Updated Editorial on:
Sub-acute Mercury (Hg) Poisoning by Medicine

The Rise of Diseases 'Caused' by Sub-acute Hg Poisoning via Medicine

Recently, much has been said about the rise of autoimmune, mitochondrial and other diseases in adults whose children, siblings, nieces and nephews, second cousins and/or grandchildren have one or more related diagnoses and/or have been diagnosed with an autism spectrum or related “neurodevelopmental” disorder. Though part of the reason for these “coincidental” familial occurrences is a genetic component, the reality is that many of the “genetic” patterns of chronic disease that are being noticed in our family trees apparently have their origins in the sub-acute mercury poisoning of us all by “medicinal” mercury compounds.

Sodium ethylmercury thiosalicylate (with common English trade names of Merthiolate, Thimerosal and Thiomersal [UK]) has been being used to sub-acutely mercury-poison most all of us since the 1930s. Before that, Calomel, mercurous chloride was the sub-acute mercury poison of choice from the late 1800s to the late 1930s. As Thimerosal is today, previously Calomel was touted as a “special” form of mercury and, without proof of safety and effectiveness, marketed in medicines for children as if it were “safe” and “effective” — principally, as teething powders and worming preparations. That we, our parents and/or our grandparents were, if exposed, adversely affected by such mercury exposures is no surprise to anyone who has studied the knowing sub-acute mercury poisoning occurring in several English-speaking nations (the USA, United Kingdom and, the last to ban these medicines, Australia [completely banned in 1956]) since the late 1800s.

In 1890s – 1940, this mercury poisoning of our young by mercury in medicine was principally effected via Calomel-laced teething powders (containing up to 25 % Calomel [85% mercury by weight]) and, to a lesser extent, human worming preparations and other mercury-containing medicines sold without any proof of safety. At its “peak”, sub-acute Calomel-mercury poisoning resulted in about 1-in-500 children having a “pink disease” diagnosis (predominately in the children from the higher socioeconomic strata) in the U.S. and probably “caused” the U.S. epidemic of “stomach cancer” in the 1950s – 1970s that disappeared in the late 1970s.

Since the 1930s in the USA, this sub-acute mercury poisoning has been increasingly effected via first Merthiolate (marketed mostly as a 0.1% by weight alcohol solution of Thimerosal) and Mercurochrome (disodium 2,7′-dibromo, 4-(hydroxy-mercuri)fluorescein \[C_{20}H_{10}Br_{2}HgO_{6}Na_{2}\] with a formula weight of 752.44 g/mole [25.8% mercury by weight]); also known as Merbromin, Mercuranine, Fluorochrome, Gallochrome, Gynochrome, Mercurocol and Mercurophage) antiseptics as well as by
vaginal contraceptive gels containing 0.1% Thimerosal, which were legally marketed from the 1930s until about 2001 in the USA\textsuperscript{1}.

In addition, Thimerosal, used as an antiseptic and in-process biological sterilizing agent as well as a “preservative” in serums and vaccines (1935 – 2009, and ongoing) became the principal mass-population sub-acute mercury poisoning vehicle of choice, as its use increased and the Calomel-containing products were withdrawn from the market. When the FDA finally banned the use of mercury compounds in some over-the-counter (O-T-C) medicines (antiseptics and vaginal contraceptives) in 1998, the principal vehicles of choice for mass mercury exposure were reduced to Thimerosal-preserved serums and vaccines.

In the area of serums, the use of Thimerosal in serum products mostly stopped in the mid-to-late 1990s. Furthermore, the last serum product, RhoGAM\textregistered, was taken off market in the USA in 2001. However, because there was no recall of the marketed Thimerosal-preserved RhoGAM, some doses of Thimerosal-preserved RhoGAM were available into 2002, and possibly 2003. The serious concerns about the toxicity of Thimerosal at the 0.01% level that sparked the discontinuation of Thimerosal-preserved BayRho and RhoGAM also sparked an “all parties” commitment in 1999 to “remove” the Thimerosal-preserved formulations from the vaccines given to children and, implicitly, pregnant women.

