communication and education tool for the public as well as provide supporting documentation for possible FEMA reimbursement and future grant opportunities.

- Vice President McMillan asked if an addendum could be added to the advisory that provides a list of contractor resources for the public. Ms. Rodriguez said that a resource list can be provided online as well through BCPH communications since resource information can change rapidly.

- Board Member Hinman asked about the advisory language and why “encouraged” was used rather than “required”. Senior Assistant County Attorney Kate Haywood explained that “encouraged” was used in order to avoid any public confusion around using “require” which would mean it could be lawfully enforced. President Thomas added that this advisory is an important resource for the public so that debris removal can be conducted safely and correctly.

- Vice President McMillan encouraged the public to also access the DAC for the many resources available there.

*Board Member Hinman made a motion, which was seconded by Vice President McMillan, to approve the Boulder County Board of Health Public Health Advisory Regarding Structural Fire Debris. With all Board Members present voting in favor of the motion, President Thomas declared the motion unanimously carried. Absent: Board Member Brooke Harrison, Ph.D.*

**ITEM 6. COVID-19 Data, Policy, and Program Update**

Deputy Director Nolen addressed the current Omicron surge that is causing additional challenges with further strains on the system and on BCPH staff. She thanked the community for their patience amid the numerous challenges that public health continues to grapple with.
Dr. Nolen spoke about key messages of the current situation. These key messages include that Omicron is affecting all areas of Colorado, not only Boulder County. While the county is prepared for surge situations, the breadth and strength of Omicron requires further action, even though staff and community energy is depleted. The situation remains dynamic, so fast moving changes are expected. The three key goals (e.g. preventing severe illness and death; protecting health systems; and safely returning to normal) that have been in place throughout the pandemic remain the same and centrally relevant to the current situation.

To delve further into the current scenario, it is projected that cases are expected to peak in Colorado in late January/early February with hospitalizations peaking in early to mid-February. Hospitalizations for children are increasing for a variety of factors and relevant data continue to be gathered. Dr. Nolen noted that new booster guidelines are in place for ages 12+ (i.e., administered five months after full course). Omicron has reshaped thinking and action so that there is now less focus on case rates and more focus on hospitalizations. The Omicron surge is causing staffing shortages in various settings such as schools, early childcare, jails, hospitality, grocery stores, law enforcement; and is impacting business spaces to safely remain open. The recent fire as described earlier is also adding to the impacts with displacements that exacerbate cases rates and hospitalizations.

Dr. Nolen introduced Chief Medical Officer Dr. Michelle Haas to address the emerging science. Dr. Haas cautioned that the data change quickly so information shared at this meeting could be updated as soon as the presentation is completed. Dr. Haas cited a recent case control study from MMWR (Morbidity and Mortality Weekly Report) about an outbreak in Nebraska that showed that the median time from exposure to infection may be three days with Omicron. This is a shorter time period than Delta and other variants which is typically five to seven days. She also cited some emerging data from the United Kingdom (UK) that found the risk of reinfection from Omicron may be five times higher compared to Delta. In other words, if a person has received two doses of the vaccine or was prior infected with the Delta variant, the risk of reinfection with Omicron is five times higher. In the same UK study, hospitalization risk appears lower from Omicron than from Delta. The data indicated a 25% reduction if there was no prior immunity and a 50% reduction if there was a prior infection. With vaccination efficacy, the UK data showed that people who were vaccinated with two doses within two to nine weeks and may have later become infected with either Omicron or Delta, the vaccine efficacy was still quite high two to nine weeks after the second dose. Effectiveness wanes over time as early as 10 weeks after the second dose. The impact of booster doses increases vaccination protection. Dr. Haas again cautioned that these data from the UK are not peer reviewed and may not account for unmeasured variables.

To summarize, Omicron infection happens quickly and often before the individual is aware; vaccination including boosters is very important in reducing the risk of transmission; and the viral clearance is more rapid among vaccinated people. Dr. Haas also noted that where transmission and virus burden is very high, tools of isolation and quarantine are more limited than before. Based on these factors, the policies set forth are pragmatic and can be implemented more easily. The use of secondary mitigation strategies is also important.