**Today’s Realities Regarding Diseases 'Caused' by Sub-acute Hg Poisoning via Medicine**

Had the 1999 pledge been honored, children, pregnant women, and the general population should have had near-zero risk of Thimerosal exposure from Thimerosal-preserved vaccines by 2005. However, contrary to government’s “commitment” to “remove” Thimerosal-preserved vaccines from the market, the Secretary of Health and Human Services (HHS) and the agencies that report to the Secretary, principally the CDC and FDA, instead have acted to “offset” the decreases in maximum mercury exposure to the pregnant women’s developing children (from the withdrawal of the Thimerosal-preserved Rho(D) serums) and developing children (from the withdrawal of the Thimerosal-preserved DTaP, Hep B and Hib vaccines) that were beginning to occur late in 2001.

In 2002, the CDC began recommending\textsuperscript{2} that

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\textsuperscript{1} In 1998, the FDA banned the use of Thimerosal and other mercury compounds in over-the-counter (O-T-C) antiseptics (and vaginal contraceptives), where the nominal Thimerosal level was 0.1%. The FDA banned this use because, in a 1982 report, it had been determined that these were neither safe for use in humans nor effective antiseptics (and vaginal contraceptives). However, the released products were not recalled and some companies (e.g., the manufacturer of “Butt Balm”) ignored the ban until at least 2005.

\textsuperscript{2} In 2002, the CDC began recommending...
Pregnant women, who would be in their second and third trimesters during the flu season and

Children 6 – 23 months of age in the flu season should be given an influenza vaccine shot, “when feasible”, without stating that that vaccine should not be Thimerosal-preserved.

The CDC made these recommendations in spite of:

a. Studies, published in 1977, showing that injecting pregnant women with flu shots during pregnancy significantly increased the risk that their children would be born with a serious birth defect (the identified serious risks, and their stated relative risks [RR], were cleft palate [7.1]², and microcephaly [2.9] and pyloric stenosis [2.0]³,

b. A knowing lack of proof of safety of Thimerosal to the required standard:
   “Any preservative used shall be sufficiently nontoxic so that the amount present in the recommended dose of the product will not be toxic to the recipient, ...”
   [As set forth for preserved biological products in 21 CFR § 610.15(a).]
   by the makers⁵ of the Thimerosal-preserved influenza vaccine formulations that were approved for pregnant women and/or developing children, and

c. An FDA-recognized, 1971, chronic toxicity assessment⁶:
   i. In which each of four, 50:50 male:female, test groups of adult rats were twice weekly injected with a sub-acute level (1, 0.3, 0.1, or 0.03 mg/kg) of Thimerosal dissolved in sterile saline for a year along with a similar “Vehicle Control” group that was injected with just sterile saline, all the rats were monitored for up to an additional year, and the survivors were sacrificed and unsophisticatedly autopsied, and
   ii. Which reported a significant excess adverse health effect (gross bronchopneumonia) in all the test groups (as compared to the controls) that was linearly dose dependent.

⁴ ibid, Appendix 5, page 488.
⁵ As required by both statute (21 U.S.C. § 351(a)(2)(B)) and regulations (21 CFR Part 211 & 21 CFR §601.2(a)).

from the pen of Paul G. King, PhD, CoMed Science Advisor
Furthermore, in the 21st century, the FDA has abetted the CDC’s actions by not only continuing to illegally approve7 the existing Thimerosal-preserved seasonal influenza vaccines but also illegally approving new suppliers of Thimerosal-preserved seasonal influenza vaccines (ID Biomedical Corporation of Quebec and CSL Ltd).

Thus, not only was the 1999 pledge not honored, but governmental agencies, including but not limited to the Department of Health and Human Services, the National Institutes of Health, CDC and FDA, “independent” medical bodies (e.g., the Institute of Medicine), certain researchers and others have also knowingly acted in a manner that has:

a. **Increased the maximum Thimerosal exposure** that a developing child may receive,

b. **Contrary to the statutory mandate to safen all childhood vaccines and decrease adverse vaccine reactions in children, as set forth in 42 USC § 300aa-27(a)(2), neither safened childhood vaccines nor reduced adverse vaccine reactions from the influenza vaccines**, since removing Thimerosal is known to reduce adverse reactions, and

c. ** Attempted to cover up the evidence of harm** through cleverly worded statements, selective evidence reviews, and epidemiological and other published studies intentionally designed not to find any link between sub-acute mercury poisoning by medicine and the increases in the childhood diseases, disorders, and syndromes that now plague our children today.

Since 2002, the maximum total dose of Thimerosal-preserved vaccines that may be given indirectly to the pregnant women’s developing children and directly to post-natal children under the CDC’s recommended routine vaccination programs has been increasing from the 1999-program nominal maximum dose of 287.5 – 300 micrograms (µg) of Hg to the 2008-program nominal maximum dose of 462.5 µg of Hg.

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7 See 21 CFR § 601.4(a) which only permits the FDA to legally license a vaccine when the submitted Biological License Application (BLA) proves that the submitter has, among other things, met all legal requirements for safety (see 21 CFR § 601.2) – including, for preserved vaccines, the “sufficiently nontoxic …” requirements set forth in 21 CFR § 610.15(a) – vaccine manufacturers’ requirements that the manufacturers of Thimerosal-preserved vaccines admit they have not met!

8 Since 2001, the number of types of vaccines that can be Thimerosal-preserved has decreased significantly and only one type of vaccines that are still preserved with Thimerosal (49.6% Hg by weight), the inactivated-influenza vaccines, is listed in the primary vaccines recommended by the CDC for any childhood vaccination program. However, the combined effect of the changes in vaccines and vaccine recommendations has resulted in a significant increase in the maximum dose of Hg to which a developing child may be exposed. This increase is the reality because, government vaccination recommendations ((by the CDC) and continued illegal approvals of Thimerosal-preserved vaccines (by the FDA) of the current and new sources of Thimerosal-preserved influenza vaccines have combined to increase the maximum vaccine dose of mercury to which a child may be routinely exposed from vaccination by the age of 18 years:

a. **From**: nominally, 300 µg of Hg for a developing child (from viability to 18 years of age) vaccinated according to the 1999 CDC routine vaccination schedule (which did not recommend annually vaccinating pregnant women or
In 2009, there has been an additional increase in the maximum Hg exposure from injected Thimerosal because the indications are that the U.S. government has recommended a “swine-flu pandemic” vaccination program that:

a. Recommends that pregnant women and young children be inoculated first,

b. Recommends the children from 6 months to 9 years of age be given two (2) doses of a “swine flu” (2009-A-H1N1) vaccine separated by about 30 days,

c. Continues to recommend pregnant women and children be inoculated with the “approved” annual human influenza vaccines which will again include mostly Thimerosal-preserved doses,

d. Provides most doses of the “approved” 2009-A-H1N1 vaccines as Thimerosal-preserved doses with a nominal Thimerosal level of about 100 micrograms per mL, and

e. Permits the “swine flu” vaccines given to pregnant women and children to be Thimerosal-preserved.

Given the reality that:

a. This “swine flu” vaccination program has been implemented in 2009, and

b. A 0.5-mL vaccine dose is being administered to pregnant women,

c. Either two, 0.25-mL or two, 0.5-mL doses are being given to the children under 9 years of age, and

d. One, 0.5-mL dose is being given to children 9 to 18 years of age,

then:

♦ The maximum that pregnant women’s developing children may be exposed to has doubled (from 25 to 50 µg of Hg) and

♦ The maximum Hg dose the children may directly receive, presuming two, 0.25-mL doses for the children 6 months to 3 years of age, one 0.5-mL dose for children 9 to 18 years of age, and two, 0.5-mL doses for the children 3 to 9 years of age, has increase by 25 µg or 50 µg9.

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9 The child born in 2002 who gets Thimerosal-preserved “swine flu” shots will be about 7 years of age in 2009 and nominally get an additional 50 µg of Hg. In “rare” instances, where: a) the child is just under 3 years of age when he or she gets the
If, after the first year:

a. There is a second year of “swine flu” vaccination, as the CDC indicates there may be,

b. Only one dose of a 2010-“swine flu” influenza vaccine is given to those previously inoculated in 2009, and

c. Thimerosal-preserved influenza vaccines continue to be approved by the FDA for use in children,

then:

♦ The maximum dose of Hg a developing child born in 2002 may receive will again increase by 50 µg of Hg.