- Vice President McMillan asked to clarify the risk of reinfection and if it is five times higher for someone who has been infected with Delta versus someone who was never infected. Dr. Haas confirmed that that is correct.
- Board Member Hinman asked about efficacy and time period of the booster in Colorado. Dr. Haas has not seen the data particular to Colorado but noted that booster impact on mortality has shown a 90% reduction rate. She will follow up about the Colorado specific data.
- Vice President McMillan asked about the rationale for quarantine policy recommendation differences between K-12 and ECE settings and the longer times for the latter. Dr. Haas explained that most children under ages 5 are not eligible to be vaccinated. When creating the policy
guidance, BCPH reviewed the studies available that showed the average viral shedding is seven and a half days so the seven day guidance for quarantine/isolation was the most pragmatic approach. Early Childhood Education Epidemiology Lead Alayna Younger added that as of January 3 the ECE quarantine/isolation guidance shifted to be more aligned with K-12 except for children under ages 5 where they need to quarantine/isolate two days longer due to challenges with mask wearing for this younger group.

- Vice President McMillan asked to confirm about pediatric hospitalization rates, and if it is the rate that is increasing and not the numbers of children. Dr. Nolen said yes, the rate is increasing.

Dr. Nolen returned to address surveillance data points around cases, positivity, and hospitalizations:

- Seven-day cumulative case rate is 1243 cases per 100,000.
- Seven-day positivity rate is 24.5%, about 5% higher than the week before. PCR tests data are becoming less reliable due to at-home testing not being readily reported.
- Cases lowest among ages 0-4 and 65+. Ages 5-11 are seeing a large decline due to vaccination eligibility and increased uptake.
- The IHME (Institute for Health Metrics and Evaluation) projections on daily cases show an anticipated peak in early February; and the positive impact of (high quality) masking on the peak.
- Percent of partial dose vaccination for eligible groups is showing increases among youth ages 12-19; recently eligible 5-11 age group is showing a rate of 58%.
- Health systems data show 72% of those currently hospitalized in Colorado are unvaccinated.
- Regionally, hospitalizations increased by 34% in the last week; pediatric admissions also increased.
- Staffing shortages reported for 62% of hospitals.
- Medical and surgical bed availability is stable but remains low at 4-7%.
- Pediatric, ICU, ventilator, and PPE metrics have not exceeded thresholds set by the state.
- Visits to emergency rooms at hospitals/waiting times are increasing.
- Significant cases among staff are being seen even at hospitals with 100% vaccination rates.
- Health systems responses include eliminating the use of cloth masks in outpatient settings; combined hospital center transfer plan remains activated; and CDPHE enacted crisis standards of care for emergency medical services for the first time since April 2020.
- Avista Hospital to be back in service in two weeks.

Deputy Director Nolen also cited the county death rate. There have been 75 deaths (as of this meeting) since May 2021 for a total 329 in the county.

She also addressed some earlier questions about Boulder County’s residents’ contribution to the hospital system stress. She cited that Boulder County hospitals admitted a total of 37 people per 100,000 in the last seven days and 1.5 per 100,000 of them were county residents. Dr. Nolen added that historically no more than five patients a day per 100,000 have been county residents.

- Vice President McMillan wanted to confirm that the majority of people who make up the admissions in Boulder County are not in fact residents of the county. Dr. Nolen confirmed that this is correct.
- Board Member Hinman wanted some clarification on the IHME graph presented earlier and what the third dose projection line means. Dr. Nolen explained that most likely the projection is indicating the current numbers of people who are vaccinated and what the addition of the booster might be during this surge. Because the surge peak will move through very quickly and the fact that it takes a couple of weeks for another dose to increase protection, it is difficult to determine how massively increasing vaccination/boosters will make a difference in this surge peak; it may affect hospitalizations and reduce death rates later on.
Dr. Nolen outlined the various efforts that BCPH is undertaking to respond to the surge. These activities include conducting a mass vaccination at the Fairgrounds; revising the school quarantine/isolation guidance to better support in-person learning; public messaging on wearing high quality masks, encouraging the VVP approved (Voluntary Vaccination Program) businesses to mask during the surge, reducing non-essential social interactions; and supporting the Marshall and Middlefork fire victims at the DAC with PPE supplies and COVID-19, flu, and Tetanus vaccinations. Dr. Nolen added that the Surveillance and Epidemiology teams are managing a challenging data situation with system lags and rapidly changing information and so highly work intensive data collection such as race/ethnicity and municipal data have been paused. The teams are further prioritizing case investigations and contact tracing due to the need to fully focus on outbreaks.

- Vice President McMillan said she appreciates that the data staff is significantly strained right now and is unable to collect all of the data needed. She wondered, though, if it is possible to shift some focus on collecting data on vulnerable hospitalized patients. Dr. Nolen said that there may be some workarounds that will be shared at the next meeting. She added that there have been some early attempts at projections using limited data sets that can be extrapolated to the broader case affected populations. Once some solutions are found, it will be important to reincorporate the equity and municipal data indicators back into the data collection efforts.

In looking at K-12 specific data, the seven-day average of cases shows the highest rate among ages 5-11. Dr. Nolen described the mitigation steps BCPH is taking with the local schools. These include ongoing vaccination clinics; high quality ventilation system installations; daily cleaning; distancing three feet when possible; community and mobile testing sites; student symptom screening by parents; school masking in all metro areas (except Douglas County); and frequent communication updates to parents. She also described the impacts to Boulder County schools. Even with historically relatively low transmission rates in classrooms, the January return to school saw that a significant number of students and staff missing the return due to the need to isolate after COVID-19 exposures during the holidays. Several students/staff have been hospitalized and five have had severe illness with one death. School staff are overwhelmed, and some private schools have delayed returning to in-person learning. Dr. Nolen noted that Denver schools had moved to remote learning one day a week last week due to support staff shortages. The recent fires have created additional stressors on Boulder Valley School District staff, in particular.

Dr. Nolen then introduced Deputy County Attorney Trina Ruhland to give the policy updates. Ms. Ruhland described some recent quarantine and isolation guidance changes in ECE and childcare settings. These include the removal of whole classroom quarantines unless the student is unvaccinated and was exposed at home, then they must quarantine. The quarantine duration changed to five days, but the student must mask upon return. If the student is unable to mask due to a medical exemption, they would still need to quarantine for the full 10 days as would the under two age group. Isolation guidance has changed so that school staff can return with a mask after five days, while ECE students can return after seven to ten days.

Deputy County Attorney Ruhland also described the K-12 guidance changes which center on prioritizing in-person learning by minimizing quarantines and exposure to positive cases. BCPH guidance was adopted and implemented by many of the metro partners. Some of the changes outlined include the definition for “fully vaccinated” now includes boosters; there is a 90 day exemption for quarantine after exposure; quarantine for medium/high risk settings such as contact sports is more strict; schools can opt-into surveillance testing; and continue with no routine quarantines for classroom exposures. As with the ECE settings, if an unvaccinated student has a positive exposure at home, they must stay home; quarantines and isolation guidance is the same for the K-12 setting. Testing is encouraged, but not required. Ms. Ruhland added that the kindergarten age students would follow the K-12 guidance because of vaccine eligibility for this age group. Due to the tremendous strain on the contact investigation and contact tracing teams with this surge, only outbreak cases are prioritized. Parents may, therefore, not be notified of each contact so keeping children at home when sick and testing when symptomatic are strongly encouraged. Data resources right
now are focused on data entry.