In the worst case scenario, the child born immediately after his or her mother was fully vaccinated (with one Thimerosal-preserved “swine flu” vaccine [in October 2009] and one Thimerosal-preserved trivalent inactivated-influenza vaccine [TIV]) in 2009 at the beginning of the “flu vaccination period” [in mid-September 2009] and then vaccinated at the end of the “2009 – 2010 flu season” (with two, 0.25-mL Thimerosal-preserved “swine flu” doses in April of 2010 and two, 0.25-mL Thimerosal-preserved TIV doses [in March/April 2009]) could be exposed to an additional 100 µg of Thimerosal-derived mercury by the time he or she is 7 months of age!

Moreover, if, as is being discussed by the CDC, there are Thimerosal-preserved 2010 “swine flu” vaccines recommended for use in children, then the example child, if he or she missed the 2009 – 2010 flu season, could then be administered two, 0.25-mL Thimerosal-preserved “swine flu” doses and two, 0.25-mL Thimerosal-preserved TIV doses at the beginning of the 2010-2011 “flu season”.

Thus, the maximum childhood dose of Thimerosal-derived Hg for the child born in 2002 just from Thimerosal-preserved “influenza” vaccines may increase to 512.59 µg of Hg (about 1.7 to 1.8 times the maximum dose from all vaccines routinely recommended for “children” under the CDC’s 1999 program).

For a 2009 child presuming: a) the child’s mother received one dose of both types of Thimerosal-preserved flu vaccines (nominally 50 µg of Hg) before giving birth, b) the child received a total of 3 doses of both types of Thimerosal-preserved vaccines (nominally, 75 µg of Hg), c) there are no other changes in the childhood vaccination schedule or the nature of the available Thimerosal-preserved vaccine formulations until after 2027, and d) the child gets a Thimerosal-preserved flu shot first “swine flu” shot and just over 3 when he or she gets the second or b) the child is under 3 years of age and the wrong dose of the “swine flu” shot is given initially and the correct dose is given a month later, the child will get 37.5 µg of Hg.
each year, then the total mercury exposure from Thimerosal-preserved flu shots will nominally be 525 µg of Hg

Thus, the preceding U.S. realities have clearly established that, contrary to the continuing misrepresentations in the major media, pro-vaccine published articles, and statements by government, academic, research, healthcare, and other officials and “experts”, the maximum dose of Thimerosal-derived mercury to which a developing child may routinely exposed has actually been increasing since 2002.

In addition, even if the “swine flu” program were not mandated, as long as:

a. The CDC’s current vaccination recommendations are not changed and
b. Any doses of Thimerosal-preserved influenza vaccines can be administered to pregnant women and developing children,

a child born in 2002 to a mother who received a Thimerosal-preserved flu shot during her pregnancy and who is vaccinated each year with Thimerosal-preserved TIVs according to the CDC’s 2002 schedule, will have been nominally exposed to 462.5 µg of mercury (Hg) by 18 years of age (or 487.5 µg of Hg if he or she receives two, 0.5-mL Thimerosal-preserved A-H1N1 influenza vaccine doses in 2009 – 2010 and there is no swine-flu program in 2010 [or 512.5 µg of Hg if there is a 2010-2011 Thimerosal-preserved A-H1N1 vaccine and the child receives one dose of it]).

Thus, if not allergic to the pertussis vaccine component in the DTaP vaccines, this 2002 child will receive roughly 1.6 to 1.7 times the level of Hg as compared to a similar child born in some developing country, which:

- Follows the CDC’s 1999 recommendations and
- Only uses the Thimerosal-preserved DTaP, Hib and Hep B vaccine formulations that have the same 0.01% Thimerosal level and dosing as those in use in the USA in 1999 (where the total nominal Hg dose would not exceed 300 µg and, given the flexibility in the CDC’s Hep B advice in 1999, might only be 287.5 µg for the fully vaccinated 18-year-old child).

When it comes to toxicity, the specific dose (dose per kg of body weight) is more important than just the dose. With this being the case, doubling the maximum dose Hg that a pregnant woman may receive from Thimerosal-preserved influenza vaccines (from 25 µg to 50 µg) is obviously a much more serious threat to the developing child, who may weigh less than a kilogram (i.e., a maximum specific dose > 50 µg/kg), than doubling the Hg dose in a child under 3 years of age (from 25 µg to 50 µg) because the 6-months-old child will certainly weigh more than 2 kg (4.4 pounds) and have a maximum specific dose exposure of < 25 µg/kg or, for the older child who probably weighs more than 10 kg (22 pounds) doubling the dose from 50 µg to 100 µg (i.e., a maximum specific dose of < 10 µg/kg).