- Vice President McMillan thanked the whole team for the tremendous work being undertaken in the ECE and K-12 settings.
- Board Member Hinman addressed an earlier public comment concern about not having children test negative before returning to the classroom and she, too, is concerned about this. She acknowledged the balance at stake from a policy perspective; but she does not necessarily agree with the decision. K-12 Policy Liaison Sandra “Soda” Sonoda acknowledged that trying to balance returning children to school with safety issues has been challenging and required some compromise given some of the limitations that currently exist. Even though school masking mandates have helped tremendously with reducing transmissions in classrooms, there exist incredible difficulties with accessing at-home tests and community testing sites during this surge. With long PCR testing turnaround times, this adds to the burdens. Ms. Sonoda noted that access and equity issues with testing capabilities are spanning the whole state. The main goal is to try to keep children in school. Board Member Hinman said that it is important to acknowledge when policy decision compromises are being made and encouraged transparency as much as possible. Dr. Nolen added that there also have been significant operational issues (e.g., shortage of tests; infrastructure to test for school staff not in place) with return to school testing. Dr. Haas further added that PCR testing can present a challenge by showing viral fragments (i.e., patient testing positive) in a patient who is asymptomatic and is feeling fine. This adds another layer of complexity along with determining which test to use for return to learn. Dr. Haas also noted some emerging data about reduced sensitivity with the antigen test to Omicron. Decision makers are left with the unanswered questions of what happens when a person is on day four or five of the illness, but their symptoms have resolved; are children being more protected in schools or does it add another layer of complexity with very little benefit?

Ms. Ruhland went on to present some policy updates at the local, state, and federal levels. Under the current Boulder County universal masking order, the isolation and quarantine guidance was adjusted to align with the CDC changes. BCPH has been strongly recommending for the community to start using high quality masks such as N95, KF94, KN95, or similar well-fitting masks. BCPH is also recommending that the 300 facilities that are in the county’s VVF Program move to indoor masking; boosters may become a requirement of the program if the definition of “fully vaccinated” is updated.

At the state level, CDPHE has extended its proof of vaccination protocol (e.g. present card/photo/vaccination App) for indoor unseated events of 500+ until at least January 31, 2022. This aligns with Boulder County’s protocol. Universal masking in public spaces has been adopted around the metro area and other parts of Colorado. Ms. Ruhland mentioned a lawsuit from Douglas County which argues that the new Douglas County Health Department’s anti-masking order is outside the public health authority of the health department and Douglas County did not legally separate from the Tri-County Health Department.

On the national front with vaccination requirements, the U.S. Supreme Court is reviewing cases regarding OSHA (Occupational Health and Safety Administration) and CMS (U.S. Centers for Medicare and Medicaid Services) where their regulatory and statutory authority is in question. The TSA (Transportation Security Administration) has continued its mask order through March 18, 2022. Lastly, ages 12-15 are now eligible for booster doses.

Dr. Nolen concluded the presentation by reviewing the layered mitigation strategies that were presented at earlier meetings. She emphasized that BCPH continues to stress the less burdensome approaches such as hand washing, social distancing, and vaccinating. Other less burdensome strategies such as masking, voluntarily limiting indoor gatherings, and remote work, when possible, have been refined to better align with the current surge situation. Efforts such as contact tracing/case investigations and asymptomatic
testing are becoming challenging in terms of their effectiveness due to test shortages and at-home tests are less sensitive. There could be further strategy refinements as the surge situation warrants.

Finally, Dr. Nolen reviewed the efforts that support Boulder County in creating habits and self-adaption to best respond to what is occurring in the community in relation to the pandemic. These efforts are finding agreement on shared goals; designing public health orders that support ongoing course correction; embedding power for self-regulation as much as possible so the community can respond accordingly; and supporting solutions that meet the self-defined needs of the community.

- President Thomas acknowledged the difficult decisions that need to be made, the challenges that exist, and shared his deep gratitude to everyone at BCPH.
- Board Member Hinman asked that given the fluidity of the situation and the surveillance data, what are the thresholds to consider moving to more severe mitigation strategies. Dr. Nolen said that watching the health system and hospitalizations has become a focal point and working with metro leadership and community partners. With the quick moving surge, it is a challenge to quickly act on policy decisions. The best strategy forward is to keep watching the situation very closely and act accordingly.

ITEM 7. Director’s Report.
The Board did not have any questions.

ITEM 8. Old & New Business / Announcements.
None.

There being nothing further to discuss, Vice President McMillan (President Thomas lost network connectivity) declared the meeting adjourned at 7:28 p.m.

Gregg Thomas, President

Camille Rodriguez, Executive Director