For children who are allergic to the pertussis component in the DTaP vaccines and are vaccinated with 4 doses of the Thimerosal-preserved DT’ vaccine, the maximum mercury exposure from Thimerosal-preserved vaccines increases to 587.5 – 612.5 µg of Hg or 1.96 to 2.11 times the comparison 1999-schedule child! [Note: These comparisons do not include the one, 0.5-mL dose of the Thimerosal-preserved Menomune meningococcal vaccine (25 µg of Hg) or two, 0.25-mL or 0.5-mL doses of the Thimerosal-preserved JE-Vax Japanese Encephalitis vaccine (17.5 or 35 µg of Hg) that some children receive.]
Faced with the realities that:

a. **The maximum Thimerosal exposure** that a U.S. child may receive is still increasing,

b. The incidence of regressive neurodevelopmental disorders and early childhood behavioral problems are still increasing, and

c. The incidence of a wide range of other diseases, disorders, and syndromes in which sub-acute mercury poisoning has been shown to be a putative or possible causative factor is similarly increasing,

it is clear to this reviewer that:

1. The public officials are continuing to knowingly misrepresent the facts about Thimerosal exposure by pointing to the irrelevant decrease in the number of Thimerosal-preserved vaccines and ignoring the actual increase in maximum mercury exposure by recommending that pregnant women get a flu shot and by increasing the age-range for the recommended annual childhood shot of Thimerosal-preserved influenza vaccines (and, in 2009 and possibly 2010, recommending Thimerosal-preserved “swine flu” vaccination for pregnant women [1 dose] and children [1 or 2 doses]),

2. The maximum injected-mercury exposure (from Thimerosal in inactivated-influenza vaccines) that our developing children may receive has been increasing since 2002,

3. Since the Thimerosal-preserved “swine flu” vaccines are being given to pregnant women and developing children in 2009 (and possibly 2010), the sub-acute mercury poisoning risk and its severity are only being further increased,

4. The increase in the rates of many of the other diseases, disorders, and syndromes in which sub-acute mercury poisoning has been shown to be a causative factor implicates the increase in the maximum dose of Thimerosal as a causal factor, and

5. In 2009, based on all of the preceding realities and the ever-increasing volume of studies demonstrating that Thimerosal is a causal factor in the harms seen and/or the sub-acute mercury poisoning that has been proven in many of the children who have these developmental diseases, disorders and syndromes, **Thimerosal-preserved influenza vaccines are unequivocally linked to the risk of neurodevelopmental harm and the other harms found in some of our children and in ourselves.**

Thus, one can trace the rise to all of these virtually unknown (in the 1940s) diseases, syndromes, and conditions to near-epidemic (< 1 in 3000), epidemic (> 1 in
1,000), or, in some instances, super-epidemic (> 1 in 100; e.g., autism spectrum disorders [> 1 in 100 (currently 1 in 91 {2009 CDC estimate} or 1 in 88 {a Department of Defense estimate in military dependents} and asthma [>1 in 10; except in the 10s of thousands of non-vaccinated, breast-fed young children from all backgrounds in a Chicago clinic headed by a Dr. Mayer Eisenstein, where the reported asthma level is < 1 in 1,000]) levels to the cumulative effects of increasing injected-mercury exposure. Because the risks of sub-acute mercury poisoning have been concealed from their parents and guardians, even the parents’ and or guardians’ ability to give informed consent to accept these risks has also been denied to those whose children and/or wards have suffered, are suffering, or may some day suffer from the effects of these mercury exposures.

Therefore, these increases bear witness to the increasing multi-generational sub-acute mercury poisoning of an increasing percentage of the population with an ever increasing level of ever more insidiously toxic:

- **Compounds** (from Calomel [an inorganic mercury compound of moderate toxicity and limited water solubility] to Thimerosal [an organic mercury compound, designed\(^{12}\) to be highly toxic to life, that is also: a) teratogenic, mutagenic, carcinogenic, and immune-system disruptive in humans, b) rapidly absorbed into human tissues, and c) metabolized into mercury species that are bioaccumulatively toxic\(^{13}\)] and

- **Modes of administration** – from:
  - Oral dosing from the late 1800s with topical powders and worming preparations containing inorganic mercury compounds [e.g., Calomel, a sparingly soluble inorganic mercury compound, mercurous chloride \(\text{Hg}_2\text{Cl}_2\), touted as “a special form of mercury” that was “safe”, which was finally withdrawn from the drug market in the 1940s] to:
  - Topical application of over-the-counter drug preparations [e.g., 0.1 % Thimerosal in ethyl alcohol {Tincture of Merthiolate} and 0.1 % Mercurochrome, sold as antiseptics], which the FDA finally banned in 1998 because they were toxic to the skin and not effective as antiseptics, then to:
  - Injected drug products [serums, vaccines, and other drug products] and in some topical nasal sprays, and eye and ear drops

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containing organic mercury compounds [today, principally 0.01 % Thimerosal used as a preservative in some vaccines and, at 0.001% to 0.01%, in other drugs as well as, to a lesser extent, phenylmercury salts (acetate, borate and nitrate)], where Thimerosal, sodium ethylmercurithiosalicylate, is touted as “a special form of mercury” that is “safe” — even though no toxicity studies have established its no observed adverse-effect level (NOAEL) for developing children or adults, which is required for a chemical to be proven toxicologically “safe” (“sufficiently nontoxic …” as per 21 CFR § 610.15(a), codified in 1973) by the manufacturer of any biological drug product using Thimerosal as a preservative before the FDA can legally approve the biologic license application (BLA) for a Thimerosal-preserved biological drug product (as required of the FDA by 21 CFR § 601.4(a) since 1977.

As was shown in a multi-generational toxicity study that was published in 1971\textsuperscript{15}, the in-utero poisoning of developing animals produces genetic effects that are expressed in those females who survive their in-utero poisoning long enough to reproduce their own young. Thus, none should be surprised at any of today's realities — including “spontaneous” genetic mutations and increasingly bizarre sequence repeat and multiple-copy “spontaneous” mutations.

\textbf{Is Sub-acute Hg Poisoning via Medicine Today’s Only Causal Factor?}

Is sub-acute mercury poisoning by Thimerosal-preserved vaccines the only causal factor? No, it is not the only causal factor for these harms. However, it is the causal factor that the Establishment has:

\begin{itemize}
  \item \textbf{Refused to eliminate},
  \item \textbf{Increased} while lying to us that it has been reduced or removed, and
  \item \textbf{Yet again significantly increased} via the CDC’s pandemic “swine flu” vaccination program in which Thimerosal-preserved inactivated-influenza vaccine doses are recommended for administration to pregnant women and children without proof of safety to the “sufficiently nontoxic …” standard set forth in 21 CFR § 610.15(a).
\end{itemize}

\textsuperscript{14} As far as this reviewer can ascertain, all of the current BLAs for the currently available FDA-licensed Thimerosal-preserved vaccine formulations were approved after 1973.

\textsuperscript{15} Goncharuk GA. Experimental investigation of the effect of organomercury pesticides on generative functions and on progeny. \textit{Hyg Sanit.} 1971; 36: 40-43.
Take Action:  
Stop Sub-acute Hg Poisoning via Vaccines Today!

Hopefully, after reading this editorial and confirming the factual information provided, many of you will understand, rise up with a single voice, and forcefully demand that:

- **All use of Thimerosal or any other mercury-based compound in medicine be immediately stopped,**

- **At a minimum, all vaccine doses that contain a preservative level of Thimerosal or other added mercury compound be immediately identified, recalled and properly destroyed,** and

- **All use of Thimerosal or other mercury compound in the manufacture of drug products be irrevocably banned!**
Concluding Remarks

Should any reader find significant factual errors in either of this editorial, then please e-mail the author your proposed corrections to the editorial along with e-mail attachments that contain copies of the published documents and studies that prove your claims.

Then, as has been the case in the past, after verifying your claims, the confirmed factual errors will be corrected and a corrected document will be posted.

Also, if you find spelling or punctuation errors, please also send them in so that this document can be appropriately updated and posted as a “revised editorial”.

Respectfully,

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